



Catalogue price list 2026

Heating, Plumbing and Ecoenergy | Edition EN01





Catalogue price list 2026

European leader in providing comfort solutions for a sustainable indoor climate

Providing comfort is our promise to all our partners.

It has to do with our dedication and ability to listen to and meet the needs of our employees, our customers and the end users.

Purmo Group provides comfort by doing things in the smartest way, always in line with and ahead of its competitors.

We provide comfort:

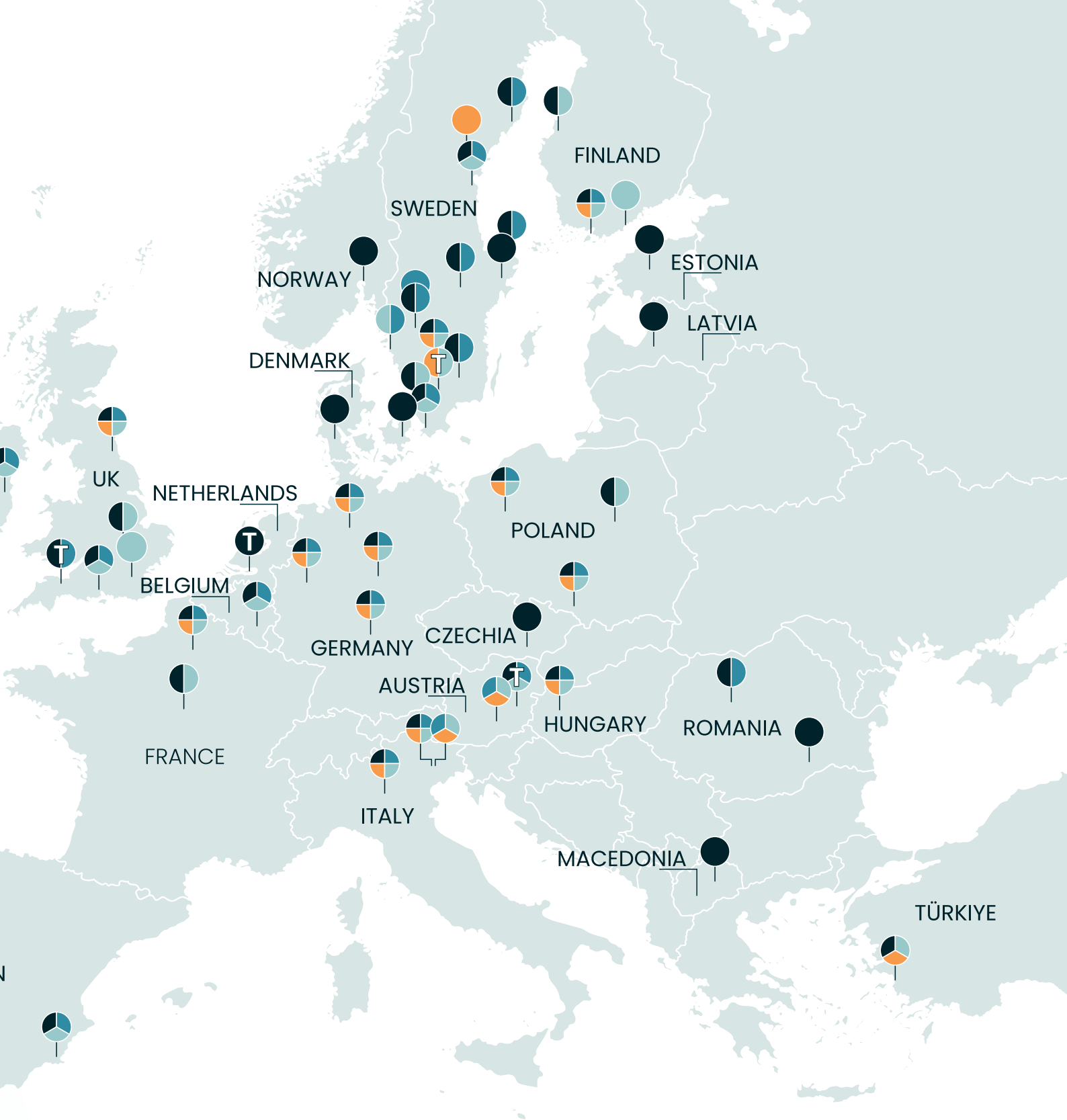
- Allowing our people to grow, guaranteeing safety at all times;
- Designing stimulating products that are accessible to many;
- Always putting our customers at the centre;
- Keeping an eye on the future to ensure the sustainability of our business.

We are Purmo Group

- Sales Offices
- Warehouse
- Offices
- Production
- T Training Center

IRELAND

SPAIN

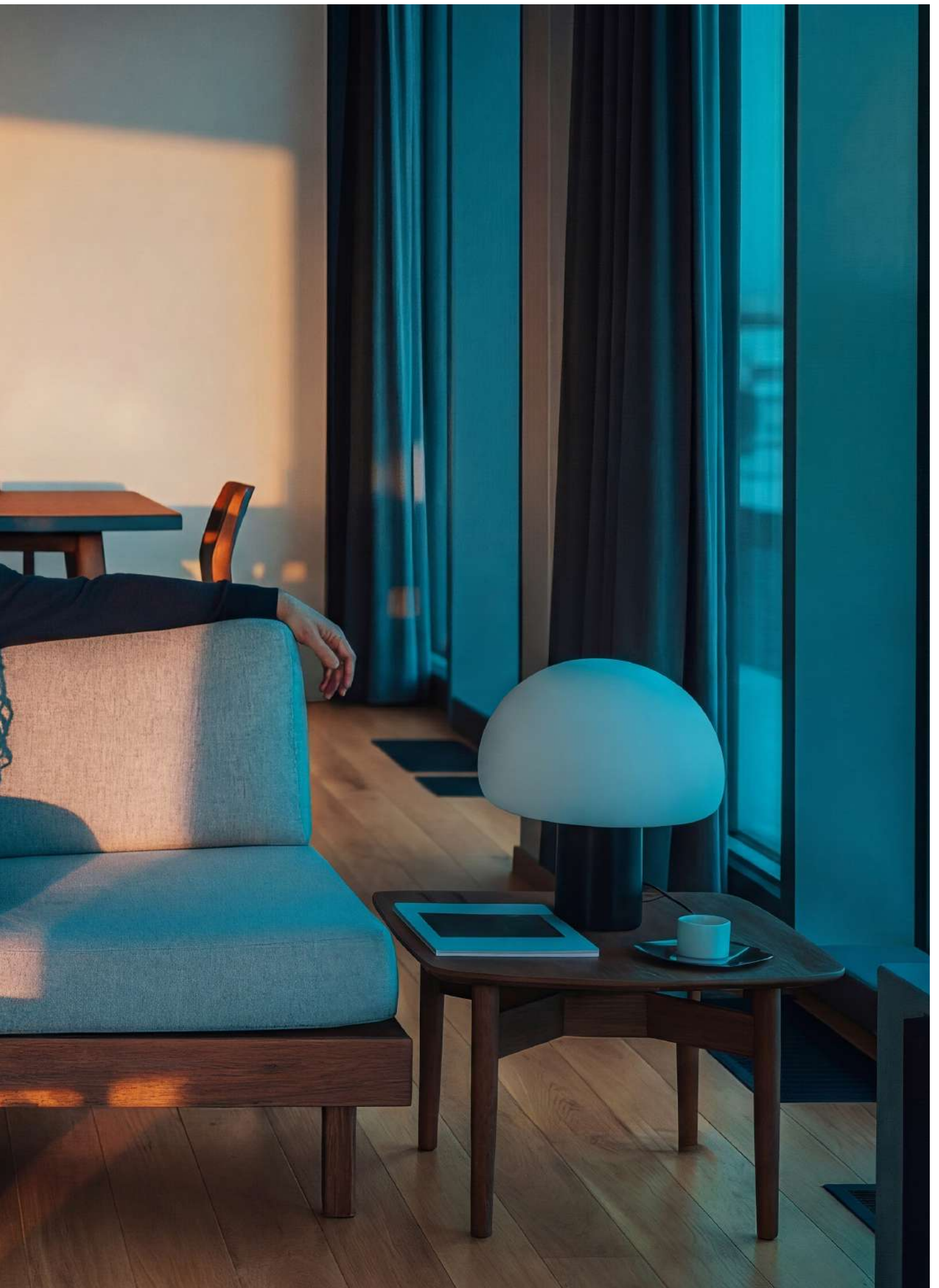


Our home

The indoors. The place where we spend so much time learning, sleeping, relaxing, sharing. It's where we live. That's why a healthy and comfortable indoor climate is so important. But in a world facing climate challenges, unprecedented population growth and a need to use resources better, ensuring sustainability is paramount.

Committed to innovation, we take a system and solution approach to delivering optimal heating and cooling that offers the highest levels of comfort and energy efficiency. With our complete range and expert knowledge, we can help you find exactly the right solution – whether you're a planner, installer, wholesaler or homeowner. So, let's work together and create innovative solutions that will meet tomorrow's indoor climate challenges today. Let's advance indoor climates as we know them.

**When indoor climate works,
so do people.**



Improving efficiency

Optimisation of
energy efficiency
thanks to the precision
of the system



Better integration

We integrate solutions
into innovative systems
for better performance



Working smarter

We work together
and we work
smarter

Reducing environmental impact

We focus on the entire
product life cycle
and reduce our impact
on the climate

CO₂

A wide-angle photograph of a modern industrial factory floor. The floor is a bright, reflective light blue. In the background, there are several large rolls of white material, possibly pipes or hoses, stacked on pallets. To the right, a large piece of industrial machinery with a blue frame and a grey control panel is visible. A person's hand is visible on the right edge, holding a large roll of white material. The ceiling is high with a complex network of metal beams and pipes. The overall atmosphere is clean and professional.

Vanguard "Made in Italy"

The entire production of EMMETI Group takes place in Italy, on a total area of 54,000 square meters.

Plants in Brescia, an area of about 10,000 square meters, are made all the semi-finished products in brass and the hydraulic line, with the use of equipment and numerical control machines of the latest generation.

By factories located in the province of Pordenone, instead leaving all the products of the line heating.

In particular it is here that are installed production lines of the multilayer pipe, in a factory of 10,000 square meters, dedicated and newly built.

The cycle ends in storage warehouses, where it is taken care of even the phase of the logistics group







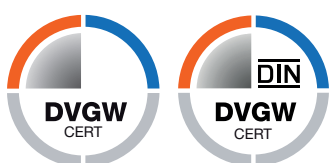
Company Certification

COMPANY WITH
MANAGEMENT SYSTEM
CERTIFIED BY DNV
ISO 9001 • ISO 14001
ISO 45001

1997: Certified Quality System according to ISO 9002:1994
2002: Certified Quality System according to ISO 9001:2000
2003: Environmental System according to ISO 14001:1996
2006: Environmental System according to ISO 14001:2004
2009: Certified Quality System according to ISO 9001:2008
2017: Environmental System according ISO 14001:2015
2017: Certified Quality System according to ISO 9001:2015
2019: Health and Safety System according to ISO 45001:2018

This standard requires continuous improvement in all ex-ecutive processes, from product and system design right through to marketing and technical support.
For EMMETI, the principles expressed in this policy come before everything else.
For this reason research and development are of fundamental importance within the company.
The quality of EMMETI products is also recognised by various European standards institutes.

Products Conformity certificates



Europe/Germany

kiwa 

IT-TD-Ki0410

<https://efrdoc.com/KIWA>

Europe/Italy

kQ

kiwaQuality
IT-TD-Ki0410

<https://efrdoc.com/KIWA>

Europe/Italy/Brazil

 **WRAS**

England UK

SKZ
Das **Kunststoff-Zentrum**

Germany



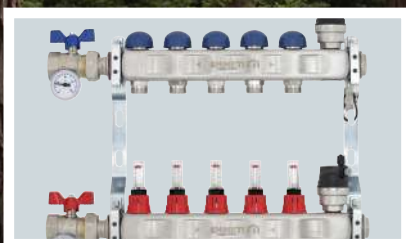
Poland

Emmeti home

Solutions for indoor climate comfort



Sanitary distribution



Manifolds and motorized ball valves

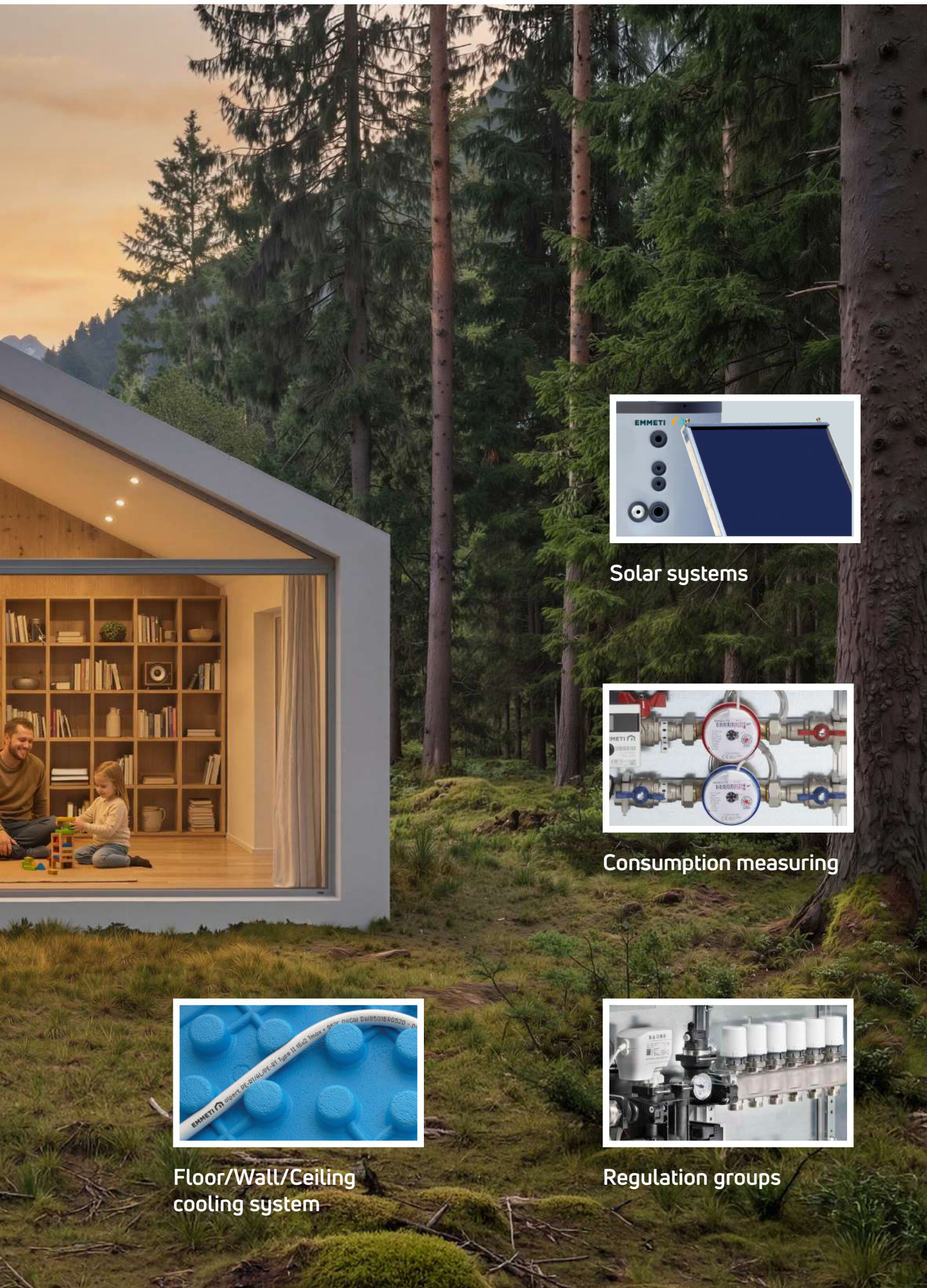


Control and regulation



Gas systems

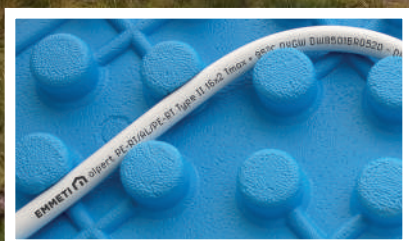




Solar systems



Consumption measuring



Floor/Wall/Ceiling
cooling system



Regulation groups

1 Multilayer distribution systems for water and gas

2 Floor heating and cooling systems

3 Wall and ceiling heating and cooling systems

4 Manifolds, boxes and Mixing groups

5 Regulation and control

6 Consumption measuring systems

7 Connection and control of heating units

8 Seals and screw fittings

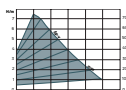
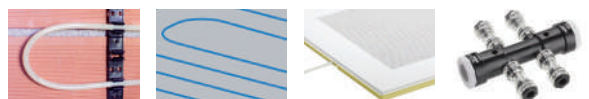
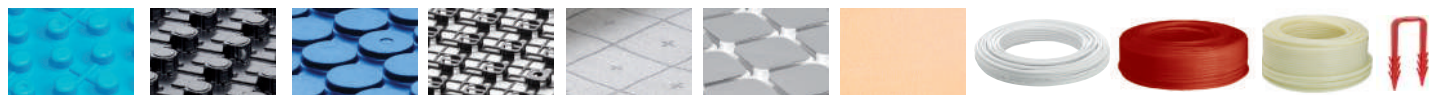
9 Gas ball valves

10 Tanks, solar panels and accessories for solar systems

11 Heating unit components

12 Spare parts and accessories

13 Technical attachments



Gerpex, EMMETI Alpert, Gaspex Multilayer distribution systems for water and gas



> Gerpex pipe
bare, insulated, in bars



24

> Gerpex RA pipe
bare, insulated, in bars



26

> EMMETI Alpert pipe
bare, insulated, in bars



29

> Press fitting and
Built-in Gerpex valve LBP



31

> Press fittings
and Built-in Gerpex valve



42

> Gaspex pipe
bare, in bars, corrugated sheat



46

> Multilayer Gaspex pipe UV protection



49

> Gaspex press fittings



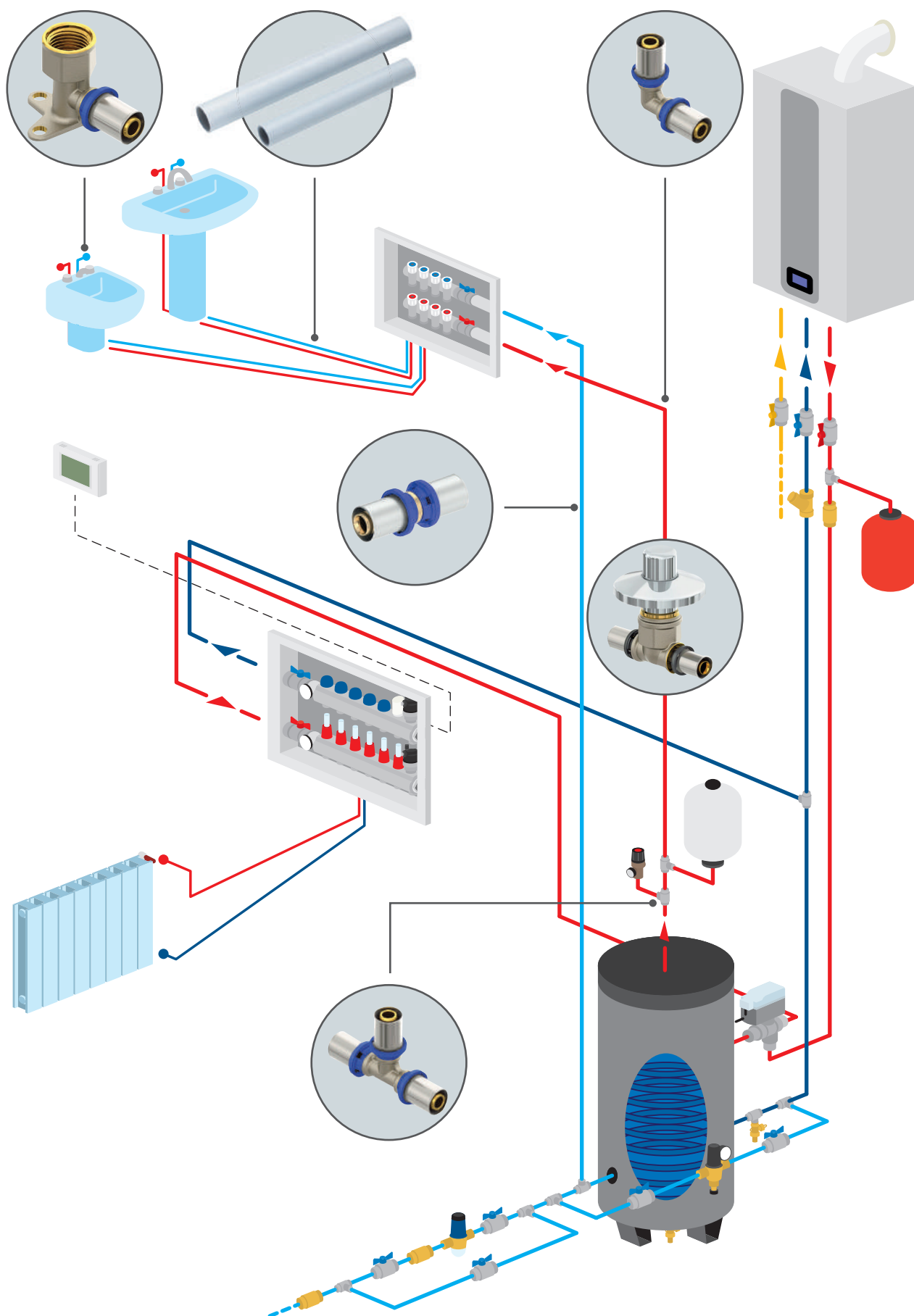
50

> Gerpex / Gaspex tooling



54

Example of installation



Multilayer systems for water

Sanitary hot water distribution systems



Emmeti systems consisting of multilayer pipes and brass press fittings represent the modern and efficient solution for the construction of bathroom fixtures, heating and cooling systems.

Among the countless advantages, the following can be identified: high resistance to high temperatures and pressures, low thermal expansion (comparable to that of a copper pipe), low pressure drops, resistance to crushing and abrasion, oxygen impermeability (thanks to the presence of an aluminium layer inside the pipes), resistance to electrochemical corrosion (thanks to the presence of a special dielectric element inside the fittings) and, finally, its reduced weight and fast installation.

Basically, multilayer pipes combine the traditional processing and durability advantages of a plastic pipe, with the strength and dimensional stability to high temperatures and pressures that characterise a metal pipe

The Emmeti product range

The Emmeti product range is quite wide and diversified, and consists of 3 types of multilayer pipes and 2 types of brass press fittings.

Only the trade names of the products are mentioned here; for details on their construction characteristics, their differences and the complete range, refer to what is indicated on the following pages.

Multilayer pipes:

- pipes **Gerpex**;
- pipes **Gerpex RA**;
- pipes **EMMETI Alpert**.

Brass press fittings:

- fittings **Gerpex**;
- fittings **Gerpex LBP**.

Emmeti multilayer water system certifications

kiwa 

IT-TD-Ki0410

<https://efrdoc.com/KIWA>



WRAS

Systems consisting of Gerpex RA pipe and press fittings

- **kiwa**  : system certification (according to UNI EN ISO 21003) in combination with Gerpex and Gerpex LBP fittings in sizes DN 16, 20, 26, 32.

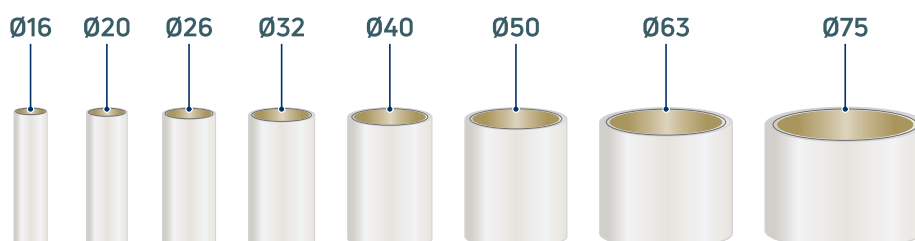
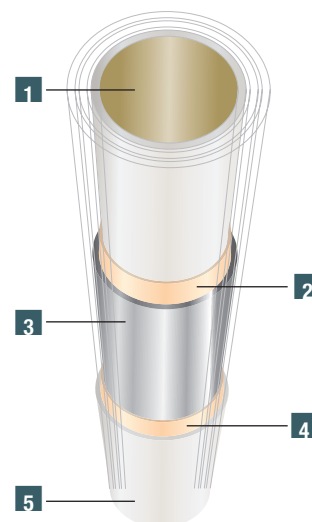
Systems consisting of EMMETI Alpert pipe and press fittings

- **kiwa**  : system certification (according to UNI EN ISO 21003) in combination with Gerpex and Gerpex LBP fittings in sizes DN 16, 20, 26, 32.
-  : system certification (according to UNI EN ISO 21003) in combination with Gerpex LBP fittings in sizes DN 16, 20, 26, 32, and in combination with Gerpex fittings in sizes DN 40, 50, 63.
-  : system certification (according to the Regulation W534) in combination with Gerpex and Gerpex LBP fittings in sizes DN 16, 20.
- **WRAS** : system certification in combination with Gerpex LBP fittings in sizes DN 16, 20, 26, 32, and in combination with Gerpex fittings in sizes DN 40, 50, 63.

All of the above systems comply with Italian Ministerial Decree 174/2004 (Suitability for contact with drinking water, for the distribution of water intended for human consumption).

Gerpex pipe

Multilayer composite pipe Gerpex for water



Construction

- 1 Cross-linked polyethylene inner pipe (PE-Xb).
- 2 Bonding layer connecting the inner pipe to the aluminium pipe.
- 3 Butt-welded aluminium pipe, thickness min 0,3 mm.
- 4 Bonding layer connecting the outer pipe to the aluminium pipe.
- 5 Cross-linked polyethylene outer pipe (PE-Xb).

Technical data Gerpex pipe

Classes of application (UNI EN ISO 21003 - see table "Classification of conditions of use" in the section "Technical attachments"): 2/10 bar, 5/10 bar

Maximum operating conditions for 50 years:

- Design temperature $T_D = 70^\circ\text{C}$

- Design pressure $p_D = 10$ bar

Maximum temperature for short periods: 95°C

Coefficient of linear expansion: $0,026 \text{ mm/m } ^\circ\text{C}$

Thermal conductivity: $0,45 \text{ W/m } ^\circ\text{C}$

Minimum radius of bending: $5 \times \text{Ø pipe}$

Surface roughness of internal pipe: $7 \mu\text{m}$

Fire reaction class: E_L (EN 13501-1)

Technical data of insulating sheath

Material: Closed-cell expanded polyethylene, covered with a film in extruded LD-PE.

Thermal conductivity (at 40°C): $\leq 0.040 \text{ W/mK}$ (UNI EN ISO 8497).

Water vapor diffusion resistance factor μ : 5000

Fire reaction class: $B_L - s2, d0$ (EN 13501-1).

Thickness of covering: Compliant with attachment B- TAB 1 of Italian Presidential Decree 412/93 for pipes that run within structures that do not face onto the exterior, nor onto heated rooms.

See introductory page Multilayer Water Systems (page 23) for details.

Classification of service conditions (UNI EN ISO 21003-1): see section Technical Attachments.

Regression curves: see section Technical Attachments.

Multilayer composite pipe Gerpex for water for water



[UNI EN ISO 21003]

Gerpex bare pipe in coils

Dimension	m pack	Code	Price €/m
16 x 2	100	28105000	2,46
20 x 2	200	28105002	3,82
20 x 2	100	28105004	3,82
26 x 3	50	28105006	6,72
32 x 3	50	28105008	9,77



[UNI EN ISO 21003]

Gerpex preinsulated pipe in coils

Dimension	Insulation thickness	m pack	Code	Price €/m
16 x 2	6 mm	100	28105100	3,39
16 x 2	6 mm	50	28105116	3,39
20 x 2	6 mm	50	28105104	4,97
20 x 2	9 mm	50	28105106	5,28
26 x 3	9 mm	50	28102882	10,28
32 x 3	9 mm	25	28102576	14,74

16x2 (6 mm) - 20x2 (9 mm) - 26x3 (9 mm) - 32x3 (9 mm):

Type installations C (see Insulation, section Heating unit components)



[UNI EN ISO 21003]

Gerpex bare pipe in 4 mt bars

Dimension	m pack	Code	Price €/m
16 x 2 (*)	96	28108000	2,85
20 x 2 (*)	96	28108004	4,35
26 x 3 (*)	40	28108006	7,88
32 x 3 (*)	28	28108008	11,74
40 x 3,5	20	28100096	21,21
50 x 4	20	28100098	29,00
63 x 4,5	12	28100100	50,69
75 x 5	12	28100070	78,20

(*) Packaged in rigid protective pipe



Galvanised steel isophonic pipe clamp collar

Dimension (mm)	Dimension (Inch)	Pcs. pack	Code	Price €/pc.
15-19	3/8"	10	01241500	2,38
20-24	1/2"	10	01241502	2,49
23-28	3/4"	10	01241504	2,57
31-36	1"	10	01241506	2,80
38-44	1 1/4"	5	01241508	3,07
44-50	1 1/2"	5	01241510	3,39
54-58	-	5	01241512	3,98
62-67	-	5	01241516	2,84
74-80	2 1/2"	5	01241514	4,33

20x1.5 mm metal plate, M8/10 nut



Joint screw with rawlplug

Dimension	Pcs. pack	Code	Price €/pc.
Ø 8 x 90	10	01241520	0,52

Ø 10 x 60 rawlplug

Gerpex RA pipe

Multilayer composite pipe Gerpex RA for water



Ø14



Ø16



Ø18



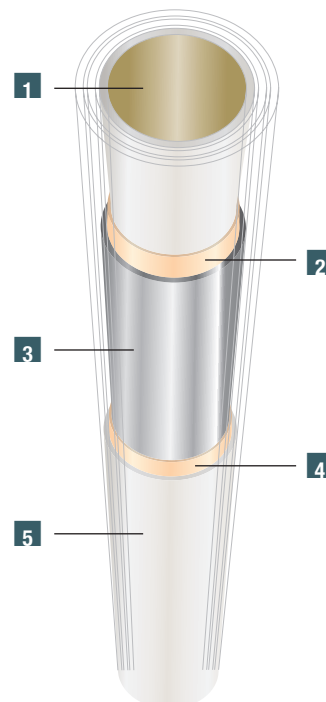
Ø20



Ø26



Ø32



Construction

- 1 Cross-linked polyethylene inner pipe (PE-Xb).
- 2 Bonding layer connecting the inner pipe to the aluminium pipe.
- 3 Butt-welded aluminium pipe, thickness min 0,2 mm.
- 4 Bonding layer connecting the outer pipe to the aluminium pipe.
- 5 Cross-linked polyethylene outer pipe (PE-Xb).

Technical data Gerpex RA pipe

Classes of application (UNI EN ISO 21003 - see table "Classification of conditions of use" in the section "Technical attachments"): 2/10 bar, 5/10 bar

Maximum operating conditions for 50 years:

- Design temperature $T_D = 70^\circ\text{C}$
- Design pressure $p_D = 10$ bar

Maximum temperature for short periods: 95°C

Coefficient of linear expansion: $0,026\text{ mm/m}^\circ\text{C}$

Thermal conductivity: $0,45\text{ W/m}^\circ\text{C}$

Minimum radius of bending: $5 \times \varnothing$ pipe

Surface roughness of internal pipe: $7\text{ }\mu\text{m}$

Fire reaction class: E_L (EN 13501-1)

Technical data of insulating sheath

Material: Closed-cell expanded polyethylene, covered with a film in extruded LD-PE.

Thermal conductivity (at 40°C): $\leq 0,040\text{ W/mK}$ (UNI EN ISO 8497)

Water vapor diffusion resistance factor μ : 5000

Fire reaction class: $B_L - s2, d0$ (EN 13501-1).

Thickness of covering (UNI 10376): Compliant with attachment

B- TAB 1 of Italian Presidential Decree 412/93 for pipes that run within structures that do not face onto the exterior, nor onto heated rooms.

kiwa 

IT-TD-Ki0410
<https://efrdoc.com/KIWA>

EPD
VERIFIED

See introductory page Multilayer Water Systems (page 23) for details

Classification of service conditions (UNI EN ISO 21003-1): see section Technical Attachments.

Regression curves: see section Technical Attachments.

Multilayer composite pipe Gerpex RA for water



[UNI EN ISO 21003]

Gerpex RA bare pipe in coils

Dimension	m pack	Code	Price €/m
16 x 2	100	28106000	2,07
16 x 2	200	28106010	2,07
16 x 2	500	28106050	2,07
18 x 2	100	28102318	3,16
20 x 2	100	28106004	2,82
20 x 2	200	28106002	2,82
26 x 3	50	28106006	6,28
32 x 3	50	28106008	7,79



[UNI EN ISO 21003]

Gerpex RA preinsulated pipe in coils

Dimension	Insulation thickness	m pack	Code	Price €/m
16 x 2	6 mm	50	28106108	3,03
16 x 2	6 mm	100	28106100	3,03
18 x 2 (*)	6 mm	50	28102340	4,12
18 x 2	6 mm	100	28102338	4,12
20 x 2	6 mm	50	28106104	4,22
20 x 2	9 mm	50	28106106	4,59
26 x 3	9 mm	50	28102880	9,16
32 x 3	9 mm	25	28102872	12,06

16x2 (6 mm) - 20x2 (9 mm) - 26x3 (9 mm) - 32x3 (9 mm): **Type installations C**
(see Insulation, section Heating unit components)

(*) Items to be out of stock



[UNI EN ISO 21003]

Gerpex RA preinsulated pipe in coils

Dimension	Insulation thickness	m pack	Code	Price €/m
16 x 2 red	6 mm	100	28106140	3,13
16 x 2 blue	6 mm	100	28106142	3,13
20 x 2 red	6 mm	50	28106144	4,38
20 x 2 blue	6 mm	50	28106146	4,38
26 x 3 red	9 mm	50	28102884	9,16
26 x 3 blue	9 mm	50	28102886	9,16
32 x 3 red	9 mm	50	28102892	12,06
32 x 3 blue	9 mm	50	28102894	12,06

16x2 (6 mm): **Type installations C** (see Insulation, section Heating unit components)



[UNI EN ISO 21003]

Gerpex RA preinsulated pipe in coils

Dimension	Insulation thickness	m pack	Code	Price €/m
16 x 2	10 mm	50	28102540	3,40
20 x 2	13 mm	50	28102542	5,00
26 x 3	13 mm	25	28102870	9,48
32 x 3	13 mm	25	28102874	12,47

20x2 (13 mm) - 26x3 (13 mm) - 32x3 (13 mm): **Type installations C**

16x2 (10 mm): **Type installations B** (see Insulation, section Heating unit components)



[UNI EN ISO 21003]

Gerpex RA double (red + blue) preinsulated pipe

Dimension	Insulation thickness	m pack	Code	Price €/m
16 x 2	6 mm	50	28102370	8,19
20 x 2	6 mm	50	28102372	10,20

Available on request: 40/50 days to order confirm.

Minimum lot: 10.000 meters

Multilayer composite pipe Gerpex RA for water



[UNI EN ISO 21003]

Gerpex RA bare pipe in 4 mt bars

Dimension	m pack	Code	Price €/m
16 x 2	96	28108010	2,64
20 x 2	96	28108014	3,74
26 x 3	40	28108016	6,84
32 x 3	28	28108018	10,11

Packaged in rigid protective pipe



[UNI EN ISO 21003]

Gerpex RA pipe with red corrugated sheath in coils

Dimension	m pack	Code	Price €/m
16 x 2	50	28102350	3,59
20 x 2	50	28102356	4,66
26 x 3	50	28102354	7,14

Available on request: 40/50 days to order confirm

Ø 16 = minimum lot 10.000 meters.

Ø 20 = minimum lot 5.000 meters.

Ø 26 = minimum lot 2.000 meters.



[UNI EN ISO 21003]

Gerpex RA pipe with blue corrugated sheath in coils

Dimension	m pack	Code	Price €/m
16 x 2	50	28102360	3,59
20 x 2	50	28102366	4,66
26 x 3	50	28102364	7,14

Available on request: 40/50 days to order confirm

Ø 16 = minimum lot 10.000 meters.

Ø 20 = minimum lot 5.000 meters.

Ø 26 = minimum lot 2.000 meters.



[UNI EN ISO 21003]

Gerpex RA double (red + blue) with corrugated sheath

Dimension	Insulation thickness	m pack	Code	Price €/m
16 x 2	6 mm	50	28102380	8,30
20 x 2	6 mm	50	28102382	10,18

Available on request: 40/50 days to order confirm.

Minimum lot: 10.000 meters



Galvanised steel isophonic pipe clamp collar

Dimension (mm)	Dimension (Inch)	Pcs. pack	Code	Price €/pc.
15-19	3/8"	10	01241500	2,38
20-24	1/2"	10	01241502	2,49
23-28	3/4"	10	01241504	2,57
31-36	1"	10	01241506	2,80
38-44	1 1/4"	5	01241508	3,07
44-50	1 1/2"	5	01241510	3,39
54-58	-	5	01241512	3,98
62-67	-	5	01241516	2,84
74-80	2 1/2"	5	01241514	4,33

20x1.5 mm metal plate, M8/10 nut



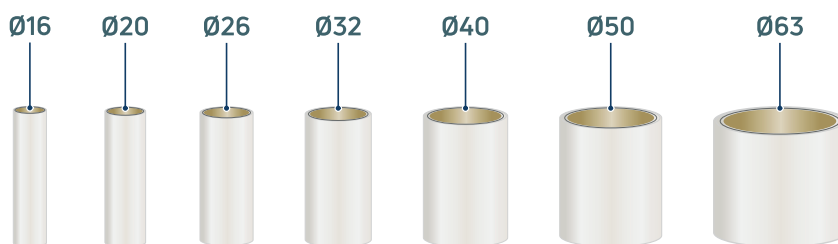
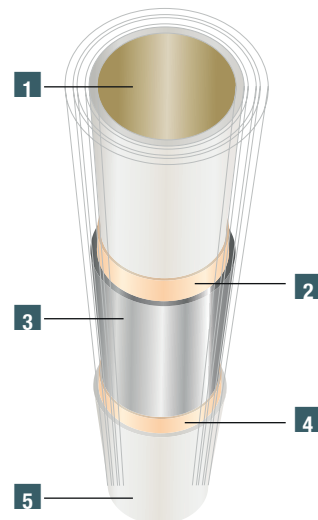
Joint screw with rawlplug

Dimension	Pcs. pack	Code	Price €/pc.
Ø 8 x 90	10	01241520	0,52

Ø 10 x 60 rawlplug

EMMETI Alpert

Multilayer composite pipe for water



Construction

- 1 Inner pipe PE-RT
- 2 Bonding layer connecting the inner pipe to the aluminium pipe
- 3 Horizontal-roller-position welding
- 4 Bonding layer connecting the outer pipe to the aluminium pipe
- 5 External pipe PE-RT

Technical data of pipe

Classes of application (UNI EN ISO 21003 - see section Technical Attachments "Classification of service conditions"): 2/10 bar, 5/10 bar

Maximum operating conditions for 50 years:

- project temperature $T_D = 70^\circ\text{C}$

- project pressure $p_D = 10$ bar

Maximum temperature for short periods: 95°C

Coefficient of linear expansion: $0,026 \text{ mm/m } ^\circ\text{C}$

Thermal conductivity: $0,45 \text{ W/mK}$

Minimum radius of bending: $5 \times \varnothing$ pipe

Surface roughness of the inner tube: $7 \mu\text{m}$

Fire reaction class: E_L (EN13501-1).

Technical data of insulating sheath

Material: Closed-cell expanded polyethylene, covered with a film in extruded LD-PE.

Thermal conductivity (at 40°C): $\leq 0,040 \text{ W/mK}$ (UNI EN ISO 8497).

Fire reaction class: $B_L - s2, d0$ (EN 13501-1).

Water vapor diffusion resistance factor μ : 5000

Thickness of covering (UNI 10376): Compliant with attachment B-TAB 1 of Italian Presidential Decree 412/93 for pipes that run within structures that do not face onto the exterior, nor onto heated rooms.



See introductory page Multilayer Water Systems (page 23) for details.

Classification of service conditions (UNI EN ISO 21003-1): see section Technical Attachments.

Regression curves: see section Technical Attachments.

Multilayer composite pipe for water



[UNI EN ISO 21003]

EMMETI Alpert nude pipe in coils

Dimension	m pack	Code	Price €/m
16 x 2	100	28107002	1,89
16 x 2	200	28107000	2,07
16 x 2	500	28107004	2,07
20 x 2	100	28107016	2,81
20 x 2	240	28107018	2,81
26 x 3	50	28107006	5,52
32 x 3	50	28107008	6,84
40 x 3,5	25	28142036	16,50

NEW



[UNI EN ISO 21003]

EMMETI Alpert preinsulated pipe in coils

Dimension	Insulation thickness	m pack	Code	Price €/m
16 x 2	6 mm	50	28107102	3,03
16 x 2	6 mm	100	28107100	3,03
20 x 2	6 mm	50	28107104	4,18
20 x 2	9 mm	50	28107106	4,55
26 x 3	9 mm	50	28107208	8,06
32 x 3	9 mm	25	28107210	10,60

16x2 (6 mm) - 20x2 (9 mm) - 26x3 (9 mm) - 32x3 (9 mm): **Type installations C**
(see Insulation, section Heating unit components)



[UNI EN ISO 21003]

EMMETI Alpert nude bare pipe in 4 mt bars

Dimension	m pack	Code	Price €/m
26 x 3 ⁽¹⁾	40	28108036	6,62
32 x 3 ^{(2) (*)}	28	28142018	9,84
32 x 3 ⁽¹⁾	28	28108038	9,78
40 x 3,5 ⁽²⁾	16	28142020	18,00
50 x 4 ⁽²⁾	20	28142032	41,81
63 x 4,5 ⁽²⁾	12	28142034	64,73

⁽¹⁾ Packed in a protective PE-HD plastic tube

⁽²⁾ Packed in a protective cardboard tube

(*) Item to be out of stock

Press fittings Gerpex LBP

Press fittings for water Gerpex LBP



Construction

- 1 Body in brass CW617N - DW (UNI EN 12164 and 12165); Threads: UNI EN ISO 228-1, UNI EN 10226.
- 2 Nylon sleeve ring, dielectric
- 3 AISI 304 stainless steel sleeve
- 4 EPDM dual o-ring

Certifications

GERPEX LBP fittings are KIWA ISO 21003 and DVGW W534 certified, with Gerpex RA and EMMETI Alpert pipes.

Gerpex LBP, the press fitting for multilayer pipe by Emmeti, has been developed to guarantee a water loss, in case of non-pressing, and a quick and safe pipe-fitting junction, when pressed correctly with the specific equipment.

The special fitting profile and the use of the double o-ring guarantees a perfect and lasting hydraulic and mechanical seal, and compatibility with 5 different pressing profiles (TH, B, U, H, F). The LBP function (**Leak Before Pressed**) allows the operator to easily identify any unpressed fittings during the system leak test, thus avoiding possible damage.

kiwa 



WRAS

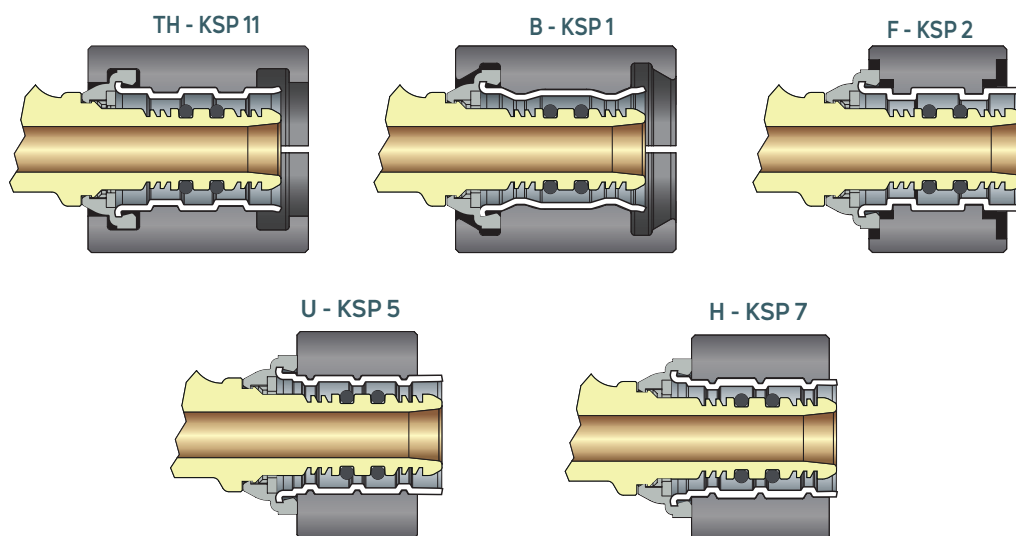
pluri



IT-TD-Ki0410
<https://efrdoc.com/KIWA>

See introductory page Multilayer Water Systems (page 23) for details.

Compatible pressing profiles



	16	20	26	32
TH	✓	✓	✓	✓
B	✓	✓	✓	✓
U	✓	✓	✓	✓
H	✓	✓	✓	✓
F	✓	✓	✓	✓

Press fittings for water Gerpex LBP



Female connecting elbow LBP

Dimension	Pcs. pack	Code	Price €/pc.
16 x 1/2"	10	28180088	5,41
20 x 1/2"	10	28180090	6,78
20 x 3/4"	10	28180092	9,37
26 x 3/4"	5	28180094	10,03
32 x 1"	5	28180096	18,28

Threads: Rp (UNI EN 10226-1)



Female elbow LBP with flange

Dimension	H mm	Pcs. pack	Code	Price €/pc.
16 x 1/2"	48	5	28180180	8,45
20 x 1/2"	48	5	28180182	8,79
20 x 3/4"	56	5	28180184	13,94
26 x 3/4"	56	5	28180186	14,13

Threads: Rp (UNI EN 10226-1)



Long Female elbow LBP with flange

Dimension	H mm	Pcs. pack	Code	Price €/pc.
16 x 1/2"	68	5	28180188	9,19
20 x 1/2"	68	5	28180190	9,46

Threads: Rp (UNI EN 10226-1)



Female elbow LBP H 52 with flange

Dimension	H mm	Pcs. pack	Code	Price €/pc.
16 x 1/2"	52	5	28181204	10,85
20 x 1/2"	52	5	28181206	11,11

Threads: Rp (UNI EN 10226-1)



Soundproofing shell for LBP female elbow H 52 mm with flange, including screw kit

Dimension	Pcs. pack	Code	Price €/pc.
Single model for H 52	1	28181230	16,16



Long Female elbow LBP H 78 mm with flange

Dimension	H mm	Pcs. pack	Code	Price €/pc.
16 x 1/2"	78	5	28181208	14,48
20 x 1/2"	78	5	28181210	14,67

Thread: Rp (UNI EN 10226-1)

Press fittings for water Gerpex LBP



Soundproofing shell for LBP female elbow H 78 mm with flange, including screw kit

Dimension	Pcs. pack	Code	Price €/pc.
Single model for H 78	1	28181232	16,85



Male connecting elbow LBP

Dimension	Pcs. pack	Code	Price €/pc.
16 x 1/2"	10	28180078	5,41
20 x 1/2"	10	28180080	6,79
20 x 3/4"	10	28180082	9,08
26 x 3/4"	5	28180084	10,03
26 x 1"	5	28180085	16,92
32 x 1"	5	28180086	17,29

Threads: Rp (UNI EN 10226-1)



Intermediate elbow LBP

Dimension	Pcs. pack	Code	Price €/pc.
16 x 16	10	28181070	6,08
20 x 20	10	28181072	8,73
26 x 26	5	28181074	12,54
32 x 32	5	28181076	19,68



45° elbow LBP intermediate

Dimension	Pcs. pack	Code	Price €/pc.
26 x 26	5	28180262	22,72
32 x 32	5	28180260	23,69



Elbow LBP with female swivel nut, flat seal

Dimension	Pcs. pack	Code	Price €/pc.
16 x 1/2"	1	28180098	7,31
16 x 3/4"	1	28180252	11,97
20 x 1/2"	1	28180254	11,99
20 x 3/4"	1	28180100	11,04
26 x 3/4"	1	28180256	13,03
26 x 1"	1	28180258	20,07

Threads: G (UNI EN ISO 228-1)

Press fittings for water Gerpex LBP



Female double elbow LBP H 52 mm with flange

Dimension	H mm	Pcs. pack	Code	Price €/pc.
16 x 1/2"	52	1	28180210	45,76
20 x 1/2"	52	1	28180212	46,84

Threads: Rp (UNI EN 10226-1)



Soundproofing shell for LBP double female elbow H 52 mm with flange, including screw kit

Dimension	Pcs. pack	Code	Price €/pc.
Double model for H 52	1	28181240	16,78



Straight Female union joint LBP

Dimension	Pcs. pack	Code	Price €/pc.
16 x 1/2"	10	28180034	4,83
20 x 1/2"	10	28180036	5,71
20 x 3/4"	10	28180038	8,23
26 x 3/4"	5	28180040	8,66
26 x 1"	5	28180042	11,99
32 x 1"	5	28180044	13,80

Threads: Rp (UNI EN 10226-1)



Straight Male union joint LBP

Dimension	Pcs. pack	Code	Price €/pc.
16 x 1/2"	10	28180020	4,55
16 x 3/4"	10	28180023	6,31
20 x 1/2"	10	28180022	5,23
20 x 3/4"	10	28180024	6,24
26 x 3/4"	5	28180026	8,32
26 x 1"	5	28180028	11,57
32 x 1"	5	28180030	12,42
32 x 1 1/4"	1	28180032	33,49

Threads: R (UNI EN 10226-1)

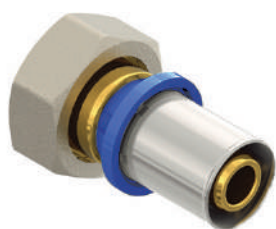


Straight Male union joint LBP with o-ring

Dimension	Pcs. pack	Code	Price €/pc.
16 x 1/2"	10	28180214	9,73
20 x 1/2"	10	28180216	10,28

Threads: G (UNI EN ISO 228-1)

Press fittings for water Gerpex LBP



Straight LBP with female swivel nut, o-ring seal

Dimension	Pcs. pack	Code	Price €/pc.
Ø 16 - 24x19 O-R	10	28180062	5,92
Ø 20 - 24x19 O-R	10	28180064	8,05
Ø 16 - Eurocone 3/4" O-R	10	28180066	7,79
Ø 20 - Eurocone 3/4" O-R	10	28180068	8,66

Threads 3/4": G (UNI EN ISO 228-1)



Straight LBP with female swivel nut, flat seal

Dimension	Pcs. pack	Code	Price €/pc.
16 x 3/8" (*)	1	28180046	5,96
16 x 1/2"	1	28180048	7,00
16 x 3/4"	1	28180050	8,32
20 x 1/2"	1	28180052	7,95
20 x 3/4"	1	28180054	8,33
26 x 3/4"	1	28180056	8,60
26 x 1"	1	28180058	10,49
32 x 1"	1	28180060	11,84

Threads: G (UNI EN ISO 228-1)

(*) Item to be out of stock



Straight intermediate union joint LBP

Dimension	Pcs. pack	Code	Price €/pc.
16 x 16	10	28181000	5,11
20 x 20	10	28181002	6,36
26 x 26	5	28181004	9,66
32 x 32	5	28181006	13,04



Straight intermediate reducing union joint LBP

Dimension	Pcs. pack	Code	Price €/pc.
20 x 16	10	28181008	6,95
26 x 16	5	28181010	9,10
26 x 20	5	28181012	9,30
32 x 16	5	28181014	11,26
32 x 20	5	28181016	13,85
32 x 26	5	28181018	12,52



Plug LBP

Dimension	Pcs. pack	Code	Price €/pc.
16 x 2	10	28180218	4,53
20 x 2	10	28180220	5,19
26 x 3	5	28180222	7,14
32 x 3	5	28180224	8,99



Adapter LBP multilayer / copper

Dimension	Pcs. pack	Code	Price €/pc.
16 x 15 mm	1	28180226	7,14
20 x 18 mm	1	28180228	8,19
20 x 22 mm	1	28180230	9,37
26 x 22 mm	1	28180232	10,39
32 x 28 mm	1	28180234	12,73

Compatibility with copper and bronze press fittings with V profile (KSP4)

Press fittings for water Gerpex LBP



Intermediate Tee joint LBP

Dimension	Pcs. pack	Code	Price €/pc.
16 x 16 x 16	5	28181102	8,61
20 x 20 x 20	5	28181104	11,47
26 x 26 x 26	5	28181106	18,28
32 x 32 x 32	5	28181108	29,43



Intermediate reducing Tee joint LBP

Dimension	Pcs. pack	Code	Price €/pc.
16 x 20 x 16	5	28181110	10,84
20 x 16 x 16	5	28181112	10,60
20 x 16 x 20	5	28181114	11,47
20 x 20 x 16	5	28181116	11,47
20 x 26 x 20	5	28181118	16,55
20 x 32 x 20	5	28181120	25,81
26 x 16 x 20	5	28181122	16,35
26 x 16 x 26	5	28181124	17,29
26 x 20 x 16	5	28181126	16,35
26 x 20 x 20	5	28181128	16,55
26 x 20 x 26	5	28181130	18,28
26 x 26 x 16	5	28181132	16,66
26 x 26 x 20	5	28181134	17,29
26 x 32 x 26	5	28181136	28,25
32 x 16 x 32	5	28181138	26,34
32 x 20 x 20	5	28181140	25,81
32 x 20 x 26	5	28181142	26,34
32 x 20 x 32	5	28181150	28,25
32 x 26 x 20	5	28181152	25,81
32 x 26 x 26	5	28181154	26,34
32 x 26 x 32	5	28181156	29,43
32 x 32 x 16	5	28181144	26,34
32 x 32 x 20	5	28181146	26,34
32 x 32 x 26	5	28181148	28,25



Intermediate Tee joint LBP with female branch

Dimension	Pcs. pack	Code	Price €/pc.
16 x 1/2" x 16	5	28180166	8,60
20 x 1/2" x 20	5	28180168	9,46
16 x 3/4" x 16	5	28180170	13,67
20 x 3/4" x 20	5	28180172	15,25
26 x 1/2" x 26	5	28180173	18,28
26 x 3/4" x 26	5	28180174	21,64
32 x 1/2" x 32	5	28180244	28,67
32 x 3/4" x 32	5	28180176	29,43
32 x 1" x 32	5	28180178	28,25

Threads: Rp (UNI EN 10226-1)



Intermediate Tee joint LBP with Male branch

Dimension	Pcs. pack	Code	Price €/pc.
16 x 1/2" x 16	5	28180158	8,60
20 x 1/2" x 20	5	28180160	10,03
20 x 3/4" x 20	5	28180162	13,92
26 x 3/4" x 26	5	28180164	15,48

Threads: R (UNI EN 10226-1)

Press fittings for water Gerpex LBP



Right-angle elbow with copper pipe, chromed

Dimension	Pcs. pack	Code	Price €/pc.
16 x DN 15 L 165	1	28181200	17,34

Not suitable for sanitary installations



Offset female Tee joint LBP

Dimension	Pcs. pack	Code	Price €/pc.
16 x 1/2" x 16	5	28180192	19,11
20 x 1/2" x 20	5	28180194	19,11

Threads: Rp (UNI EN 10226-1)



Right terminal LBP

Dimension	Pcs. pack	Code	Price €/pc.
16 x 1/2"	5	28180196	15,48
20 x 1/2"	5	28180198	15,82

Threads: Rp (UNI EN 10226-1)

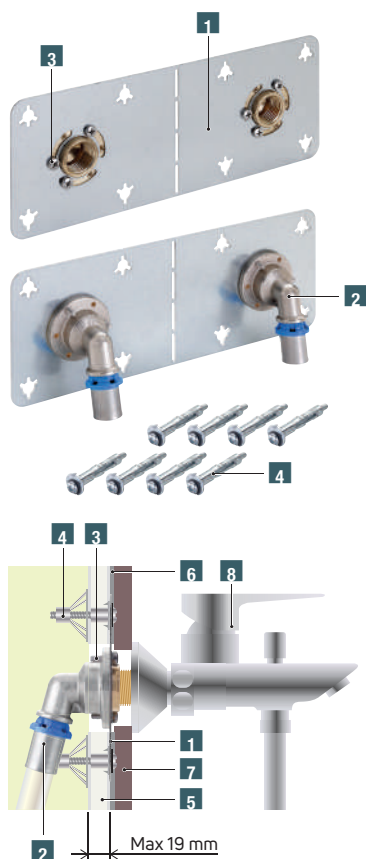


Left terminal LBP

Dimension	Pcs. pack	Code	Price €/pc.
16 x 1/2"	5	28180200	15,48
20 x 1/2"	5	28180202	15,82

Threads: Rp (UNI EN 10226-1)

Raccordi a pressione per acqua Gerpex LBP



Bath/shower kit for plasterboard, LBP

Composition

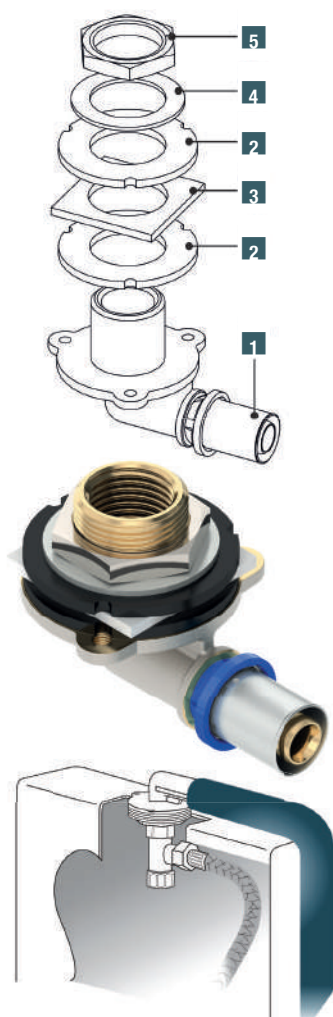
- 1 No. 1 steel plate, connection spacing 150 mm;
- 2 No. 2 LBP female elbow fittings, size 16 x 1/2", 105°;
- 3 No. 6 M4x12 screws, for fixing the fittings on the metal plate;
- 4 No. 8 M4 wall plugs, for fixing the plate on the plasterboard.

The kit is suitable for installation on plasterboard sheets with a maximum thickness of 19 mm

Dimension	Pcs. pack	Code	Price €/pc.
16 x 1/2" - 105°	1	28180250	56,65

Installation example

- 1 Steel plate, connection spacing 150 mm
- 2 LBP female elbow fitting, size 16 x 1/2", 105°
- 3 Screw M4x12
- 4 M4 dowel
- 5 Plasterboard sheet
- 6 Glue
- 7 Tile
- 8 Mixer



Elbow fitting for flush-mounted toilet flush boxes

Operating temperature: 0 °C ÷ 95 °C

Operating pressure: 10 bar

Composition

- 1 Male square fitting
- 2 NBR Seal
- 3 Polypropylene square plate (PP)
- 4 Galvanised steel washer (Fe P13 EU111)
- 5 Brass hex locknut dimension 32 (EN 12164 CW617N)

Dimension	Pcs. pack	Code	Price €/pc.
16 x 1/2"	1	28181202	23,75

Press fittings for water Gerpex LBP



Kit 10 galvanised flush-mounted brackets for flanged elbows

Dimension	Pcs. pack	Code	Price €/kit
10 brackets kit	1	28104062	93,19
Takeoffs 80-100-153 mm Takeoffs 153 mm for fixing flanged elbow in 4 point.			



Built-in galvanised bracket for flanged elbows

Dimension	Pcs. pack	Code	Price €/pc.
	2	28101530	8,17
Takeoffs 80-100-153 mm			



Galvanised bracket for flanged elbow

Dimension	Pcs. pack	Code	Price €/pc.
	1	28101531	5,31
Takeoff 153 mm			



Bracket for axially offset Tee

Dimension	Pcs. pack	Code	Price €/pc.
	2	28101532	5,78



Plug for circuit test with o-ring

Dimension	Pcs. pack	Code	Price €/pc.
1/2" blue	50	28090003	0,91
1/2" red	50	28090004	0,91
3/4" blue	50	28090006	1,42
3/4" red	50	28090008	1,47

Threads: G (UNI EN ISO 228-1)



Leakage test plug for multilayer pipe

Dimension	Pcs. pack	Code	Price €/pc.
16 x 2	1	28101846	23,55
20 x 2	1	28101848	23,55

Complete with 1/2" F fitting for release valve (provided standard)

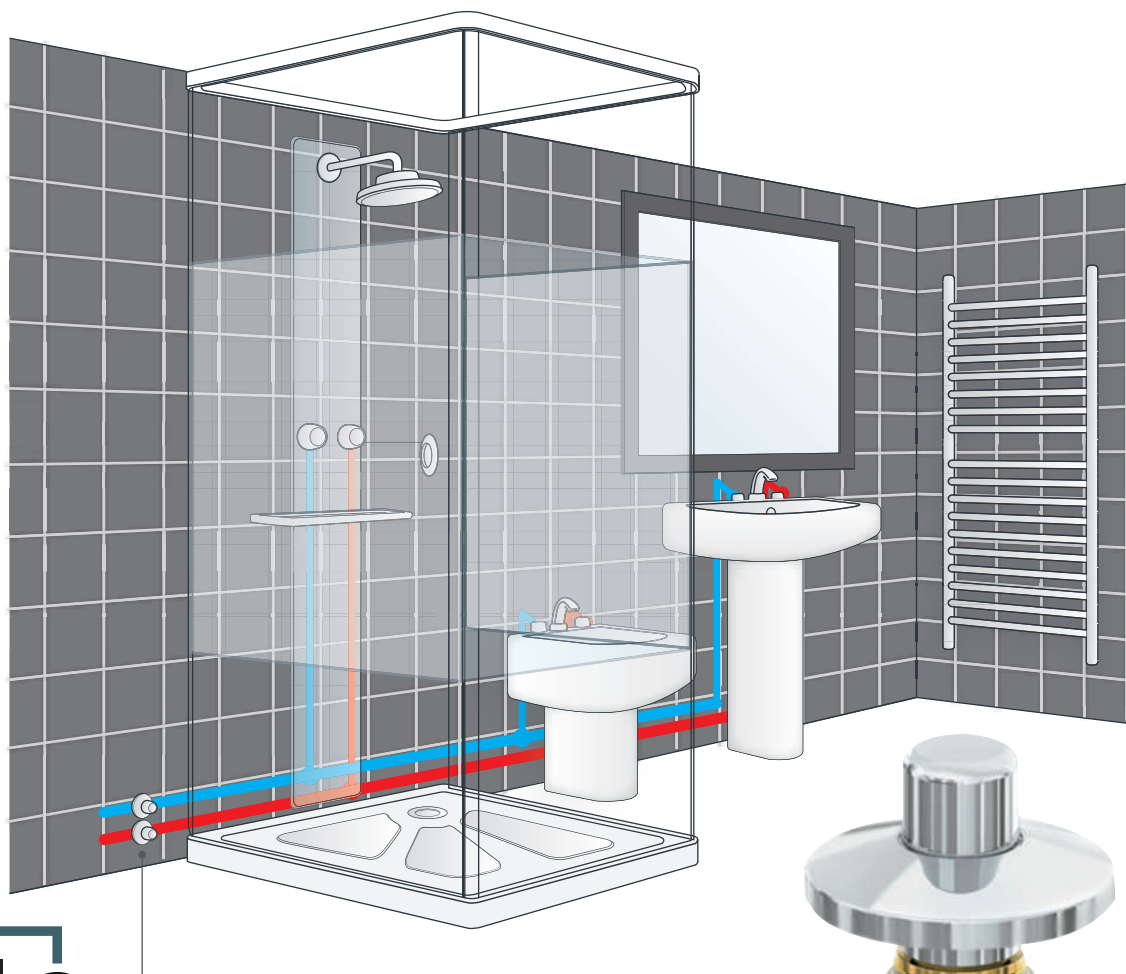


Built-in box for flanged elbows

Dimension	Pcs. pack	Code	Price €/pc.
	1	13010010	9,83

For installation of flanged elbows

Valve for built-in application Gerpex LBP



Construction

Body made of brass CW617N DW (UNI EN 12165)
Group screw brass CW617N - DW (UNI EN 12164)
Rosette-gaskets-flywheel, brushed and chrome-plated
Gasket and seal in EPDM

Technical data

Maximum operating temperature: 95 °C
Maximum operating pressure at 95 °C: 6 bar

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 **WRAS** pluri  **profile**

EPD
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Body LBP

Dimension	Pcs. pack	Code	Price €/pc.
16 x 3/4"	1	28180204	13,80
20 x 3/4"	1	28180206	15,25
26 x 3/4"	1	28180208	21,64

Threads: Rp (UNI EN 10226-1)

Valve for built-in application Gerpex LBP



Screw group 3/4" for built-in valve body

Dimension	Pcs. pack	Code	Price €/pc.
3/4"	10	28100988	29,14

Threads: RGp (UNI EN ISO 228-1)
Complete with screw protection cap.



Cap shutter 3/4" with handle

Dimension	Pcs. pack	Code	Price €/pc.
3/4"	10	28100982	22,90

Threads: G (UNI EN ISO 228-1)



Extended screw (+20 mm) brass 3/4"

Dimension	Pcs. pack	Code	Price €/pc.
3/4" for built-in valve body (*)	10	90008172	19,60
3/4" for cap shutter with handle	10	90008180	12,35

Threads: G (UNI EN ISO 228-1)
(*) Complete with screw protection cap.



Spherical ash seal

Dimension	Pcs. pack	Code	Price €/pc.
	10	90008012	2,00



x 10

Set of 10 spare parts plastic butterfly handle for 3/4" blind quill screw assembly

Dimension	Pcs. pack	Code	Price €/set
Set of 10 butterfly handles	1	90008194	3,49



x 10

Set of 10 brass handles for 3/4" blind quill screw Group

Dimension	Pcs. pack	Code	Price €/set
Set of 10 brass handles	1	90008192	30,33

Press fittings Gerpex for water

Press fittings for water Gerpex



SCAN



Construction

- 1 Body in brass CW617N - DW (UNI EN 12164 and 12165). Threads: UNI EN ISO 228-1, UNI EN 10226.
- 2 Nylon sleeve ring, dielectric
- 3 AISI 304 stainless steel sleeve
- 4 EPDM dual o-ring



See introductory page Multilayer Water Systems (page 23) for details



Female connecting elbow

Dimension	Profile	Pcs. pack	Code	Price €/pc.
18 x 1/2"	B (KSP1)	10	28101332	8,87
40 x 1 1/4	TH (KSP11)	1	28115536	34,80
50 x 1 1/2	TH (KSP11)	1	28115572	56,80
63 x 2"	TH (KSP11)	1	28115404	85,51
75 x 2 1/2	TH (KSP11) (†)	1	28115564	173,00

Threads: Rp (UNI EN 10226-1)

(†) 75x5 derivation also compatible with F profile (KSP2)



Female elbow with flange

Dimension	Profile	H mm	Pcs. pack	Code	Price €/pc.
18 x 1/2"	B (KSP1)	52,5	10	28101302	11,31

Threads: Rp (UNI EN 10226-1)



Male connecting elbow

Dimension	Profile	Pcs. pack	Code	Price €/pc.
18 x 1/2"	B (KSP1)	10	28101344	9,05
40 x 1 1/4	TH (KSP11)	1	28115150	38,54
50 x 1 1/2	TH (KSP11)	1	28115160	57,99
63 x 2"	TH (KSP11)	1	28115170	75,73

Threads: R (UNI EN 10226-1)



Intermediate elbow

Dimension	Profile	Pcs. pack	Code	Price €/pc.
18 x 18	B (KSP1)	10	28101354	10,43
40 x 40	TH (KSP11)	1	28115200	50,82
50 x 50	TH (KSP11)	1	28115210	62,84
63 x 63	TH (KSP11)	1	28115220	80,65
75 x 75	TH (KSP11) (†)	1	28115540	146,90

(†) 75x5 derivation also compatible with F profile (KSP2)

Press fittings Gerpex for water



Intermediate elbow 45°

Dimension	Profile	Pcs. pack	Code	Price €/pc.
40 x 40	TH (KSP11)	1	28101720	37,34
50 x 50	TH (KSP11)	1	28101722	58,56
63 x 63	TH (KSP11)	1	28101724	71,15
75 x 75	TH (KSP11) ⁽¹⁾	1	28115542	143,40

⁽¹⁾ 75x5 derivation also compatible with F profile (KSP2)



Straight Female union joint

Dimension	Profile	Pcs. pack	Code	Price €/pc.
18 x 1/2"	B (KSP1)	10	28101456	6,21
40 x 1"1/4	TH (KSP11)	1	28115534	27,50
50 x 1"1/2	TH (KSP11)	1	28115570	29,42
63 x 2"	TH (KSP11)	1	28115402	41,90
75 x 2"1/2	TH (KSP11) ⁽¹⁾	1	28115562	157,80

⁽¹⁾ 75x5 derivation also compatible with F profile (KSP2)

Threads: Rp (UNI EN 10226-1)

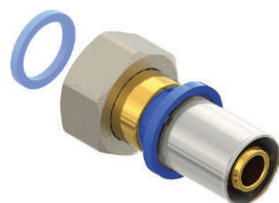


Straight Male union joint

Dimension	Profile	Pcs. pack	Code	Price €/pc.
18 x 1/2"	B (KSP1)	10	28101442	6,51
40 x 1"	TH (KSP11)	1	28115512	33,40
40 x 1"1/4	TH (KSP11)	1	28115000	33,40
50 x 1"1/2	TH (KSP11)	1	28115010	38,90
63 x 2"	TH (KSP11)	1	28115020	57,38
75 x 2"1/2	TH (KSP11) ⁽¹⁾	1	28115552	117,70

⁽¹⁾ Derivation 75x5: also compatible with profile F (KSP2)

Threads: R (UNI EN 10226-1)



Straight with female swivel nut, flat seal

Dimension	Profile	Pcs. pack	Code	Price €/pc.
40 x 1"1/2	TH (KSP11)	1	28102622	36,98
50 x 2"	TH (KSP11)	1	28102624	64,11
63 x 2"1/2	TH (KSP11)	1	28102626	90,05

Threads: G (UNI EN ISO 228-1)



Straight intermediate union joint

Dimension	Profile	Pcs. pack	Code	Price €/pc.
18 x 18	B (KSP1)	10	28101424	8,63
40 x 40	TH (KSP11)	1	28115050	38,90
50 x 50	TH (KSP11)	1	28115060	59,16
63 x 63	TH (KSP11)	1	28115070	72,07
75 x 75	TH (KSP11) ⁽¹⁾	1	28115554	134,70

⁽¹⁾ derivation 75x5 also compatible with F profile (KSP2)



Straight intermediate reducing union joint

Dimension	Profile	Pcs. pack	Code	Price €/pc.
40 x 26	TH (KSP11) ⁽¹⁾	1	28181020	33,40
40 x 32	TH (KSP11) ⁽¹⁾	1	28181022	36,62
50 x 32	TH (KSP11) ⁽¹⁾	1	28181024	50,82
50 x 40	TH (KSP11)	1	28115110	57,99
63 x 40	TH (KSP11)	1	28115120	66,64
63 x 50	TH (KSP11)	1	28115130	68,95
75 x 40	TH (KSP11) ⁽²⁾	1	28115556	123,10
75 x 50	TH (KSP11) ⁽²⁾	1	28115558	124,60
75 x 63	TH (KSP11) ⁽²⁾	1	28115560	126,70

⁽¹⁾ LBP function in 26x3 and 32x3 leads.

⁽²⁾ 75x5 derivation: also compatible with profile F (KSP2)

Press fittings Gerpex for water



Intermediate Tee joint

Dimension	Profile	Pcs. pack	Code	Price €/pc.
18 x 18 x 18	B (KSP1)	5	28101364	14,70
40 x 40 x 40	TH (KSP11)	1	28115250	62,84
50 x 50 x 50	TH (KSP11)	1	28115260	81,97
63 x 63 x 63	TH (KSP11)	1	28115270	113,50
75 x 75 x 75	TH (KSP11) ⁽¹⁾	1	28115544	232,30

⁽¹⁾ 75x5 derivation also compatible with F profile (KSP2)



Intermediate reducing Tee joint

Dimension	Profile	Pcs. pack	Code	Price €/pc.
40 x 20 x 40	TH (KSP11) ⁽¹⁾	1	28181178	60,17
40 x 26 x 32	TH (KSP11) ⁽¹⁾	1	28181168	57,99
40 x 26 x 40	TH (KSP11) ⁽¹⁾	1	28181170	59,16
40 x 32 x 32	TH (KSP11) ⁽¹⁾	1	28181172	57,99
40 x 32 x 40	TH (KSP11) ⁽¹⁾	1	28181174	59,16
40 x 40 x 32	TH (KSP11) ⁽¹⁾	1	28181176	59,16
50 x 20 x 50	TH (KSP11) ⁽¹⁾	1	28181180	89,70
50 x 26 x 50	TH (KSP11) ⁽¹⁾	1	28181182	87,07
50 x 32 x 50	TH (KSP11) ⁽¹⁾	1	28181184	77,19
50 x 40 x 40	TH (KSP11)	1	28115524	83,13
50 x 40 x 50	TH (KSP11)	1	28115310	79,71
50 x 50 x 32	TH (KSP11) ⁽¹⁾	1	28181186	82,08
50 x 50 x 40	TH (KSP11)	1	28115528	85,13
63 x 32 x 63	TH (KSP11) ⁽¹⁾	1	28181190	171,20
63 x 40 x 63	TH (KSP11)	1	28115406	173,80
63 x 50 x 63	TH (KSP11)	1	28115330	113,50
75 x 40 x 75	TH (KSP11) ⁽²⁾	1	28115546	215,20
75 x 50 x 75	TH (KSP11) ⁽²⁾	1	28115548	217,40
75 x 63 x 75	TH (KSP11) ⁽²⁾	1	28115566	243,50

⁽¹⁾ LBP function only in 16x2 - 20x2 - 26x3 - 32x3 leads.

⁽²⁾ 75x5 derivation: also compatible with profile F (KSP2)



Intermediate Tee joint with female branch

Dimension	Profile	Pcs. pack	Code	Price €/pc.
40 x 3/4" x 40	TH (KSP11)	1	28115350	62,84
40 x 1" x 40	TH (KSP11)	1	28115360	62,84
40 x 1 1/4" x 40	TH (KSP11)	1	28115530	96,42
50 x 3/4" x 50	TH (KSP11)	1	28115370	67,06
50 x 1" x 50	TH (KSP11)	1	28115380	66,64
50 x 1 1/4" x 50	TH (KSP11)	1	28115532	100,50
63 x 1" x 63	TH (KSP11)	1	28115390	90,03
63 x 1 1/4" x 63	TH (KSP11)	1	28115400	88,15
75 x 1" x 75	TH (KSP11) ⁽¹⁾	1	28115550	218,80

⁽¹⁾ 75x5 derivation also compatible with F profile (KSP2)

Threads: Rp (UNI EN 10226-1)



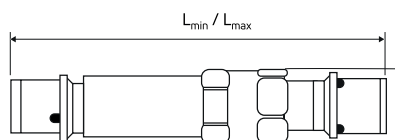
Chromed copper pipe

Dimension	Pcs. pack	Code	Price €/pc.
Ø 15 x 1/2" M (L 175 mm)	5	28101686	16,36

Not suitable for sanitary installations

Threads: G (UNI EN ISO 228-1)

Press fittings Gerpex for water



Press fitting for multilayer pipe repairs

Gerpex, Gerpex RA, EMMETI Alpert

Telescopic press fitting, in CW617N brass and O-Ring in EPDM PEROX, for repairing damaged multilayer pipes.

Dimension	Profile	L _{min}	L _{max}	Pcs. pack	Code	Price €/pc.
16 x 16	TH (KSP11)	150 mm	203,5 mm	1	9985R001	97,01
20 x 20	TH (KSP11)	159 mm	219,5 mm	1	9985R002	116,60
26 x 26	TH (KSP11)	182 mm	245,5 mm	1	9985R003	173,00



x 10

Kit 10 galvanised flush-mounted brackets for flanged elbows

Dimension	Pcs. pack	Code	Price €/kit
10 brackets kit	1	28104062	93,19

Takeoffs 80-100-153 mm

Takeoffs 153 mm for fixing flanged elbow in 4 point.



Built-in galvanised bracket for flanged elbows

Dimension	Pcs. pack	Code	Price €/pc.
	2	28101530	8,17

Takeoffs 80-100-153 mm



Galvanised bracket for flanged elbow

Dimension	Pcs. pack	Code	Price €/pc.
	1	28101531	5,31

Takeoff 153 mm



Plug for circuit test with o-ring

Dimension	Pcs. pack	Code	Price €/pc.
1/2" blue	50	28090003	0,91
1/2" red	50	28090004	0,91
3/4" blue	50	28090006	1,42
3/4" red	50	28090008	1,47

Threads: G (UNI EN ISO 228-1)



Leakage test plug for multilayer pipe

Dimension	Pcs. pack	Code	Price €/pc.
16 x 2	1	28101846	23,55
20 x 2	1	28101848	23,55

Complete with 1/2" F fitting for release valve (provided standard)

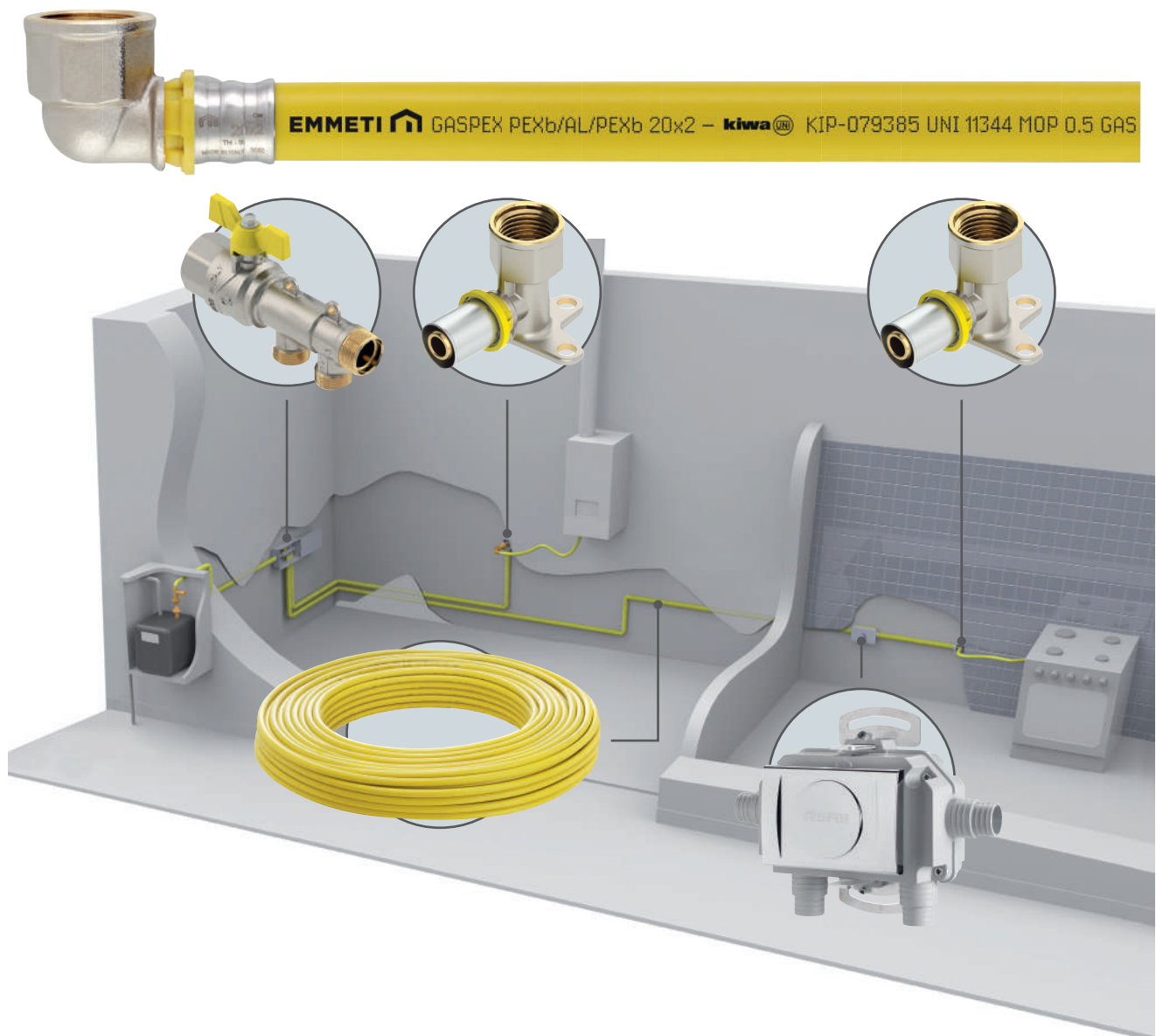


Built-in box for flanged elbows

Dimension	Pcs. pack	Code	Price €/pc.
	1	13010010	9,83

For installation of flanged elbows

Multilayer pipe system for gas adduction plants



kiwa 
IT-TD-Ki0410
<https://efrdoc.com/KIWA>

kQ
kiwaQuality
IT-TD-Ki0410
<https://efrdoc.com/KIWA>

Field of application

Gaseous fuels supplied by distribution networks, cylinders and fixed GPL tanks, with maximum operating pressure of 0,5 bar and operating temperature from -20 °C to +70 °C

In appliance to:

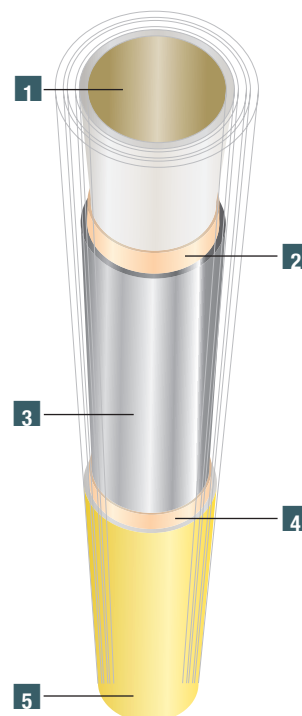
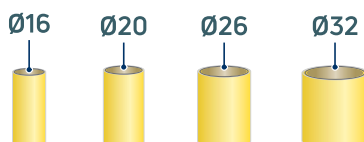
- > **UNI 11344**
- > **ISO 17484**
- > **ABNT NBR 16821**

Suitability for use:

- > **UNI 7129-1**
- > **UNI 11528**

Gaspex pipe

Multilayer Gaspex pipe



IT-TD-Ki0410
<https://efrdoc.com/KIWA>



kiwaQuality
IT-TD-Ki0410
<https://efrdoc.com/KIWA>

Construction

- 1 Cross-linked polyethylene inner pipe (PE-Xb).
- 2 Bonding layer connecting the inner pipe to the aluminium pipe.
- 3 Butt-welded aluminium pipe, thickness min 0,2 mm.
- 4 Bonding layer connecting the outer pipe to the aluminium pipe.
- 5 High-density polyethylene inner pipe (PE-Xb), yellow colour.

Corrugated sheath technical data (ref. precoated pipe)

Material: Polypropylene PP

Technical data Gaspex pipe

Operating temperature: -20 °C÷70 °C (*)
Max operating pressure: 0,5 bar (*)
Coefficient of linear expansion: 0.026 mm/m °C
Thermal conductivity: 0.45W/m°C
Minimum radius of bending: 5 x Ø pipe
Surface roughness of internal pipe: 7 µm

(*) values referring to certification according to UNI 11344, for applications according to UNI 7129-1 and UNI 11528

Expandable corrugated sheath technical data

Material: Polypropylene PP
Self-extinguishing (CEI EN 60695-2-10):
1) Class 850 (°C)
2) Mean extinguishing time 6,4 (seconds)
Self-extinguishing (UL 94): Class V2
Expanding capacity: approximately 3 times the original length

> **kiwa** : sizes Ø 16, Ø 20, Ø 26, Ø 32

IT-TD-Ki0410
<https://efrdoc.com/KIWA>

> **kQ** : sizes Ø 16, Ø 20, Ø 26, Ø 32

kiwaQuality
IT-TD-Ki0410
<https://efrdoc.com/KIWA>

Multilayer Gaspex pipe



Gaspex bare pipe in roll

Dimension	m pack	Code	Price €/m
16 x 2	100 m	28109200	2,12
20 x 2	100 m	28109204	2,85
26 x 3	50 m	28109206	6,34
32 x 3	50 m	28109208	7,87



Gaspex bare pipe in 4 mt bars

Dimension	m pack	Code	Price €/m
26 x 3 (*)	40	28109226	6,95

Packaged in rigid protective pipe

(*) Item to be out of stock



Gaspex pipe with rolled corrugated sheath

Dimension	Ø internal sheath	Ø external sheath	m pack	Code	Price €/m
16 x 2	31 mm	36 mm	50	28109260	4,39
20 x 2	31 mm	36 mm	50	28109264	5,22
26 x 3	40 mm	46 mm	25	28109266	9,26

Size of corrugated sheath appropriate to the requirements of UNI 7129-1: 2015



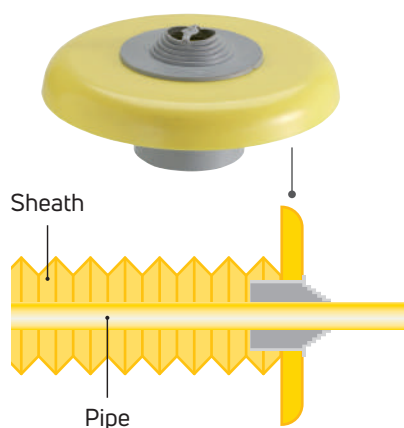
Expandable corrugated sheath

Dimension	m pack	Code	Price €/m
20*	50	01220500	1,92
25*	25	01220502	2,41
30*	25	01220504	2,89
40*	25	01220506	3,34

(*) internal Ø (mm)

For installations in compliance with UNI 7129:2015, use:

- sheath Ø 30 for 16x2 and 20x2 pipe;
- sheath Ø 40 for 26x3 pipe.



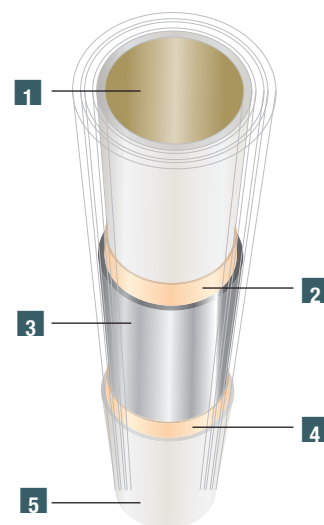
Expandable sheath terminal

Dimension	Pcs. pack	Code	Price €/pc.
Ø internal 20 mm (*)	10	01220508	4,11
Ø internal 25 mm (*)	10	01220510	4,11
Ø internal 30 mm (*)	10	01220512	4,11

(*) Items to be out of stock

Gaspex UV

Multilayer Gaspex pipe UV protection



Construction

- 1 Cross-linked polyethylene inner pipe (PEX)
- 2 Bonding layer connecting the inner pipe to the aluminium pipe.
- 3 Butt-welded aluminium pipe, thickness min 0,2 mm.
- 4 Bonding layer connecting the outer pipe to the aluminium pipe.
- 5 External coating of polyethylene (PEX)

Technical data Gaspex UV protected pipe

Max operating pressure: 5 bar
 Operating temperature: -20 °C ÷ +60°C
 Coefficient of linear expansion: 0.026 mm/m °C
 Thermal conductivity: 0.45W/m°C
 Minimum radius of bending: 5 x Ø pipe
 Surface roughness of internal pipe: 7 µm

In appliance to:

- > ISO 17484-1
- > ISO 18225

Suitability for use:

verify the use according to local rules and parameters Kly.

> **kiwaQuality** : sizes Ø 16, Ø 20, Ø 26, Ø 32



GAS

Gaspex UV pipe in roll

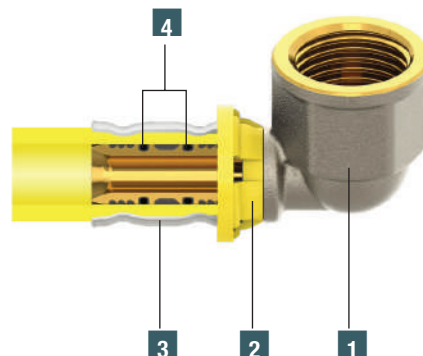
Dimension	m pack	Code	Price €/m
16 x 2	100	28109240	2,16
20 x 2	100	28109244	2,89
26 x 3	50	28109246	6,43
32 x 3	50	28109248	7,95

Gaspex UV protected pipe is a PE-Xb/AL/PE-Xb multilayer pipe approved according ISO 17484-1 (multilayer pipe systems for indoor gas installations with a maximum operating pressure up to and including 5 bar) and ISO 18225 (multilayer piping system for outdoor gas installations) with an UV protection of at least 3.5 GJ/m² (=83.65 Kly).

Material on request.
 Timings to be agreed.

Press fittings Gaspex

Press fittings for gas Gaspex



IT-TD-Ki0410
<https://efrdoc.com/KIWA>



kiwaQuality
IT-TD-Ki0410
<https://efrdoc.com/KIWA>

Construction

- 1 Body in brass CW617N - DW (UNI EN 12164 and 12165); threads: UNI EN ISO 228-1, UNI EN 10226.
- 2 Nylon sleeve ring
- 3 AISI 304 stainless steel sleeve annealed
- 4 NBR dual o-ring (black, teflon coated, yellow, in conforming to EN 682 and EN 549)



Female elbow

Dimension	Profile	Pcs. pack	Code	Price €/pc.
16 x 1/2"	B (KSP1) / TH (KSP11)	10	28125040	5,98
20 x 1/2"	B (KSP1) / TH (KSP11)	10	28125042	7,32
20 x 3/4"	B (KSP1) / TH (KSP11)	10	28125044	10,04
26 x 3/4"	B (KSP1) / TH (KSP11)	5	28125046	11,72
32 x 1"	B (KSP1) / TH (KSP11)	5	28125048	19,82

Threads: Rp (UNI EN 10226-1)



Female elbow, flanged elbow

Dimension	Profile	Pcs. pack	Code	Price €/pc.
16 x 1/2"	B (KSP1) / TH (KSP11)	5	28125060	9,40
20 x 1/2"	B (KSP1) / TH (KSP11)	5	28125062	9,56
20 x 3/4"	B (KSP1) / TH (KSP11)	5	28125064	14,99

Threads: Rp (UNI EN 10226-1)



Male elbow

Dimension	Profile	Pcs. pack	Code	Price €/pc.
16 x 1/2"	B (KSP1) / TH (KSP11)	10	28125050	5,98
20 x 1/2"	B (KSP1) / TH (KSP11)	10	28125052	7,36
20 x 3/4"	B (KSP1) / TH (KSP11)	10	28125054	9,85
26 x 3/4"	B (KSP1) / TH (KSP11)	5	28125056	10,85
32 x 1"	B (KSP1) / TH (KSP11)	5	28125058	18,74

Threads: R (UNI EN 10226-1)



Female connecting elbow, flat seal in NBR

Size	Profile	Pcs. pack	Code	Price €/pc.
16 x 1/2"	B (KSP1) / TH (KSP11)	1	28125424	8,47
20 x 3/4"	B (KSP1) / TH (KSP11)	1	28125426	12,53

Threads: G (UNI EN ISO 228-1)



Intermediate elbow

Size	Profile	Pcs. pack	Code	Price €/pc.
16 x 16	B (KSP1) / TH (KSP11)	10	28125320	6,62
20 x 20	B (KSP1) / TH (KSP11)	10	28125322	9,56
26 x 26	B (KSP1) / TH (KSP11)	5	28125324	13,48
32 x 32	B (KSP1) / TH (KSP11)	5	28125326	21,37



Straight Female union joint

Dimension	Profile	Pcs. pack	Code	Price €/pc.
16 x 1/2"	B (KSP1) / TH (KSP11)	10	28125000	5,41
20 x 1/2"	B (KSP1) / TH (KSP11)	10	28125002	6,14
20 x 3/4"	B (KSP1) / TH (KSP11)	10	28125004	9,00
26 x 3/4"	B (KSP1) / TH (KSP11)	5	28125006	9,40
26 x 1"	B (KSP1) / TH (KSP11)	5	28125008	12,86
32 x 1"	B (KSP1) / TH (KSP11)	5	28125010	14,99

Threads: Rp (UNI EN 10226-1)



Straight Male union joint

Dimension	Profile	Pcs. pack	Code	Price €/pc.
16 x 1/2"	B (KSP1) / TH (KSP11)	10	28125020	5,06
20 x 1/2"	B (KSP1) / TH (KSP11)	10	28125022	5,70
20 x 3/4"	B (KSP1) / TH (KSP11)	10	28125024	6,81
26 x 3/4"	B (KSP1) / TH (KSP11)	5	28125026	9,00
26 x 1"	B (KSP1) / TH (KSP11)	5	28125028	12,46
32 x 1"	B (KSP1) / TH (KSP11)	5	28125030	13,48

Threads: R (UNI EN 10226-1)



Straight intermediate union joint

Dimension	Profile	Pcs. pack	Code	Price €/pc.
16 x 16	B (KSP1) / TH (KSP11)	10	28125290	6,41
20 x 20	B (KSP1) / TH (KSP11)	10	28125292	9,02
26 x 26	B (KSP1) / TH (KSP11)	5	28125294	11,94
32 x 32	B (KSP1) / TH (KSP11)	5	28125296	16,12



Straight intermediate reducing union joint

Dimension	Profile	Pcs. pack	Code	Price €/pc.
20 x 16	B (KSP1) / TH (KSP11)	10	28125300	9,02
26 x 20	B (KSP1) / TH (KSP11)	5	28125304	10,42
32 x 26	B (KSP1) / TH (KSP11)	5	28125310	15,86



Straight with female swivel nut, flat seal in NBR

Size	Profile	Pcs. pack	Code	Price €/pc.
16 x 1/2"	B (KSP1) / TH (KSP11)	1	28125400	7,64
16 x 3/4"	B (KSP1) / TH (KSP11)	1	28125402	9,07
20 x 1/2"	B (KSP1) / TH (KSP11)	1	28125404	7,96
20 x 3/4"	B (KSP1) / TH (KSP11)	1	28125406	9,05
26 x 3/4"	B (KSP1) / TH (KSP11)	1	28125408	9,48
26 x 1"	B (KSP1) / TH (KSP11)	1	28125410	12,15
32 x 1"	B (KSP1) / TH (KSP11)	1	28125412	13,25

Threads: G (UNI EN ISO 228-1)



Straight with female swivel nut, o-ring fitting

Dimension	Profile	Pcs. pack	Code	Price €/pc.
Ø 16 - 24x19	B (KSP1) / TH (KSP11)	10	28125220	6,46
Ø 20 - 24x19	B (KSP1) / TH (KSP11)	10	28125222	8,71
16x2 - 3/4 EK	B (KSP1) / TH (KSP11)	10	28125240	8,60
20x2 - 3/4 EK	B (KSP1) / TH (KSP11)	10	28125242	9,40

Threads 3/4": G (UNI EN ISO 228-1)



Intermediate Tee joint

Size	Profile	Pcs. pack	Code	Price €/pc.
16 x 16 x 16	B (KSP1) / TH (KSP11)	10	28125330	9,56
20 x 20 x 20	B (KSP1) / TH (KSP11)	10	28125332	12,46
26 x 26 x 26	B (KSP1) / TH (KSP11)	5	28125334	19,82
32 x 32 x 32	B (KSP1) / TH (KSP11)	5	28125430	31,89



Intermediate reducing Tee joint

Size	Profile	Pcs. pack	Code	Price €/pc.
16 x 20 x 16	B (KSP1) / TH (KSP11)	5	28125336	11,63
20 x 16 x 16	B (KSP1) / TH (KSP11)	5	28125338	11,36
20 x 16 x 20	B (KSP1) / TH (KSP11)	5	28125340	12,46
20 x 20 x 16	B (KSP1) / TH (KSP11)	5	28125342	12,46
20 x 26 x 20	B (KSP1) / TH (KSP11)	5	28125344	17,99
20 x 32 x 20	B (KSP1) / TH (KSP11)	5	28125346	28,00
26 x 20 x 20	B (KSP1) / TH (KSP11)	5	28125354	17,99
26 x 20 x 26	B (KSP1) / TH (KSP11)	5	28125356	19,82
26 x 32 x 26	B (KSP1) / TH (KSP11)	5	28125362	30,62
32 x 20 x 20	B (KSP1) / TH (KSP11)	5	28125366	28,00
32 x 20 x 26	B (KSP1) / TH (KSP11)	5	28125368	28,53
32 x 20 x 32	B (KSP1) / TH (KSP11)	5	28125370	30,62
32 x 26 x 26	B (KSP1) / TH (KSP11)	5	28125374	28,53
32 x 26 x 32	B (KSP1) / TH (KSP11)	5	28125376	31,89



Intermediate Tee joint with female branching

Dimension	Profile	Pcs. pack	Code	Price €/pc.
16 x 1/2" x 16	B (KSP1) / TH (KSP11)	10	28125070	9,40
16 x 3/4" x 16	B (KSP1) / TH (KSP11)	10	28125072	14,99
20 x 1/2" x 20	B (KSP1) / TH (KSP11)	5	28125074	10,21
20 x 3/4" x 20	B (KSP1) / TH (KSP11)	5	28125076	16,52
26 x 3/4" x 26	B (KSP1) / TH (KSP11)	5	28125078	16,81
32 x 3/4" x 32	B (KSP1) / TH (KSP11)	5	28125080	31,89
32 x 1" x 32	B (KSP1) / TH (KSP11)	5	28125082	30,62

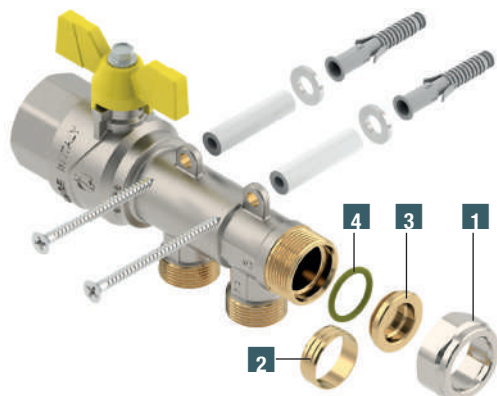
Threads: Rp (UNI EN 10226-1)



Built-in box for flanged elbows

Dimension	Pcs. pack	Code	Price €/pc.
	1	13010010	9,83

Built-in box for installation of Gaspex flanged elbows



Valve with manifold first inlet

Collector with integrated shut-off valve with 1" F inlet / two 24x 19M branches / one M28x1.5 branch, suited for creating joints inside the rooms, which can be exposed and have a shut-off, in compliance with UNI 7129.

The pack includes:

- Screws, plugs and spacers for wall-mounted installation.
- Nut M28x1.5 (1) that can be used with the brass ogive (2) supplied for connection to copper piping Ø22 mm, or with the blind adapter D22 (3) and relative o-ring in HNBR 18x2.5 (4) provided in order to seal the outlet if not used.

Note: fitting seals, see gas monobloc section

Dimension	Pcs. pack	Code	Price €/pc.
1" F	1	09812566	67,27

Lateral branches: 24x19 Male

Head branch: M28 x 1.5

Threads 1": Rp (UNI EN 10226-1)



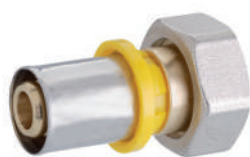
[UNI EN 331]



Female cap 24x19 for gas

Dimension	Pcs. pack	Code	Price €/pc.
Female cap 24x19	20	01321460	3,29

Fitting to be used to plug the 24x19 male branches of the valve with first inlet manifold.



Straight with female swivel nut, o-ring fitting

Dimension	Profile	Pcs. pack	Code	Price €/pc.
Ø 26 - M 28 x 1,5	B (KSP1) / TH (KSP11)	2	28125250	22,91

Fitting accessory for derivation M28x1,5 alve with manifold first inlet



Built-in box for valve with gas manifold first inlet

Dimension	Pcs. pack	Code	Price €/pc.
264x164x110	1	13010000	33,96

Items inside the package:

- 4 adjustable extension cables for DN16 - DN18 - DN20 - DN26 - DN32 pipes
- 2 M4x50 screws with relative washers and nuts

Dimensions: see section Technical Attachments

Tooling for Gerpex and Gaspex



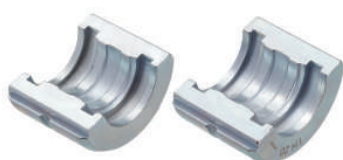
SCAN



Manual pressing machine

360° rotating head - Telescopic arms, extensible 200 mm
Instrument weight: approximately 3 Kg
Instrument length: 560 - 760 mm - Thrust force: min. 32 kN
Press fittings: from DN 14 to DN 32

Model	Pcs. pack	Code	Price €
	1	28101840	1.316,00



Dies for manual pressing machine and insert holder for SPM19

Dimension	Profile	Pcs. pack	Code	Price €
16 x 2	TH (KSP11)	1	28100640	124,50
20 x 2	TH (KSP11)	1	28100642	124,50
26 x 3	TH (KSP11)	1	28100644	130,50
32 x 3	TH (KSP11)	1	28100646	130,50



SPM32-230 230 V electrohydraulic pressing machine for Gerpex grippers DN14 to DN75

Weight: 4.1 kg
Dimensions LxHxS: 410x296x80 mm
Thrust force: min. 32kN - Power supply: 230 VAC, 50 Hz
Power consumption: 450 W - Degree of protection: IP40
Clamping time: 8 to 12 s depending on diameter
Operating temperature: -20 °C to 50 °C
Head can be rotated 360°
Sound pressure level: <70 dB(A)
Automatic piston return
USB connection for remote diagnosis
LEDs for malfunction and operating status indication
Complete with plastic carrying case.

Model	Pcs. pack	Code	Price €
SPM32-230	1	28122060	3.813,00



SPM32-18 electrohydraulic battery-operated 18 V press machine for Gerpex grippers DN14 to DN75

Weight including battery: 4.8 kg
Dimensions LxHxS: 409x335x82 mm
Thrust force: min. 32kN
Power supply: 18 VDC - Battery charge: 230 V, 50 Hz
Battery capacity: 5.0 Ah
Degree of protection: IP40 charging time: approx 40 min
Pressures per battery: ca 200 (DN20)
Clamping time: 4 to 7 s depending on diameter
Operating temperature: -20 °C TO 50 °C
Head can be rotated 360°
Automatic piston return
USB connection for remote diagnosis
LEDs for malfunction and operating status indication
Complete with black plastic carrying case, Lithium-ion (Li-Ion) 18 V battery, battery charger, USB cable, USB stick with analysis software.

Model	Pcs. pack	Code	Price €
SPM32-18	1	28122062	5.004,00

Tooling for Gerpex and Gaspex



18V battery for SPM32-18 electrohydraulic press machine

Lithium-ion (Li-Ion) battery -Weight: 720 g
Battery capacity: 5.0 Ah

Model	Pcs. pack	Code	Price €
18 V	1	28122064	471,00



Case for jaws

Dimension	Pcs. pack	Code	Price €
	1	28122012	207,00

Suitable for jaws up to 40



Gerpex jaws

Dimension	Profile	Pcs. pack	Code	Price €
14 x 2	B (KSP1)	1	28100629	311,80
14 x 2 (*)	B (KSP1)	1	28100201	311,80
16 x 2	TH (KSP11)	1	28100630	348,00
18 x 2	B (KSP1)	1	28100631	351,10
20 x 2	TH (KSP11)	1	28100632	348,00
26 x 3	TH (KSP11)	1	28100634	374,90
32 x 3	TH (KSP11)	1	28100636	374,90
40 x 3,5	TH (KSP11)	1	28100650	482,70
50 x 4	TH (KSP11)	1	28100652	495,80
63 x 4,5	TH (KSP11)	1	28100654	2.135,00
75 x 5	TH (KSP11)	1	28100656	2.866,00

(*) Item to be out of stock



SPM19 battery pressing machine 18V for Gerpex jaw with dies from DN 16 to DN 32

Weight (battery included): 2,3 Kg – Dimensions LxHxS: 371x100x74 mm
Feed force: min 19 kN – Power supply: 18 V DC – Battery power: 230 V, 50 Hz –
Battery capacity: 2,0 Ah – Charging time: 30 minutes aprox
Pressing time: from 3 to 4 s (depending on the nominal width)
Operation temperature range: -10 °C ÷ 40 °C
Sound level: 75 dB(A) in 1 m distance
Vibrations: < 2,5 m/s² (real value pondered by the acceleration)
360° rotating head - Automatic piston retraction
USB connection for remote diagnosis - Optical malfunction report and working state indicator -Complete with metal case, battery 18 V, battery charger, USB cable, analysis software.

Model	Pcs. pack	Code	Price €
SPM19	1	28101826	4.013,00

Tooling for Gerpex and Gaspex



Battery 18 V for SPM19 pressing machine

Battery Lithium-Ion (Li-ion)
Weight: 430 g

Dimension	Pcs. pack	Code	Price €
2 Ah	1	28101821	425,50



Battery charger 18 V for SPM19 pressing machine

Dimension	Pcs. pack	Code	Price €
	1	28101824	285,90



230 V adapter for SPM19 pressing machine

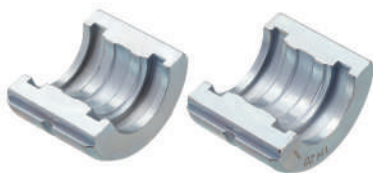
Dimension	Pcs. pack	Code	Price €
	1	28101822	1.251,00

Permits power supply to the SPM19 pressing machine, directly at 230 V, replacing the 18 V battery



Gerpex jaw for SPM19 pressing machine

Dimension	Pcs. pack	Code	Price €
	1	28101828	429,60



Dies for jaw for manual pressing machine and insert holder for SPM19

Dimension	Profile	Pcs. pack	Code	Price €
16 x 2	TH (KSP11)	1	28100640	124,50
20 x 2	TH (KSP11)	1	28100642	124,50
26 x 3	TH (KSP11)	1	28100644	130,50
32 x 3	TH (KSP11)	1	28100646	130,50



Flarer and calibrator for screwdriver

Dimension	Pcs. pack	Code	Price €
Ø 16	1	28100702	58,97
Ø 20	1	28100704	60,79
Ø 26	1	28100706	63,79
Ø 32	1	28100708	72,37



Handle for flarer and calibrator

Dimension	Pcs. pack	Code	Price €
	1	28100898	42,53

Article can be combined with 28100702, 28100704, 28100706 and 28100708.

Tooling for Gerpex and Gaspex



Kit flarer and calibrator for screwdriver

Kit consisting of:

- no. 1 case;
- no. 1 flare calibrator for Ø16 pipe;
- no. 1 flare calibrator for Ø20 pipe;
- no. 1 flare calibrator for Ø26 pipe;
- no. 1 flare calibrator for Ø32 pipe;
- no. 1 handle for flare calibrator.

Dimension	Pcs. pack	Code	Price €
	1	28100700	330,50



Flarer and calibrator Ø 14 - Ø 16 - Ø 18 - Ø 20 - Ø 26

Dimension	Pcs. pack	Code	Price €
Ø 14	1	28100960	55,35
Ø 16	1	28100962	56,90
Ø 18	1	28100964	56,90
Ø 20	1	28100966	59,66
Ø 26	1	28100968	59,66



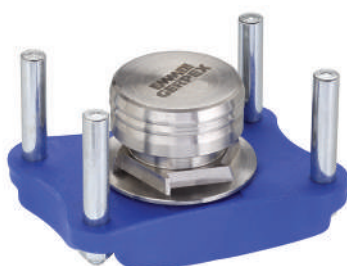
Flarer and calibrator Ø 16-20-26

Dimension	Pcs. pack	Code	Price €
Ø 16-20-26	1	28100959	81,03



Flarer and calibrator Ø 32

Dimension	Pcs. pack	Code	Price €
Ø 32	1	28100949	54,18



Flarer and calibrator Ø 40 - Ø 50

Dimension	Pcs. pack	Code	Price €
Ø 40	1	28100946	71,90
Ø 50	1	28100947	120,60



Flarer and calibrator Ø 63

Dimension	Pcs. pack	Code	Price €
Ø 63	1	28100972	147,70

Tooling for Gerpex and Gaspex



Flarer and calibrator Ø 75

Dimension	Pcs. pack	Code	Price €
Ø 75	1	28100885	212,70



Shear for Multilayer Pipe

Dimension	Pcs. pack	Code	Price €
Up to DN26	1	28101890	154,20
Spare blade	1	28101892	64,33



Shear for multilayer pipe

Dimension	Pcs. pack	Code	Price €
Ø 26 ÷ 40	1	28101812	243,10
Spare blade for cutter Ø 26 ÷ 40	1	28101814	93,91



Gerpex shear

Dimension	Pcs. pack	Code	Price €
Ø 14 ÷ 32	1	28100942	78,40
Spare blade for cutter	1	28100943	23,62



Pipe cutter for Gerpex

Dimension	Pcs. pack	Code	Price €
Pipe cutter Ø 14 ÷ 32	1	28100944	93,60
Spare part wheel	1	28100948	31,55
Pipe cutter Ø 6 ÷ 75	1	28024081	227,60
Spare part wheel	1	28024085	85,39



Internal spring for bending pipe

Dimension	Pcs. pack	Code	Price €
Ø 16 L=100 mm	1	28100622	36,62
Ø 18 L=500 mm	1	28100618	23,55
Ø 20 L=1000 mm	1	28100624	41,84
Ø 26 L=1000 mm	1	28100626	39,44



External spring for bending pipe

Dimension	Pcs. pack	Code	Price €
Ø 16 L=500 mm	1	28100716	35,25
Ø 20 L=500 mm	1	28100720	35,23

Tooling for Gerpex and Gaspex



Hydraulic bending machine for Gerpex pipe

Dimension	Pcs. pack	Code	Price €
Ø 26 ÷ 32	1	28100920	1.152,00

Complete with case, shape Ø 26 and Ø 32



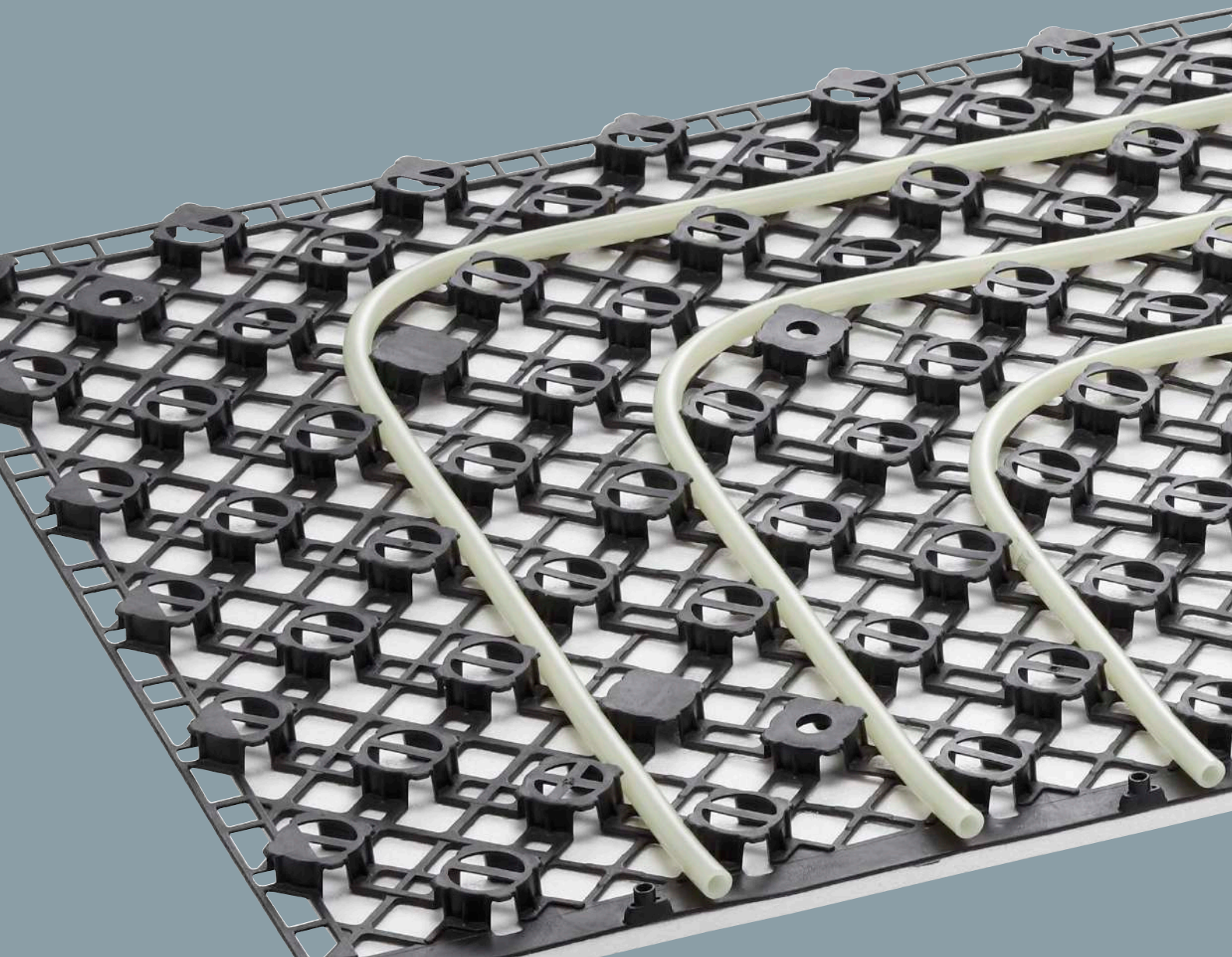
Forms and Shapes for bending machine

Dimension	Pcs. pack	Code	Price €
Form Ø 16	1	28104002	103,90
Form Ø 20	1	28104006	106,80
Shape 14÷16	1	28104010	148,70
Shape 18÷20	1	28104012	148,70



Emmeti Floor

Floor heating and cooling systems



> Insulating panels



63

> Pipes



87

> Accessories



89

> Floor heating and cooling industrial system



95

> Emmeti Clima Floor

Product for radiant heating system:



See "Catalogue Price List Air Conditioning" 103



Emmeti Floor

Floor heating and cooling system



The growing success which underfloor heating is obtaining on a world level is logical and well-deserved.

Modern calculation systems, proved constructional techniques, innovative materials and improved thermal insulation conditions in buildings, are the requirements which have made possible the unstoppable advance of this heating solution.

The distribution of heated air in the room is uniform, the heat radiated from the floor transmits energy to the walls, which disperse it, reducing the thermal load affecting the people occupying the room. The low temperature of the floor, around 23 °C, avoids the circulation and decomposition of dust in the rooms, a source of irritation to the respiratory tract and of the characteristic black smudges on the walls.

The Emmeti underfloor heating plant range offers special components for the simple and rapid creation of durable and reliable systems which provide excellent standards of comfort.

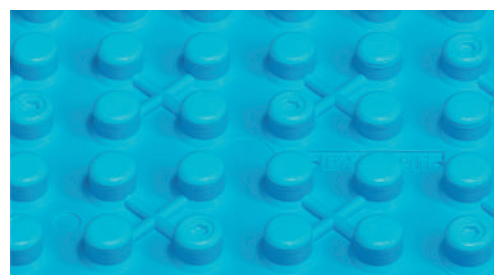
The high quality of the products, the technical characteristics of the materials used and the extreme flexibility of fittings, make it possible to install underfloor heating in any type of building for domestic, commercial, industrial or sporting use, in offices, places of worship and buildings of historical value.

The Emmeti Floor system is invisible and does not limit furnishing options in the rooms.

Dimensions: see section Technical Attachments.

Floor system

Emmeti Floor - Insulating panels



[UNI EN 13163]

Standard Floor insulating panel

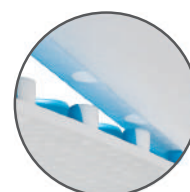
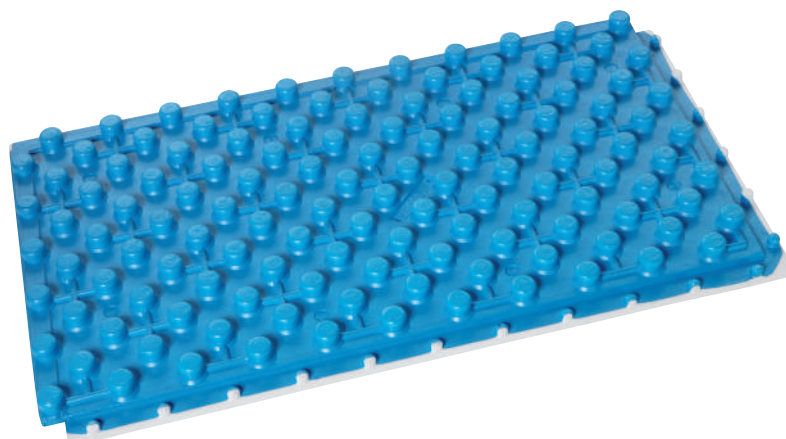
Dimension	Density	Pack m ²	Code	Price € pack	€/m ²
1100 x 600 x 32 / H10 (**)	30 kg/m ³	14,52	28134044	283,20	19,50
1100 x 600 x 32 / H10	40 kg/m ³	14,52	28130079	349,00	24,03
1100 x 600 x 48 / H20 (*)	25 kg/m ³	7,92	28134042	158,20	19,97
1100 x 600 x 48 / H20 (**)	25 kg/m ³	9,24	28134043	199,10	21,55
1100 x 600 x 48 / H20	30 kg/m ³	9,24	28134068	205,50	22,24
1100 x 600 x 63 / H30	30 kg/m ³	6,6	28134050	169,80	25,73

Panel in expanded polystyrene (EPS) printed for thermal insulation, with surface bosses and cylindrical edges, clad in a rigid polystyrene film. Pipe spacing 5 cm.

(*) Item to be out of stock

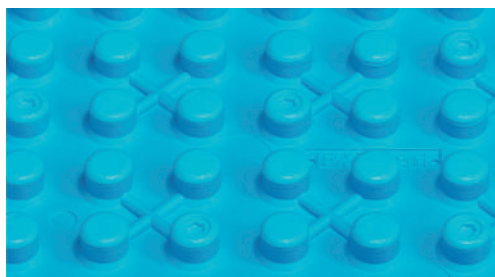
(**) Items on request: 20 days to order confirm

Technical data	Norm	Model H10 (28134044)	Model H10 (28130079)	Model H20 (*) (28134042)	Model H20 (28134043)	Model H20 (28134068)	Model H30 (28134050)
Type	UNI EN 13163	EPS 200	EPS 250	EPS 150	EPS 150	EPS 200	EPS 200
Density	UNI EN 1602	30 kg/m ³	40 kg/m ³	25 kg/m ³	25 kg/m ³	30 kg/m ³	30 kg/m ³
Compression resistance at 10% of crushing	UNI EN 826	≥ 200 kPa	≥ 250 kPa	≥ 150 kPa	≥ 150 kPa	≥ 200 kPa	≥ 200 kPa
Thermal conductivity λ_D (λ_{ins})	UNI EN 12667 (UNI EN 1264-3)	0,033 W/mK	0,032 W/mK	0,033 W/mK	0,033 W/mK	0,033 W/mK	0,033 W/mK
Thermal resistance $R_{\lambda,ins}$ (S_{ins}/λ_{ins})	UNI EN 1264-3:2021	0,30 m ² K/W	0,30 m ² K/W	0,60 m ² K/W	0,60 m ² K/W	0,60 m ² K/W	0,90 m ² K/W
Class to reaction to fire	UNI EN ISO 11925	Euroclass E	Euroclass E	Euroclass E	Euroclass E	Euroclass E	Euroclass E
Water absorption	EN 12087	< 5%	< 5%	< 5%	< 5%	< 5%	< 5%
Resistance factor diffusion of water vapor μ	UNI EN 12086	40 ÷ 100	40 ÷ 100	40 ÷ 100	40 ÷ 100	40 ÷ 100	40 ÷ 100
Slab thickness S_{ins}	UNI EN 1264-3	10 mm	10 mm	20 mm	20 mm	20 mm	30 mm
Total length		1135 mm	1135 mm	1135 mm	1135 mm	1135 mm	1135 mm
Total width		635 mm	635 mm	635 mm	635 mm	635 mm	635 mm
Total thickness		32 mm	32 mm	48 mm	48 mm	48 mm	63 mm
Coating film thickness		0,16 mm	0,16 mm	0,16 mm	0,16 mm	0,16 mm	0,16 mm
Pipe spacing		50 mm	50 mm	50 mm	50 mm	50 mm	50 mm
External Ø of installing pipes		16-17 mm	16-17 mm	16-17 mm	16-17 mm	16-17 mm	16-17 mm
Pack		14,52 m ²	14,52 m ²	7,92 m ²	9,24 m ²	9,24 m ²	6,6 m ²



H = 10/20/30 mm

Floor system



Standard Floor insulating panel

Dimension	Density	Pack m ²	Code	Price € pack	€/m ²
1100 x 600 x 68 / H40	30 kg/m ³	5,28	28134062	185,50	35,13
1100 x 600 x 78 / H50 (*)	30 kg/m ³	4,62	28130093	193,30	41,84
1100 x 600 x 88 / H60 (*)	30 kg/m ³	3,96	28134064	194,80	49,19

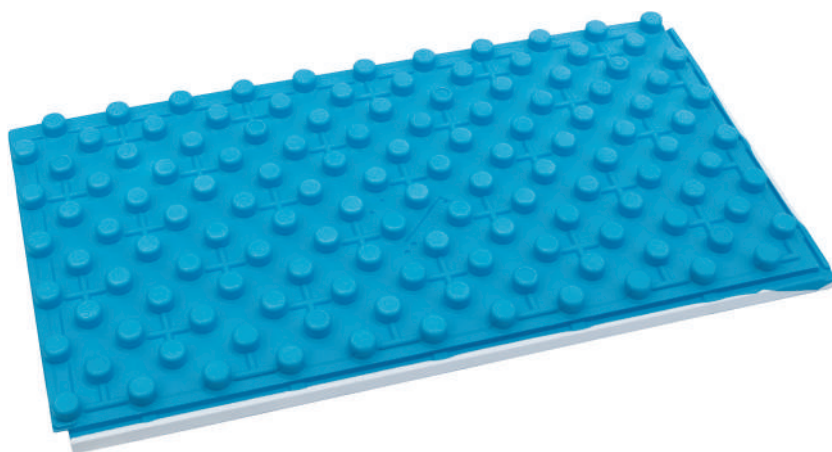
Panel in expanded polystyrene (EPS) printed for thermal insulation, with surface bosses and peripheral interlocking joints, clad in a rigid polystyrene film. Pipe spacing 5 cm.

(*) Available on request: 20 days to order confirm



[UNI EN 13163]

Technical data	Norm	Model H40	Model H50	Model H60
Type	UNI EN 13163	EPS 200	EPS 200	EPS 200
Density	UNI EN 1602	30 kg/m ³	30 kg/m ³	30 kg/m ³
Compression resistance at 10% of crushing	UNI EN 826	≥ 200 kPa	≥ 200 kPa	≥ 200 kPa
Thermal conductivity λ_D (λ_{ins})	UNI EN 12667 (UNI EN 1264-3)	0,033 W/mK	0,033 W/mK	0,033 W/mK
Thermal resistance $R_{\lambda,ins}$ (S_{ins}/λ_{ins})	UNI EN 1264-3: 2021	1,20 m ² K/W	1,50 m ² K/W	1,85 m ² K/W
Class of reaction to fire	UNI EN ISO 11925	Euroclass E	Euroclass E	Euroclass E
Water absorption	EN 12087	< 5%	< 5%	< 5%
Resistance factor diffusion of water vapor μ	UNI EN 12086	40 ÷ 100	40 ÷ 100	40 ÷ 100
Slab thickness S_{ins}	UNI EN 1264-3	40 mm	50 mm	60 mm
Total lenght		1120 mm	1120 mm	1120 mm
Total width		620 mm	620 mm	620 mm
Total thickness		68 mm	78 mm	88 mm
Coating film thickness		0,16 mm	0,16 mm	0,16 mm
Pipe spacing		50 mm	50 mm	50 mm
External Ø of installing pipes		16-17 mm	16-17 mm	16-17 mm
Pack		5,28 m ²	4,62 m ²	3,96 m ²



H = 40/50/60 mm

Floor system



Standard Combi Floor insulating panel

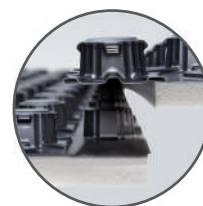
Dimension	Density	Pack m ²	Code	Price € pack	€/m ²
1200 x 800 x 32 / H10	30 kg/m ³	18,24	28134075	368,90	20,22
1200 x 800 x 42 / H20	25 kg/m ³	13,44	28134077	337,60	25,12
1200 x 800 x 52 / H30	25 kg/m ³	9,6	28134079	261,00	27,19

Panel in expanded polystyrene (EPS) printed for thermal insulation, with surface bosses and cylindrical edges, coupled with thermoformed rigid polystyrene film. Pipe spacing 5 cm.



[UNI EN 13163]

Technical data	Norm	Model H10	Model H20	Model H30
Type	UNI EN 13163	EPS 200	EPS 150	EPS 150
Density	UNI EN 1602	30 kg/m ³	25 kg/m ³	25 kg/m ³
Compression resistance at 10% of crushing	UNI EN 826	≥ 200 kPa	≥ 150 kPa	≥ 150 kPa
Thermal conductivity $\lambda_D (\lambda_{ins})$	UNI EN 12667 (UNI EN 1264-3)	0,033 W/mK	0,033 W/mK	0,033 W/mK
Thermal resistance $R_{\lambda,ins} (S_{ins} / \lambda_{ins})$	UNI EN 1264-3: 2021	0,30 m ² K/W	0,60 m ² K/W	0,9 m ² K/W
Class to reaction to fire	UNI EN ISO 11925	Euroclass E	Euroclass E	Euroclass E
Water absorption	EN 12087	< 5%	< 5%	< 5%
Resistance factor diffusion of water vapor μ	UNI EN 12086	40 ÷ 100	30 ÷ 70	30 ÷ 70
Slab thickness S_{ins}	UNI EN 1264-3	10 mm	20 mm	30 mm
Total lenght		1250 mm	1250 mm	1250 mm
Total width		850 mm	850 mm	850 mm
Total thickness		32 mm	42 mm	52 mm
Coating film thickness		0,65 mm	0,65 mm	0,65 mm
Pipe spacing		50 mm	50 mm	50 mm
External Ø of installing pipes		16-17 mm	16-17 mm	16-17 mm
Pack		18,24 m ²	13,44 m ²	9,60 m ²



Floor system



Insulating panel Standard Combi Floor with graphite

Dimension	Density	Pack m ²	Code	Price € pack	€/m ²
1200 x 800 x 32 / H10 (*)	30 kg/m ³	18,24	28134032	435,90	23,90
1200 x 800 x 45 / H23 (*)	25 kg/m ³	12,48	28134121	364,20	29,18
1200 x 800 x 60 / H38 (*)	25 kg/m ³	7,68	28134123	284,40	37,03
1200 x 800 x 67 / H45 (*)	25 kg/m ³	7,68	28134039	313,80	40,86
1200 x 800 x 82 / H60 (*)	25 kg/m ³	5,76	28134125	293,50	50,95

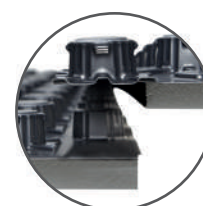
Panel in expanded polystyrene (EPS) printed, additived with graphite, for thermal insulation, with surface bosses and cylindrical edges, coupled with thermoformed rigid polystyrene film.
Pipe spacing 5 cm.



[UNI EN 13163]

(*) Item on request: 30 days to order confirm

Technical data	Norm	Model H10	Model H23	Model H38	Model H45	Model H60
Type	UNI EN 13163	EPS 200	EPS 150	EPS 150	EPS 150	EPS 150
Density	UNI EN 1602	30 kg/m ³	25 kg/m ³	25 kg/m ³	25 kg/m ³	25 kg/m ³
Compression resistance at 10% of crushing	UNI EN 826	≥ 200 kPa	≥ 150 kPa	≥ 150 kPa	≥ 150 kPa	≥ 150 kPa
Thermal conductivity $\lambda_D (\lambda_{ins})$	UNI EN 12667 (UNI EN 1264-3)	0,030 W/mK	0,030 W/mK	0,030 W/mK	0,030 W/mK	0,030 W/mK
Thermal resistance $R_{\lambda,ins} (S_{ins}/\lambda_{ins})$	UNI EN 1264-3: 2021	0,30 m ² K/W	0,75 m ² K/W	1,25 m ² K/W	1,50 m ² K/W	2,00 m ² K/W
Class to reaction to fire	UNI EN ISO 11925	Euroclass E	Euroclass E	Euroclass E	Euroclass E	Euroclass E
Water absorption	EN 12087	< 2%	< 2%	< 2%	< 2%	< 2%
Resistance factor diffusion to water vapor μ	UNI EN 12086	40 ÷ 100	40 ÷ 100	40 ÷ 100	40 ÷ 100	40 ÷ 100
Slab thickness S_{ins}	UNI EN 1264-3	10 mm	23 mm	38 mm	45 mm	60 mm
Total lenght		1250 mm	1250 mm	1250 mm	1250 mm	1250 mm
Total width		850 mm	850 mm	850 mm	850 mm	850 mm
Total thickness		32 mm	45 mm	60 mm	67 mm	82 mm
Coating film thickness		0,65 mm	0,65 mm	0,65 mm	0,65 mm	0,65 mm
Pipe spacing		50 mm	50 mm	50 mm	50 mm	50 mm
External Ø of installing pipes		16-17 mm	16-17 mm	16-17 mm	16-17 mm	16-17 mm
Pack		18,24 m ²	12,48 m ²	7,68 m ²	7,68 m ²	5,76 m ²



Floor system



Insulating panel Classic Floor with coating film (polystyrene rigid film, thickness 0,16 mm)

Dimension	Density	Pack m ²	Code	Price € pack	€/m ²
1200 x 750 x 50 / H20 (*)	20 kg/m ³	12,6	28134014	250,00	19,84
1200 x 750 x 65 / H30 (*)	30 kg/m ³	9	28130099	262,00	29,11

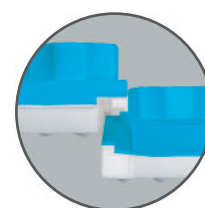
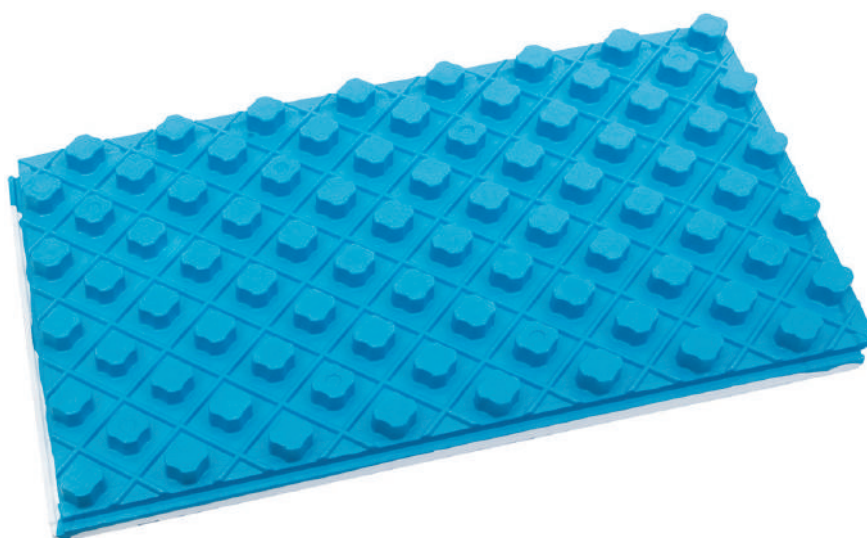
Panel in expanded polystyrene (EPS) printed for thermal insulation, with surface bosses and peripheral interlocking joints, coated with polystyrene rigid film. Pipe spacing: 7,5 cm.

(*) Available on request: 20 days to order confirm



[UNI EN 13163]

Technical data	Norm	Model H20	Model H30
Type	UNI EN 13163	EPS 100	EPS 200
Density	UNI EN 1602	20 kg/m ³	30 kg/m ³
Compression resistance at 10% of crushing	UNI EN 826	≥ 100 kPa	≥ 200 kPa
Thermal conductivity $\lambda_D (\lambda_{ins})$	UNI EN 12667 (UNI EN 1264-3)	0,035 W/mK	0,033 W/mK
Thermal resistance $R_{\lambda,ins} (S_{ins}/\lambda_{ins})$	UNI EN 1264-3: 2021	0,55 m ² K/W	0,90 m ² K/W
Class of reaction to fire	UNI EN ISO 11925	Euroclase E	Euroclass E
Water absorption	EN 12087	< 4%	< 5%
Factor of resistance to diffusion of water vapor μ	UNI EN 12086	30 ÷ 70	40 ÷ 100
Slab thickness S_{ins}	UNI EN 1264-3	20 mm	30 mm
Total lenght		1220 mm	1220 mm
Total width		770 mm	770 mm
Total thickness		50 mm	65 mm
Film coating thickness		0,16 mm	0,16 mm
Pipe spacing		75 mm	75 mm
Externa Ø of installing pipes		16-17-20 mm	16-17-20 mm
Pack		12,6 m ²	9 m ²



Floor system



Step Combi Floor phono-insulating panel

Dimension	Pack m ²	Code	Price € pack	€/m ²
1400 x 800 x 51 / H30-2	6,72	28134098	189,90	28,26

Panel in elasticized expanded polystyrene (EPS-T) printed for thermal and acoustic insulation (from footstep noise), with surface bosses and cylindrical edges, coupled with thermoformed rigid polystyrene film. Pipe spacing 5 cm.



[UNI EN 13163]

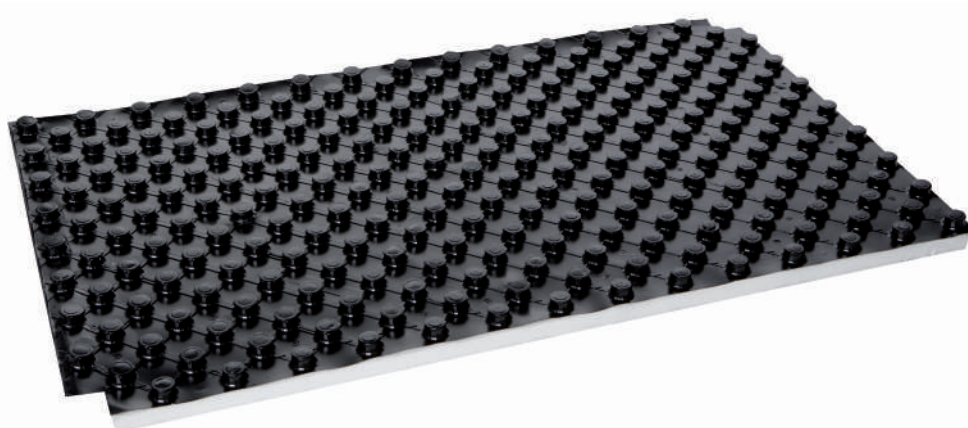
Technical data	Norm	Model H35
Type	UNI EN 13163	EPS-T
Dinamic stiffness	EN 29052-1 / UNI EN 13163	< 20 MN/m ³ /SD20
Compressibility	EN 12431 / UNI EN 13163	≤ 2 mm/CP2
ΔLw** (index of evaluation of attenuation of the level of sound pressure on the walkway)	UNI EN 12354-2	28 dB
Thermal conductivity $\lambda_D (\lambda_{ins})$	UNI EN 12667 (UNI EN 1264-3)	0,04 W/mK
Thermal resistance $R_{\lambda,ins} (S_{ins}/\lambda_{ins})$	UNI EN 1264-3: 2021	0,75 m ² K/W
Class of reaction to fire	UNI EN ISO 11925	Euroclass E
Water absorption	EN 12087	< 5%
Slab thickness S_{ins}	UNI EN 1264-3	30-2 mm
Total lenght		1450 mm
Total width		850 mm
Total thickness		51 mm
Coating film thickness		0,6 mm
Pipe spacing		50 mm
External Ø of installing pipes		16 - 17 mm
Pack		6,72 m ²

Reference to technical data table:

**** forecast calculation for systems with "slab + resilient layer" system (floating flooring), valid for concrete and cement block floors, as per the simplified model set forth by standard EN 12354-2, table C1.**

Conditions:

mass per unit of area of the slab: 100 kg/m² - dynamic rigidity of the resilient slab: 20 MN/m³



Floor system



Step Combi Floor phono-insulating panel with graphite

Dimension	Pack m ²	Code	Price € pack	€/m ²
1400 x 800 x 51 / H30-2	6,72	28134270	220,20	32,77

Panel in elasticized expanded polystyrene (EPS-T) printed, double density, added with graphite, for thermal and acoustic insulation (from footstep noise), with surface bosses and cylindrical edges, coupled with thermoformed rigid polystyrene film. Pipe spacing 5 cm.

Item on request: 20 days from order confirm.



[UNI EN 13163]

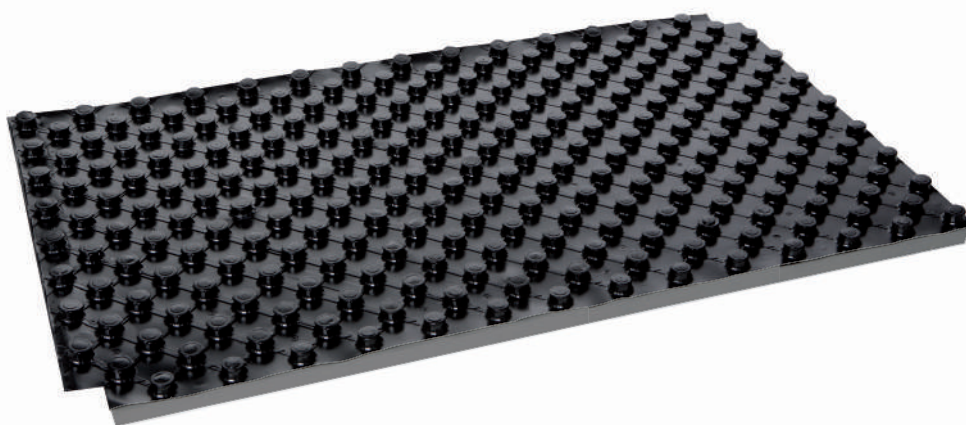
Technical data	Norm	Model H30
Type	UNI EN 13163	EPS-T
Dinamic stiffness	EN 29052-1 / UNI EN 13163	< 20 MN/m ² /SD20
Comprensibility	EN 12431 / UNI EN 13163	≤ 2 mm/CP2
ΔLw** (index of evaluation of attenuation of the level of sound pressure on the walkway)	UNI EN 12354-2	28 dB
Thermal conductivity $\lambda_D (\lambda_{ins})$	UNI EN 12667 (UNI EN 1264-3)	0,032 W/mK
Thermal resistance $R_{\lambda,ins} (S_{ins}/\lambda_{ins})$	UNI EN 1264-3: 2021	0,90 m ² K/W
Class to reaction to fire	UNI EN ISO 11925	Euroclass E
Water absorption	EN 12087	< 5%
Slab thickness S_{ins}	UNI EN 1264-3	30-2 mm
Total lenght		1450 mm
Total width		850 mm
Total thickness		51 mm
Coating film thickness		0,6 mm
Pipe spacing		50 mm
External Ø of installing pipes		16 - 17 mm
Pack		6,72 m ²

Reference to technical data table:

**** forecast calculation for systems with "slab + resilient layer" system (floating flooring), valid for concrete and cement block floors, as per the simplified model set forth by standard EN 12354-2, table C1.**

Conditions:

mass per unit of area of the slab: 100 kg/m² - dynamic rigidity of the resilient slab: 20 MN/m³



Floor system



[UNI EN 13163]

Insulating panel Thin Floor with graphite with self-adhesive base

Dimension	Density	Pack m ²	Code	Price € pack	€/m ²
1200 x 600 x 19 / H5	40 kg/m ³	12,96	28134048	504,30	38,91

Panel in expanded polystyrene (EPS) printed, treated with graphite, for thermal insulation, with surface bosses (100 mm pitch, for pipe DN 12x2), edges Male-Female, self-adhesive base and upper rigid polystyrene film.

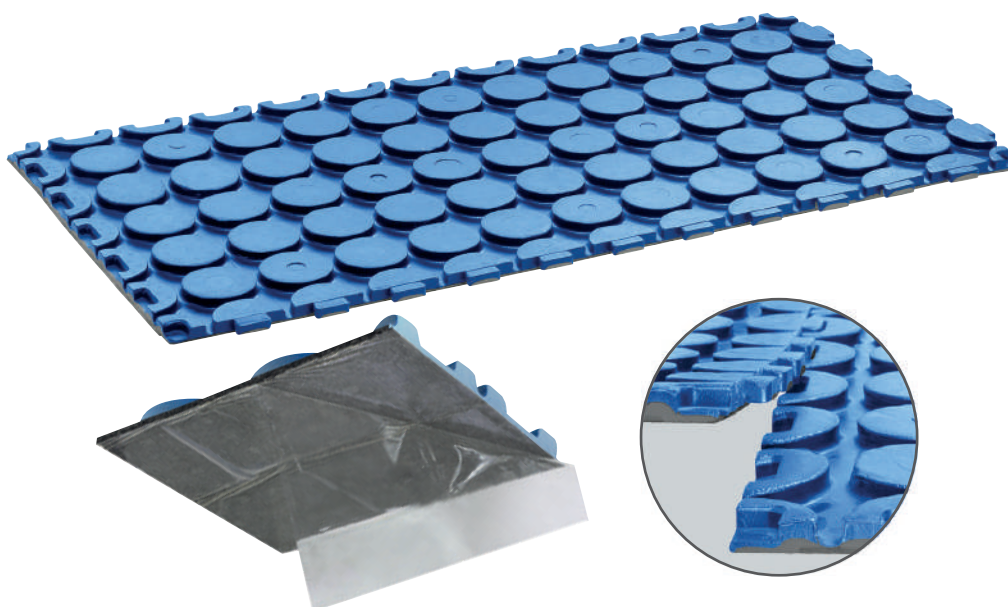
Ideal for renovation projects, thanks to the low profile, in combination with the latest generation of fluid screeds, enables the construction of plants with thick (cladding excluded) minimum of 30 mm, without compromising the thermal insulation guaranteed by the layer in EPS.

Note:

the actual Slab thickness S_{ins} and construction procedures to be defined by the manufacturer / supplier of the same according to his specifications, depending on the installation conditions (size and surface type of installation, type loft, etc.) and the type of slab chosen.

The choice of surface finish should take into account the type and used screed.

Technical data	Norm	Model H5
Type	UNI EN 13163	EPS 250
Density	UNI EN 1602	40 kg/m ³
Compression resistance at 10% of crushing	UNI EN 826	≥ 250 kPa
Thermal conductivity $\lambda_D (\lambda_{ins})$	UNI EN 12667 (UNI EN 1264-3)	0,031 W/mK
Thermal resistance $R_{\lambda,ins} (S_{ins} / \lambda_{ins})$	UNI EN 1264-3: 2021	0,15 m ² K/W
Class to reaction to fire	UNI EN ISO 11925	Euroclass E
Water absorption	EN 12087	< 5%
Resistance factor diffusion of water vapor μ	UNI EN 12086	40 ÷ 100
Slab thickness S_{ins}	UNI EN 1264-3	5 mm
Total lenght		1215 mm
Total width		615 mm
Total thickness		19 mm
Coating film thickness		0,16 mm
Pipe spacing		100 mm
External Ø of installing pipes		12 mm
Pack		12,96 m ²



Floor system



Project Emmeti Floor insulating panel

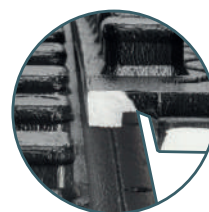
Dimension	Density	Pack m ²	Code	Price € pack	€/m ²
1200 x 800 x 47 / H20	25 kg/m ³	14,40	28134052	267,10	18,55
1200 x 800 x 57 / H30	25 kg/m ³	10,56	28134054	243,60	23,07
1200 x 800 x 69 / H41	25 kg/m ³	8,64	28134154	256,10	29,64

EPS 150 type closed cell sintered expanded polystyrene panel, hot coated with a compact PS film 160 micron thick. Pipe pitch 5 cm.



[UNI EN 13163]

Technical data	Norm	Model H20	Model H30	Model H41
Type	UNI EN 13163	EPS 150	EPS 150	EPS 150
Density	UNI EN 1602	25 kg/m ³	25 kg/m ³	25 kg/m ³
Compression resistance at 10% of crushing	UNI EN 826	≥ 150 kPa	≥ 150 kPa	≥ 150 kPa
Thermal conductivity λ_D (λ_{ins})	UNI EN 12667 (UNI EN 1264-3)	0,033 W/mK	0,033 W/mK	0,033 W/mK
Thermal resistance $R_{\lambda,ins}$ (S_{ins} / λ_{ins})	UNI EN 1264-3: 2021	0,60 m ² K/W	0,90 m ² K/W	1,25 m ² K/W
Class to reaction to fire	EN 13501-1	Euroclass E	Euroclass E	Euroclass E
Water absorption	EN 12087	< 5%	< 5%	< 5%
Resistance factor diffusion of water vapor μ	UNI EN 12086	30 ÷ 70	30 ÷ 70	30 ÷ 70
Slab thickness S_{ins}	UNI EN 1264-3	20 mm	30 mm	41 mm
Total lenght		1230 mm	1230 mm	1230 mm
Total width		830 mm	830 mm	830 mm
Total thickness		46,5 mm	56,5 mm	67,5 mm
Coating film thickness		0,16 mm	0,16 mm	0,16 mm
Pipe spacing		50 mm	50 mm	50 mm
External Ø installable pipes		16-17 mm	16-17 mm	16-17 mm
Pack		14,40 m ²	10,56 m ²	8,64 m ²



Floor system



Plan Floor insulating panel

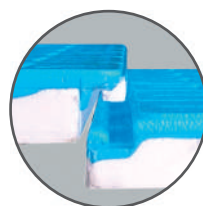
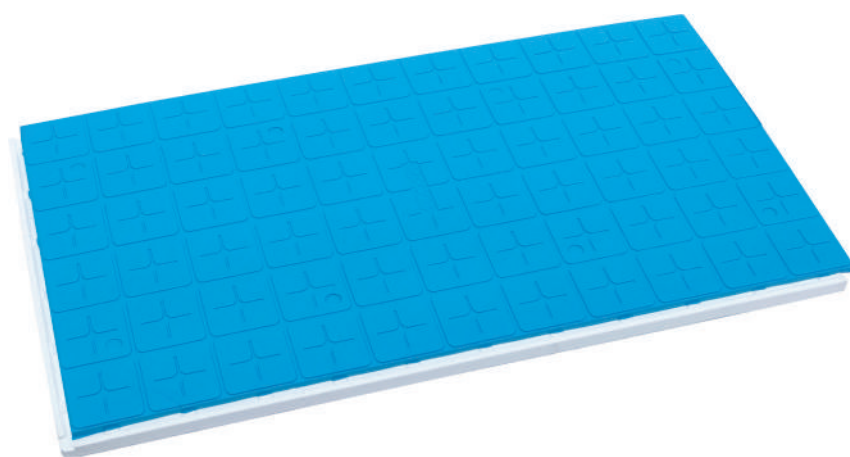
Dimension	Density	Pack m ²	Code	Price € pack	€/m ²
1100 x 600 x 30 / H30	30 kg/m ³	10,56	28130072	258,40	24,47

Smooth panel in expanded polystyrene (EPS) printed for thermal insulation, with surface impressions for the laying of pipes and peripheral interlocking joints. Covered with a rigid polystyrene film. Footprints pipe 5 cm.

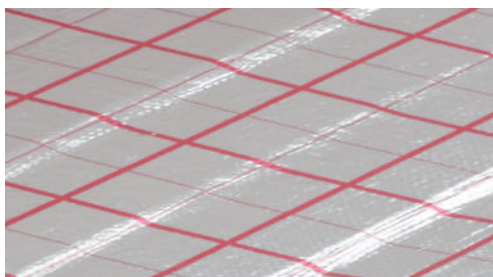


[UNI EN 13163]

Technical data	Norm	Model H30
Type	UNI EN 13163	EPS 200
Density	UNI EN 1602	30 kg/m ³
Compression resistance at 10% of crushing	UNI EN 826	≥ 200 kPa
Thermal conductivity $\lambda_D (\lambda_{ins})$	UNI EN 12667 (UNI EN 1264-3)	0,033 W/mK
Thermal resistance $R_{\lambda,ins} (S_{ins} / \lambda_{ins})$	UNI EN 1264-3: 2021	0,90 m ² K/W
Class to reaction to fire	UNI EN ISO 11925	Euroclass E
Water absorption	EN 12087	< 5%
Resistance factor diffusion of water vapor μ	UNI EN 12086	40 ÷ 100
Slab thickness S_{ins}	UNI EN 1264-3	30 mm
Total lenght		1120 mm
Total width		620 mm
Total thickness		30 mm
Coating film thickness		0,16 mm
Pipe spacing		50 mm
Pack		10,56 m ²



Floor system



[UNI EN 13163]

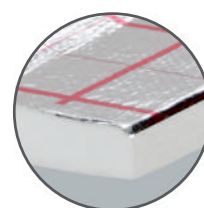
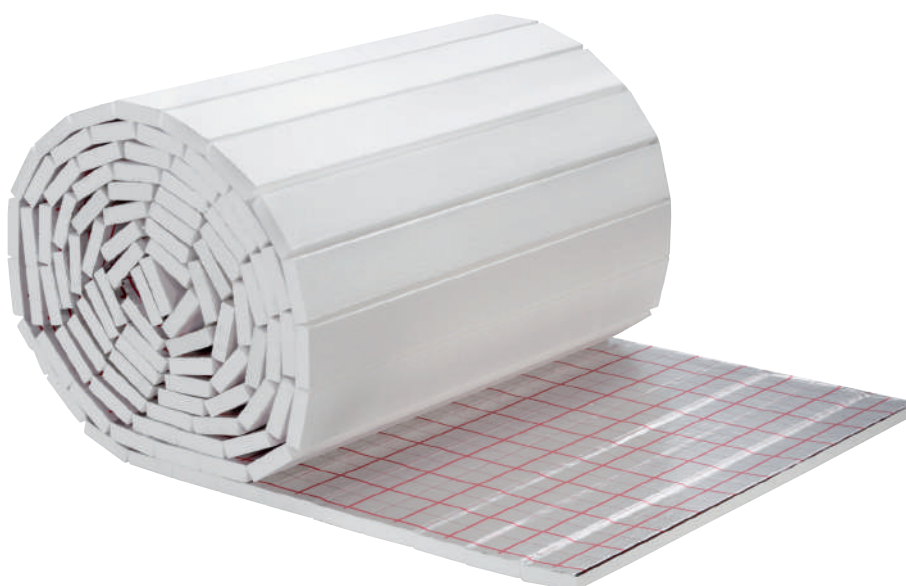
Roll Floor insulating panel

Dimension	Density	Pack m ²	Code	Price € pack	€/m ²
10000 x 1000 x 30 / H20 (*)	25 kg/m ³	10	28134256	205,30	20,53
10000 x 1000 x 30 / H30	25 kg/m ³	10	28134250	230,30	23,03
10000 x 1000 x 40 / H40 (*)	25 kg/m ³	10	28134252	261,90	26,19
10000 x 1000 x 50 / H50 (*)	25 kg/m ³	10	28134254	302,80	30,28
6000 x 1000 x 60 / H60 (*)	25 kg/m ³	6	28134258	226,20	37,70

Panel smooth in roll, consisting of slats (dimensions: 100 x 1000 mm) made of expanded polystyrene (EPS) printed for thermal insulation, coupled to a film HDPE with red color aluminum track laying step 5 cm and self-adhesive edge.

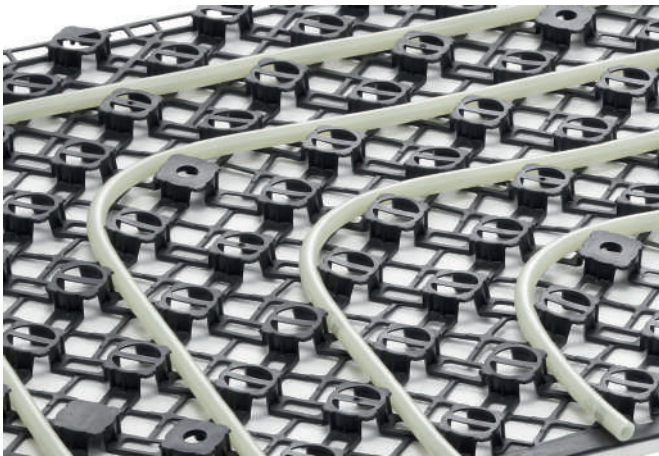
(*) Available on request: 20 days from order confirmation

Technical data	Norm	Model H20	Model H30	Model H40	Model H50	Model H60
Type	UNI EN 13163	EPS 150	EPS 150	EPS 150	EPS 150	EPS 150
Density	UNI EN 1602	25 kg/m ³	25 kg/m ³	25 kg/m ³	25 kg/m ³	25 kg/m ³
Compression resistance at 10% of crushing	UNI EN 826	≥ 150 kPa	≥ 150 kPa	≥ 150 kPa	≥ 150 kPa	≥ 150 kPa
Thermal conductivity λ_D (λ_{ins})	UNI EN 12667 (UNI EN 1264-3)	0,033 W/mK	0,033 W/mK	0,033 W/mK	0,033 W/mK	0,033 W/mK
Thermal resistance $R_{\lambda,ins}$ (S_{ins}/λ_{ins})	UNI EN 1264-3: 2021	0,60 m ² K/W	0,90 m ² K/W	1,20 m ² K/W	1,50 m ² K/W	1,85 m ² K/W
Class to reaction to fire	UNI EN ISO 11925	Euroclass E	Euroclass E	Euroclass E	Euroclass E	Euroclass E
Water absorption	EN 12087	< 5%	< 5%	< 5%	< 5%	< 5%
Resistance factor diffusion of water vapor μ	UNI EN 12086	30 ÷ 70	30 ÷ 70	30 ÷ 70	30 ÷ 70	30 ÷ 70
Slab thickness S_{ins}	UNI EN 1264-3	20 mm	30 mm	40 mm	50 mm	60 mm
Total lenght		10.000 mm	10.000 mm	10.000 mm	10.000 mm	6.000 mm
Total width		1.000 mm	1.000 mm	1.000 mm	1.000 mm	1.000 mm
Total thickness		20 mm	30 mm	40 mm	50 mm	60 mm
Coating film thickness		0,16 mm	0,16 mm	0,16 mm	0,16 mm	0,16 mm
Pipe spacing		50 mm	50 mm	50 mm	50 mm	50 mm
Pack		10 m ²	10 m ²	10 m ²	10 m ²	6 m ²



Floor system

Grid Floor System



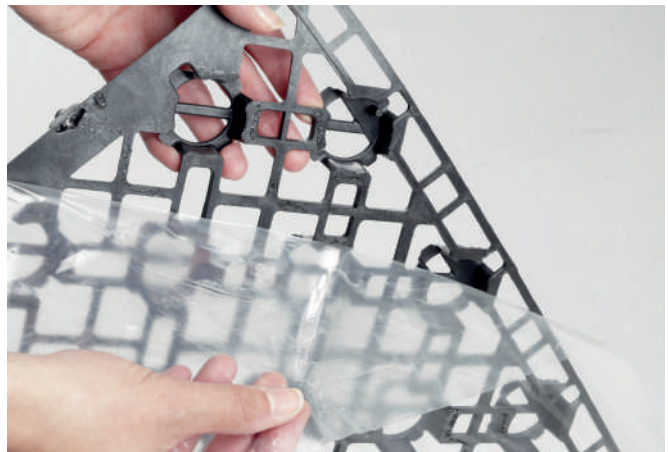
Grid Floor panel for DN12 pipe



Grid Floor panel for DN16-17 pipe



Detail of perimeter joints



Particular adhesive bottom film



SCAN

The range of Grid Floor panels for the construction of radiant floor systems is characterized by the particular shape of the grid in recycled plastic material (polypropylene), which combines the simplicity of laying the pipes of the ashlar systems, with the advantages of flat systems. The pipes are firmly hooked to the panels and are completely in contact with the screed, which can completely fill the perforated bosses, improving the heat exchange of the system.

The range

- Grid floor panel for DN12 pipe with self-adhesive base, thickness 15mm;
- Grid floor panel for DN12 pipe coupled with EPS150 sheet, thickness 15 + 10 mm;
- Grid floor panel for DN16 / 17 pipe coupled with EPS150 sheet, thickness 22 + 10 mm;
- Grid floor panel for DN16 / 17 pipe coupled with EPS150 sheet, thickness 22 + 25 mm;
- Grid floor panel for DN16 / 17 pipe coupled with EPS150 sheet, thickness 22 + 42 mm.

Advantages

Impact resistant bosses and shaped for optimal blocking of pipes. Heat exchange and homogeneous distribution of the surface temperature. Excellent compatibility with low thickness fluid screeds (levelling).

Ideal for renovations, thanks to the reduced thickness of the panels. The model for DN12 pipe and 15 mm thickness with self-adhesive base, applied on existing floors, allows a covering thickness of only 5 mm using the special Knauf NE499 Super-levelling, for a total footprint of the panel + screed system of only 20 mm.

Dimensions: see section Technical Attachments

Floor system

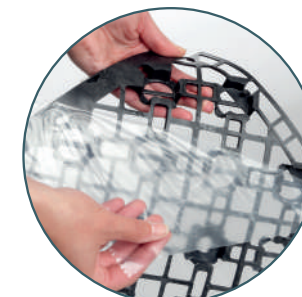
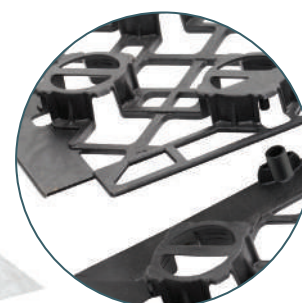
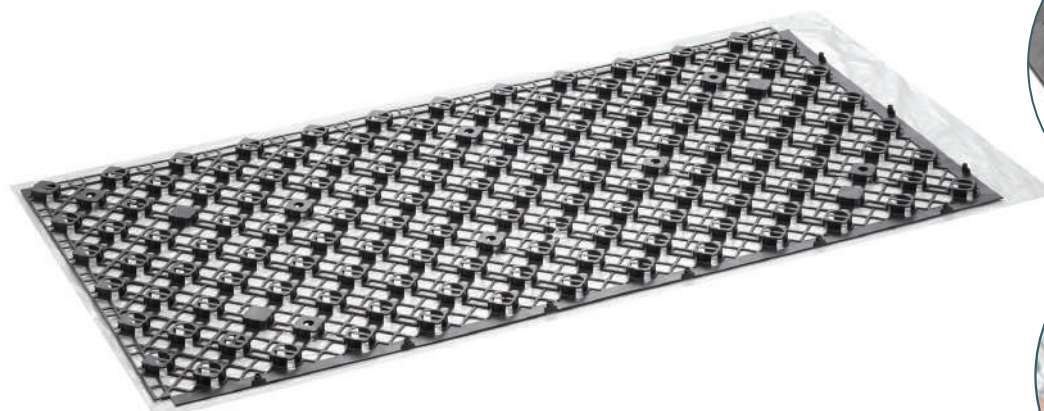


Grid Floor panel for DN12 pipe, with self-adhesive base

Dimensions	Pack m ²	Code	Price € pack	€/m ²
1200x600x15 / H0	15,84	28134168	612,40	38,66

Support panel in recycled plastic material (polypropylene) for the construction of radiant systems with reduced thickness, equipped with perimeter joints and self-adhesive base for gluing on existing flooring or substrate, previously treated with primer ("anchored" floor system). Allows the use of very low thickness fluid screeds (levelings) with a minimum thickness of 5 mm above the panel

Technical data	Model H0
Total lenght	1220 mm
Total width	620 mm
Total thickness	15 mm
Bosses thickness	15 mm
Pipe spacing	50 mm
External Ø of installing pipes	12 mm
Pack	15,84 m ²



Floor system



Grid Floor insulating panels for DN12 pipe

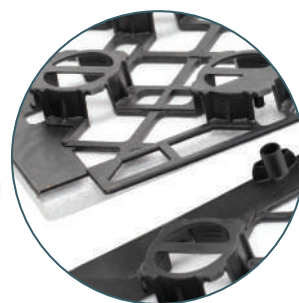
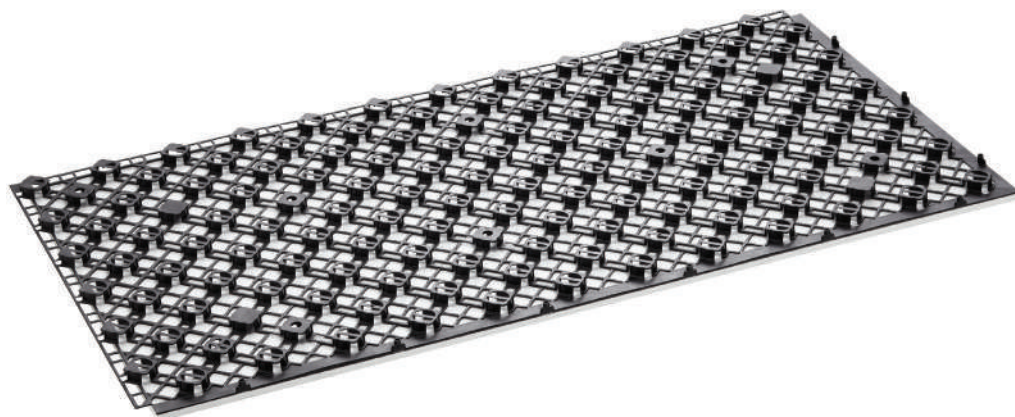
Dimensions	Density	Pack m ²	Code	Price € pack	€/m ²
1200x600x25 / H10	25 kg/m ³	7,20	28134166	312,10	43,35

Support panel in recycled plastic material (polypropylene) for the construction of radiant systems with reduced thickness, coupled with a flat insulation in Expanded Sintered Polystyrene (white EPS 150). Equipped with perimeter joints.



[UNI EN 13163]

Technical data	Norm	Model H10
Type	UNI EN 13163	EPS 150
Recycled material (%)		≥ 10 %
Density	UNI EN 1602	25 kg/m ³
Compression resistance at 10% of crushing	UNI EN 826	≥ 150 kPa
Thermal conductivity $\lambda_D (\lambda_{ins})$	UNI EN 12667 (UNI EN 1264-3)	0,033 W/mK
Thermic resistance $R_{\lambda,ins} (S_{ins}/\lambda_{ins})$	UNI EN 1264-3:2021	0,30 m ² K/W
Class of reaction fire	UNI EN ISO 11925	Euroclass E
Water absorption	EN 12087	< 3%
Factor of resistance to diffusion of water vapor μ	UNI EN 12086	30 ÷ 70
Slab thickness S_{ins}	UNI EN 1264-3	10 mm
Total lenght		1220 mm
Total width		620 mm
Total thickness		25 mm
Bosses thickness		15 mm
Pipe spacing		50 mm
External Ø of installing pipes		12 mm
Pack		7,20 m ²



Floor system



Grid Floor insulating panel for DN 16-17 pipe

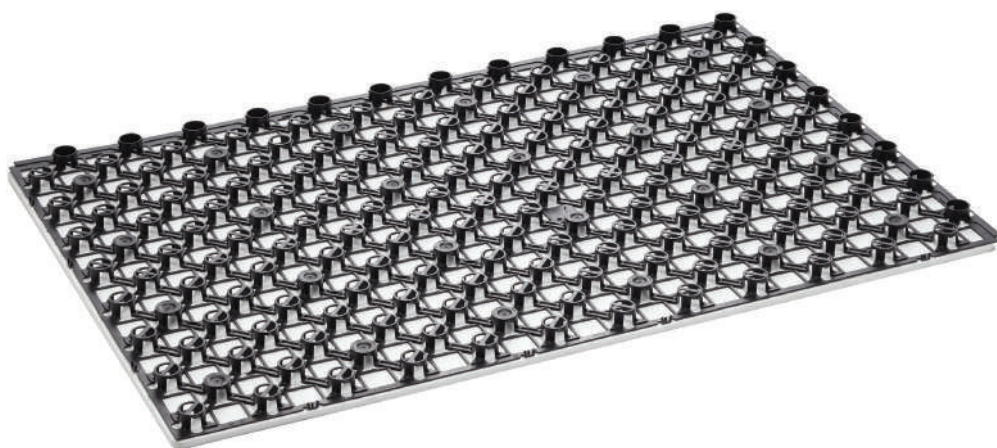
Dimensions	Density	Pack m ²	Code	Price € pack	€/m ²
1200x800x32 / H10	25 kg/m ³	7,68	28134160	303,00	39,45
1200x800x47 / H25	25 kg/m ³	8,64	28134162	398,70	46,14
1200x800x64 / H42	25 kg/m ³	5,76	28134164	331,60	57,57

Support panel in recycled plastic material (polypropylene) for the construction of radiant systems with reduced thickness, coupled with a flat insulation in Expanded Sintered Polystyrene (white EPS 150). Equipped with perimeter joints.



[UNI EN 13163]

Technical data	Norm	Model H10	Model H25	Model H42
Type	UNI EN 13163	EPS 150	EPS 150	EPS 150
Recycled material (%)		≥ 10 %	≥ 10 %	≥ 10 %
Density	UNI EN 1602	25 kg/m ³	25 kg/m ³	25 kg/m ³
Compression resistance at 10% of crushing	UNI EN 826	≥ 150 kPa	≥ 150 kPa	≥ 150 kPa
Thermal conductivity $\lambda_D (\lambda_{ins})$	UNI EN 12667 (UNI EN 1264-3)	0,033 W/mK	0,033 W/mK	0,033 W/mK
Thermic resistance $R_{\lambda,ins} (S_{ins}/\lambda_{ins})$	UNI EN 1264-3:2021	0,30 m ² K/W	0,75 m ² K/W	1,25 m ² K/W
Class of reaction fire	UNI EN ISO 11925	Euroclass E	Euroclass E	Euroclass E
Water absorption	EN 12087	< 3%	< 3%	< 3%
Factor of resistance to diffusion of water vapor μ	UNI EN 12086	30 ÷ 70	30 ÷ 70	30 ÷ 70
Slab thickness S_{ins}	UNI EN 1264-3	10 mm	25 mm	42 mm
Total lenght		1220 mm	1220 mm	1220 mm
Total width		820 mm	820 mm	820 mm
Total thickness		32 mm	47 mm	64 mm
Bosses thickness		22 mm	22 mm	22 mm
Pipe spacing		50 mm	50 mm	50 mm
External Ø of installing pipes		16-17 mm	16-17 mm	16-17 mm
Pack		7,68 m ²	8,64 m ²	5,76 m ²

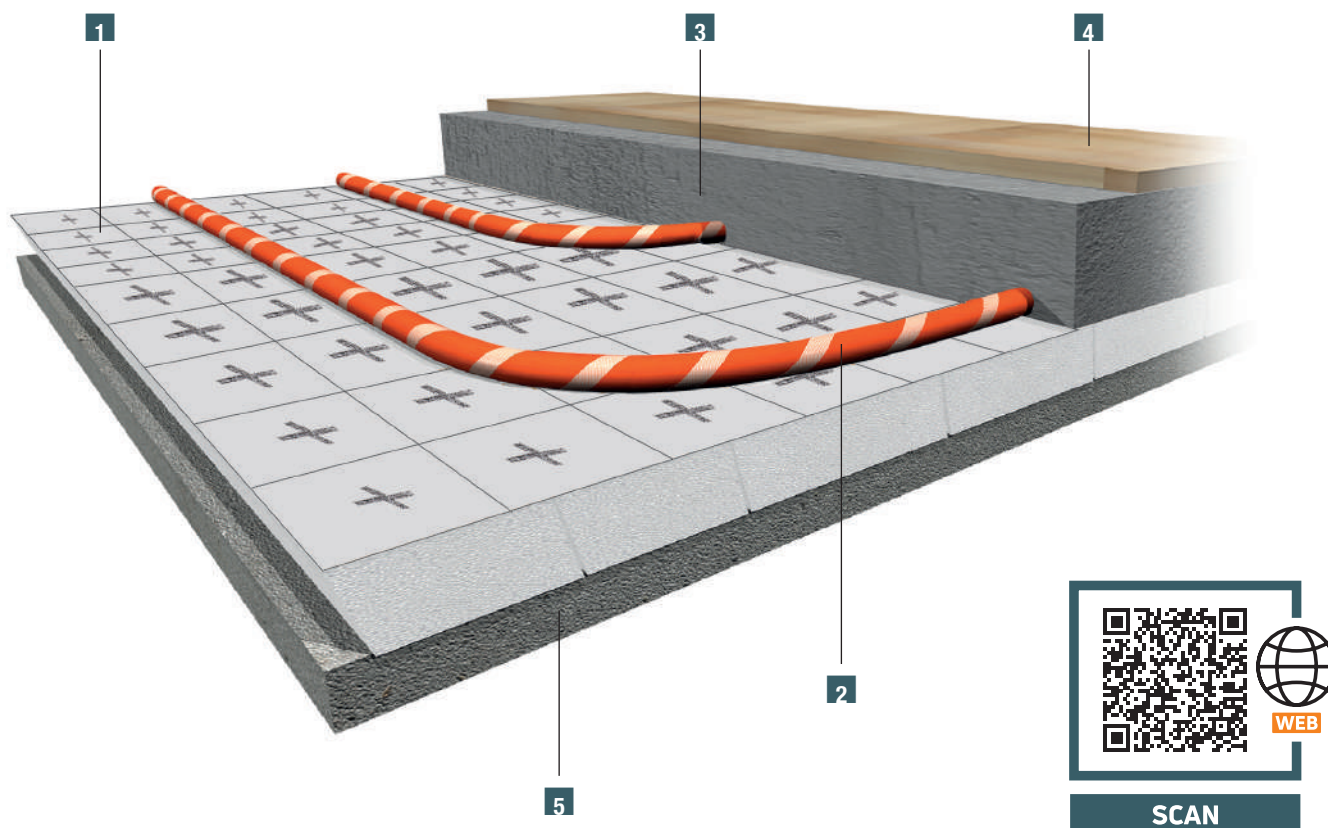


Floor system

Klettjet System

KLETTJET is the system of smooth roll panels that uses tear-off technology for a simple and flexible laying of the pipes. It is composed of a range of EPS polystyrene panels, or expanded PE, equipped at the top with a film, with installation grid, on which the appropriate PE-Xc tube equipped with tape for tear-off fastening.

Flooring with the Klettjet system

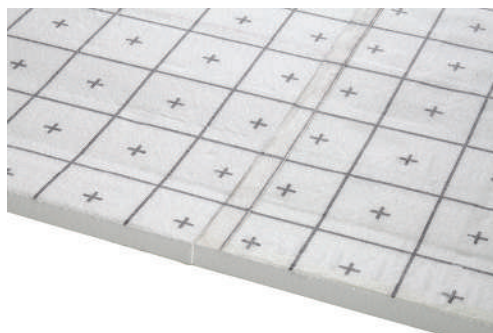


Construction

- 1 EPS Klettjet insulating panel
- 2 PexPenta Klett pipe
- 3 Screed
- 4 Floor
- 5 Slab

Dimensions: see section **Technical Attachments**.

Floor system



EPS Klettjet insulating panel

Dimension	Density	Pack m ²	Code	Price € pack	€/m ²
10000 x 1000 x 20 / H20	25 kg/m ³	10	28134126	234,30	23,43
10000 x 1000 x 30 / H30	25 kg/m ³	10	28134128	265,00	26,50
10000 x 1000 x 41 / H41 (*)	25 kg/m ³	10	28134150	331,10	33,11

Smooth panel in roll, made up of slats (dimensions: 100 x 1000 mm) in expanded polystyrene (EPS) printed for thermal insulation, coupled with a white loop film with black trace of laying pitch 5 cm.

(*) Item available on request



[UNI EN 13163]

Technical data	Norm	Model H20	Model H30	Model H41
Type	UNI EN 13163	EPS 150	EPS 150	EPS 150
Density	UNI EN 1602	25 kg/m ³	25 kg/m ³	25 kg/m ³
Compression resistance at 10% of crushing	UNI EN 826	≥ 150 kPa	≥ 150 kPa	≥ 150 kPa
Thermal conductivity $\lambda_D (\lambda_{ins})$	UNI EN 12667 (UNI EN 1264-3)	0,033 W/mK	0,033 W/mK	0,033 W/mK
Thermal resistance $R_{\lambda,ins} (S_{ins} / \lambda_{ins})$	UNI EN 1264-3: 2021	0,60 m ² K/W	0,90 m ² K/W	1,25 m ² K/W
Class to reaction to fire	UNI EN ISO 11925	Euroclass E	Euroclass E	Euroclass E
Water absorption	EN 12087	< 5%	< 5%	< 5%
Resistance factor diffusion of water vapor μ	UNI EN 12086	40 ÷ 100	40 ÷ 100	30 ÷ 70
Slab thickness S_{ins}	UNI EN 1264-3	20 mm	30 mm	41 mm
Total length		10.000 mm	10.000 mm	10.000 mm
Total width		1.000 mm	1.000 mm	1.000 mm
Total thickness		20 mm	30 mm	41 mm
Pipe spacing		50 mm	50 mm	50 mm
Pack		10 m ²	10 m ²	10 m ²



Floor system



PE Klettjet R panel

Dimension	Pack m ²	Code	Price € pack	€/m ²
20000 x 1000 x 6 / H6	20	28134286	568,00	28,40

Panel smooth in roll made of closed-cell extruded polyethylene with self-adhesive base, for thermal and acoustic insulation (from footstep noise).

[UNI EN 14313]

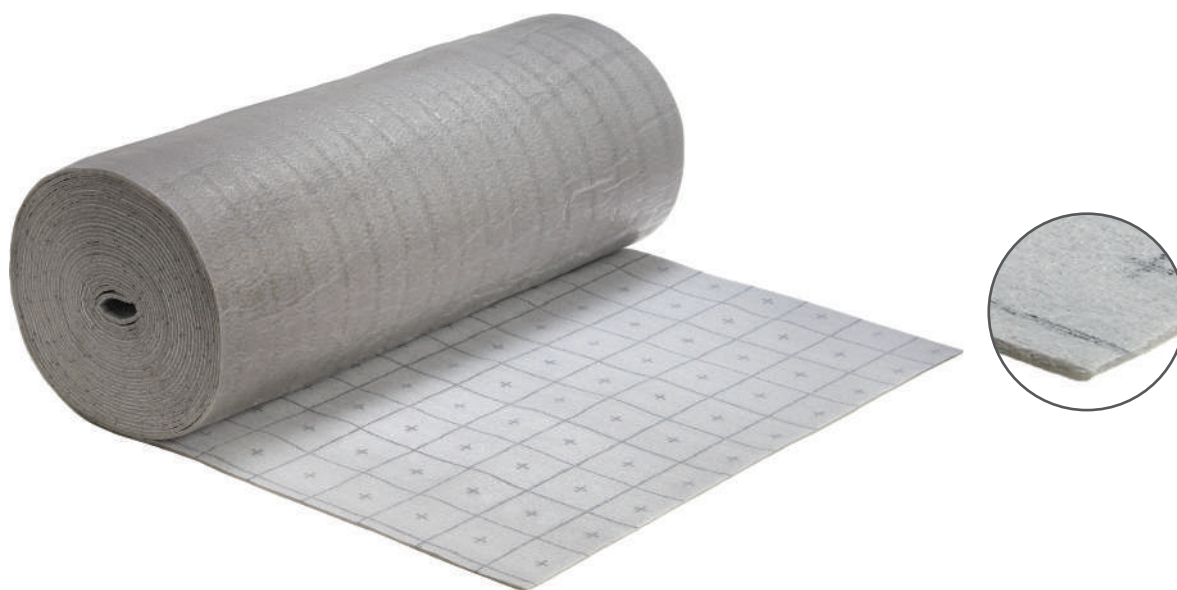
Technical data	Norm	Model H6
Type	UNI EN 14313	Expanded PE
Dinamic stiffness	EN 29052-1	< 210 MN/m ³
Compressibility	EN 12431	≤ 2 mm/CP2
ΔLw** (index of evaluation of attenuation of the level of sound pressure on the walkway)	UNI EN 12354-2	13dB
Thermal conductivity λ_D (λ_{ins})	EN 12939 (UNI EN 1264)	0,045 W/mK
Thermal resistance $R_{\lambda,ins}$ (S_{ins}/λ_{ins})	UNI EN 1264-3: 2021	0,1 m ² K/W
Class of reaction to fire	UNI EN ISO 11925	Euroclass E
Maximum load	/	5.0 kPa
Slab thickness S_{ins}	UNI EN 1264-3	6 mm
Total lenght		20.000 mm
Total width		1.000 mm
Total thickness		6 mm
Pipe spacing		50 mm

Reference to technical data table:

**** forecast calculation for systems with "slab + resilient layer" system (floating flooring), valid for concrete and cement block floors, as per the simplified model set forth by standard EN 12354-2, table C1.**

Conditions:

mass per unit of area of the slab: 100 kg/m² - dynamic rigidity of the resilient slab: 210 MN/m³



Floor system



[UNI EN ISO 21003-2]

PexPenta Klett pipe

Classes of application / Operating pressures (bar):

Cl. 4 / 6 bar - Cl. 5 / 6 bar

Oxygen permeability (DIN 4726): < 0.1 mg/(m²d) at 40 °C; < 0.32 mg/(m²d) at 80 °C

Density: 940 kg/m³

Thermal conductivity: 0.41 W/(mK)

Degree of reticulation: ≥60%

Average coefficient of linear expansion: 0,15 mm/(m °C)

Minimum bending radius: 5 x external diameter

Internal roughness: 6 µm - Water capacity: 0.11 l/min

Application: heating systems

Dimension	m pack	Code	Price €/m
16 x 2 mm	240	28141830	3,56
16 x 2 mm	600	28141832	3,56

5-layers pipe in high-density polyethylene, with electronic system crosslinking, complying with to standard UNI EN ISO 21003-2 and certified DIN CERTCO 3V365.

Accessories for Klettjet System



PATENT PENDING

Monoblocco seal for PexPenta Klett pipe

Dimension	Thread	Pcs. pack	Code	Price €/pc.
16 x 2	24x19	20	28110118	5,78
16 x 2	3/4" Eurocone	10	28110606	5,28



Tape 50 mm for joining panels Klettjet

Dimension	Roll each pack	Code	Price €/roll
50 mm x 100 mt	1	28134290	109,20



Unwinder for tape 50 mm for panels Klettjet

Dimension	Pcs. pack	Code	Price €/pc.
	1	28134294	181,20



PexPenta Klett tube support

Dimension	Pcs. pack	Code	Price €/pc.
	1	28134296	648,10



Pair of gloves for PexPenta Klett pipe

Dimensions	Pcs. pack	Code	Price €/pc.
	1 pair	28134299	19,45

Dry System - Emmeti Dry Alu Floor

The new **Emmeti Dry Alu Floor** system represents the ideal solution for installations that require minimum thicknesses, reduced weight on the floors and quick operational start-up of the system.

In fact, Emmeti Dry Alu Floor has been designed for installations with dry application, without screed, applicable above existing floors or completely flat sub-bases. The pipes are laid in coils.

Available in two different thicknesses (30 and 40 mm total) it's particularly suited for application in building renovations.

The system is composed of:

- A moulded expanded polystyrene panel (type EPS 200) for thermal insulation, with shaped surface with longitudinal and orthogonal chases (pitch 150 mm) for 17x2 pipe, coupled with an aluminium conductive foil (thickness 0.3 mm).
- A moulded expanded polystyrene panel (type EPS 200) for thermal insulation, with shaped surface with longitudinal, orthogonal and curved chases for 17x2 pipe, coupled with a rigid polystyrene film, for the realization of the head curves and the crossings corresponding to the doors and collectors.
- A polyethylene separation sheet
- Two galvanized steel plates (with and without adhesive side), for the realization of the dual upper layer for thermal conduction and distribution of the load.

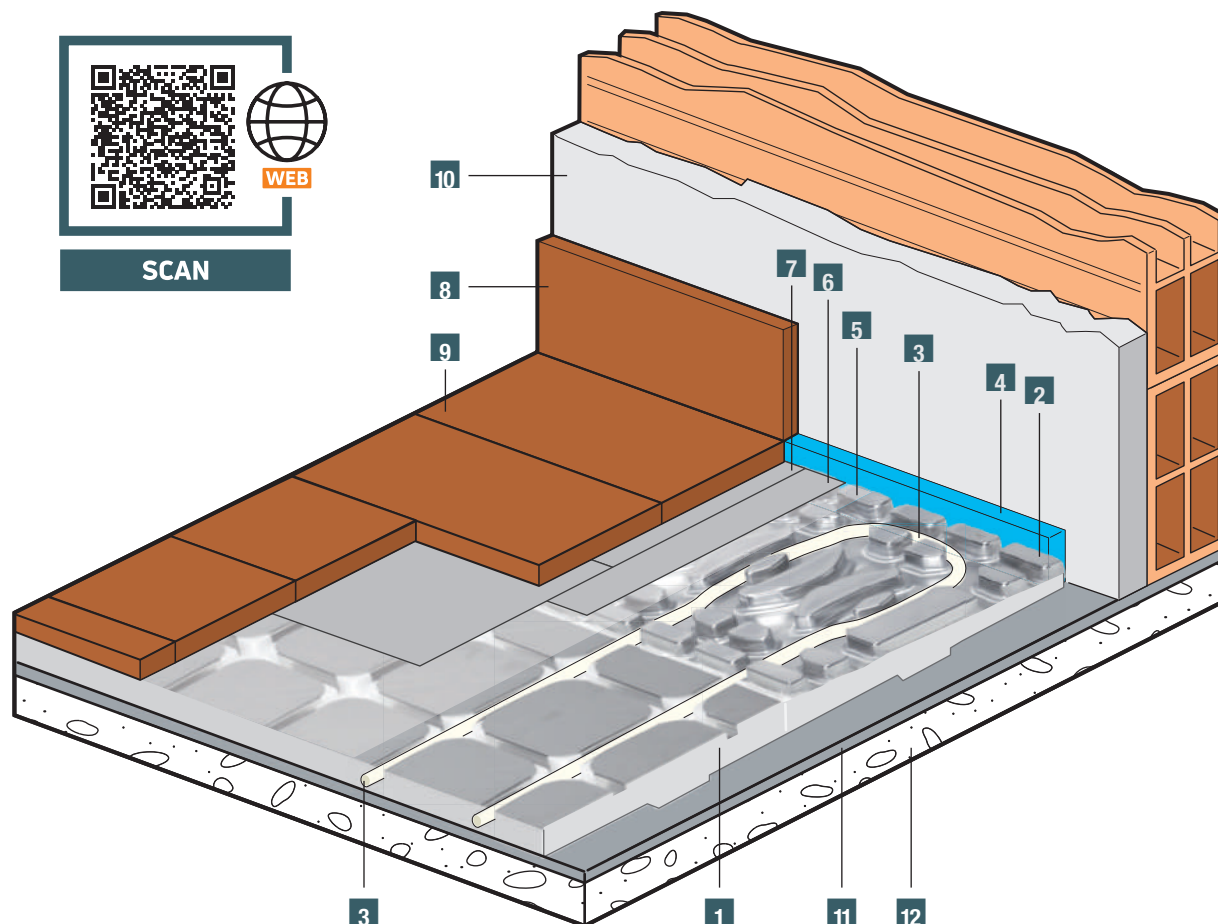
Flooring

In the case of **parquet**, it is recommended that the type underlayment with joints, laid without glue.

For the adhesion of floor coverings of **ceramic or stone** type, it is necessary to use specialized adhesives for metal surfaces (typically a polyurethane glues), providing the joints of at least 4/5 mm and grouting with suitable fillers elastic. It 'should the tiles are of no larger than 40 cm per side.

Dimensions: see section **Technical Attachments**

Ceramic or stone type Floors

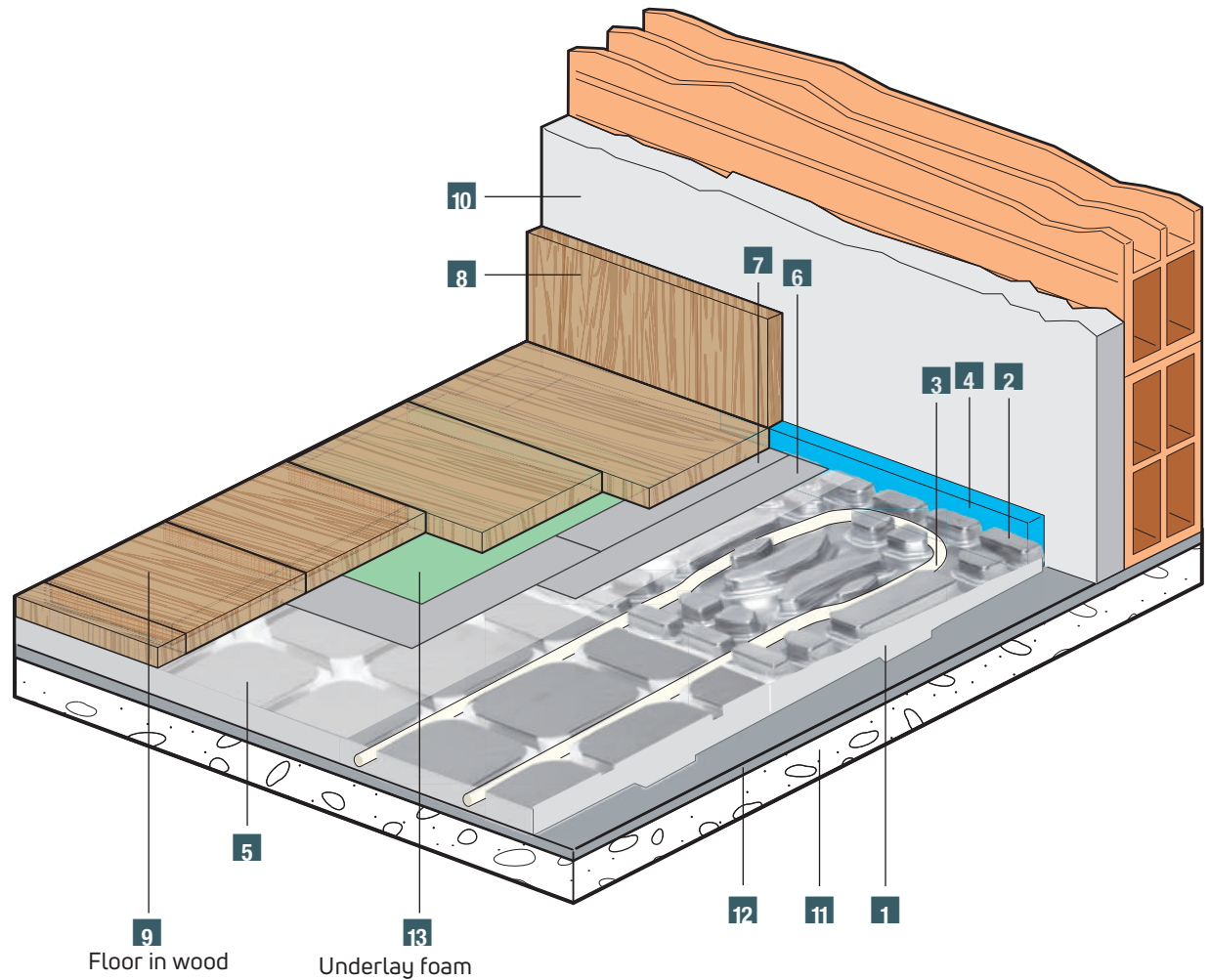


Construction

- | | |
|---|--|
| 1 Dry Alu Floor panel with aluminium foil | 7 Galvanized steel plate with adhesive (second layer) glued to the first |
| 2 Dry Alu Floor head panel | 8 Skirting |
| 3 Emmeti pipe PE-Xa 17x2 and PE-RT 17x2 | 9 Floor |
| 4 Perimeter insulation strip | 10 Plaster |
| 5 Polyethylene separation sheet | 11 Self-levelling layer |
| 6 Galvanized steel plate (first layer) | 12 Slab |

Floor system

Flooring with floating parquet



Construction

- 1 Dry Alu Floor panel with aluminium foil
- 2 Dry Alu Floor head panel
- 3 Emmeti pipe PE-Xa 17x2 and PE-RT 17x2
- 4 Perimeter insulation strip
- 5 Polyethylene separation sheet
- 6 Galvanized steel plate (first layer)
- 7 Galvanized steel plate with adhesive (second layer) glued to the first
- 8 Skirting
- 9 Floor in wood
- 10 Plaster
- 11 Self-levelling layer
- 12 Slab
- 13 Underlay foam

Floor system



Dry Alu Floor insulating panel

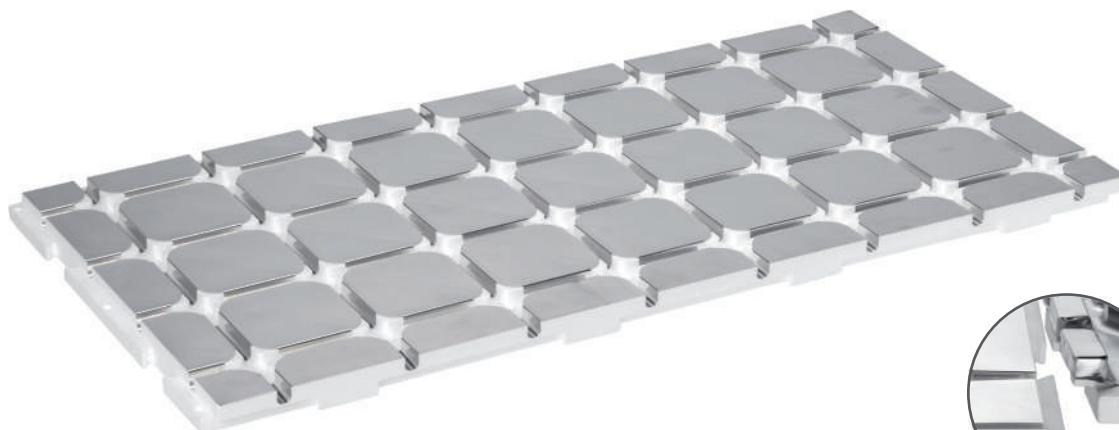
Dimension	Pack m ²	Code	Price € pack	€/m ²
1200 x 600 x 28 / H10	11,52	28134100	952,30	82,66

Panel in polystyrene type EPS 200, complies with EN 13163, with dovetail joints on four sides and upper aluminum foil. Pipe of laying 150 mm. Suitable for serpentine circuits.



[UNI EN 13163]

Technical data	Norm	Model H10 (panel)
Type	UNI EN 13163	EPS 200
Density	UNI EN 1602	30 kg/m ³
Compression resistance at 10% of crushing	UNI EN 826	≥ 200 kPa
Thermal conductivity λ_D (λ_{ins})	EN 12939 (UNI EN 1264-3)	0,033 W/mK
Thermal resistance $R_{\lambda,ins}$ (S_{ins}/λ_{ins})	UNI EN 1264-3: 2021	0,65 m ² K/W
Class of reaction of fire	UNI EN ISO 11925	Euroclass E
Water absorption	EN 12087	< 5%
Resistance factor diffusion of water vapor μ	UNI EN 12086	40 ÷ 100
Slab thickness S_{ins}	UNI EN 1264-3	21,4 mm
Total lenght		1215 mm
Total width		615 mm
Total thickness		28 mm
Sheet thickness Al		0,3 mm
Pipe spacing		150 mm
External Ø of installing pipes		17 mm
Pack		11,52 m ²



Floor system



Head Dry Alu Floor insulating panel

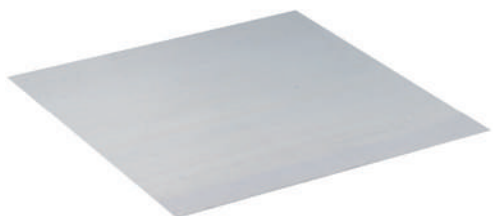
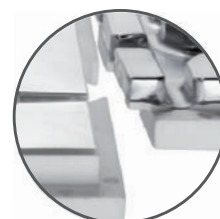
Dimension	Pack m ²	Code	Price € pack	€/m ²
600 x 300 x 28 / H10	5,76	28134104	466,80	81,04

Panel in polystyrene type EPS 200, complies with EN 13163, with dovetail joints on 4 sides and top film in rigid PS. Suitable for the creation of the head curves of the serpentine circuits, with pitch 150 mm.



[UNI EN 13163]

Technical data	Norm	Model H10 (headl)
Type	UNI EN 13163	EPS 200
Density	UNI EN 1602	30 kg/m ³
Compression resistance at 10% of crushing	UNI EN 826	≥ 200 kPa
Thermal conductivity $\lambda_D (\lambda_{ins})$	EN 12939 (UNI EN 1264-3)	0,033 W/mK
Thermal resistance $R_{\lambda,ins} (S_{ins}/\lambda_{ins})$	UNI EN 1264-3: 2021	0,55 m ² K/W
Class to reaction to fire	UNI EN ISO 11925	Euroclass E
Water absorption	EN 12087	< 5%
Resistance factor diffusion of water vapor μ	UNI EN 12086	40 ÷ 100
Slab thickness S_{ins}		18,1 mm
Total lenght		615 mm
Total width		315 mm
Total thickness		28 mm
Coating film thickness		0,16 mm
Pipe spacing		150 mm
External Ø of installing pipes		17 mm
Pack		5,76 m ²



Kit of galvanized steel plates, 1 mm thickness

Dimension	Pack m ²	Code	Price €/pack
600 x 600 x 1 (*)	3,6	28134109	294,00
600 x 300 x 1 (*)	3,6	28134113	322,90
600 x 600 x 1 (**)	3,6	28134111	372,30
600 x 300 x 1 (**)	3,6	28134115	373,60

Note: for the installation of the finished floor, use glues type bicomponent epoxy-polyurethane-specific substrates heated metallic, the choice of which it is always the layer, depending on the type of flooring. Excluded are floating floors, which do not require bonding.
(*) Without adhesive side - (**) With adhesive side

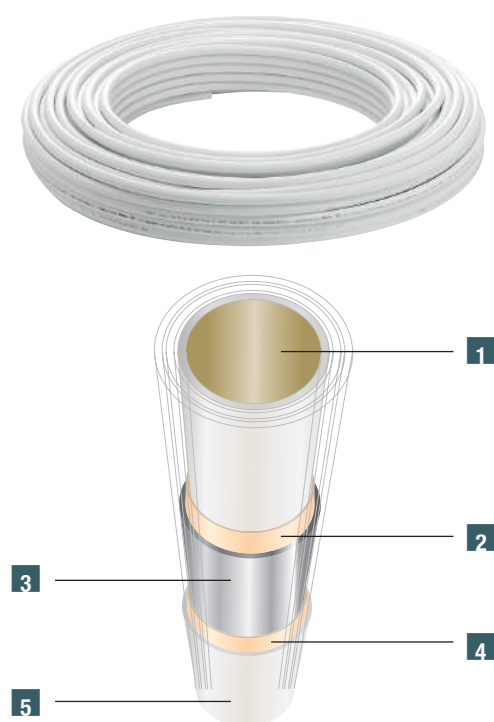


Insulating perimeter strip

Dimension	m pack	Code	Price €/m
5 x 100 mm	50	28130492	1,24

In closed-cell expanded polyethylene, with adhesive band for fixing to a wall.

Pipes for Emmeti Floor



EMMETI Alpert pipe

Application classes (UNI EN ISO 21003 - see table in the Technical Annexes section "Classification of conditions of use"): 2/10 bar, 5/10 bar;

Maximum operating conditions for 50 years:

- Design temperature $T_D = 70^\circ\text{C}$

- Design pressure $p_D = 10$ bar

Maximum temperature for short periods: 95°C ;

Linear expansion coefficient: $0.026\text{ mm/m}^\circ\text{C}$;

Thermal conductivity: 0.45 W/mK

Oxygen permeability (DIN 4726): $0\text{ mg}/(\text{m}^2\cdot\text{d})$

Minimum bending radius: $5 \times \varnothing$ tube

Surface roughness of the inner tube: $7\text{ }\mu\text{m}$

Fire reaction class: E_L (EN 13501-1)

Construction

1 Inner pipe PE-RT

2 Bonding layer connecting the inner pipe to the aluminium pipe

3 Horizontal-roller-position welding

4 Bonding layer connecting the outer pipe to the aluminium pipe

5 External pipe PE-RT

Dimension	m pack	Code	Price €/m
16 x 2	100	28107002	1,89
16 x 2	200	28107000	2,07
16 x 2	500	28107004	2,07

Multilayer pipe for plumbing and heating systems, compliant with the UNI EN ISO 21003 standard and made of composite material through a technologically advanced process with which a PE-RT pipe (non-cross-linked polyethylene with high resistance to high temperatures) is coupled to an aluminium core (thickness 0.2 mm) butt welded and externally covered with another layer of PE-RT.

Classification of service conditions (UNI EN ISO 21003-1) and regression curves EMMETI Alpert pipe (16x2): see section Technical Attachments.

[UNI EN ISO 21003]



SKZ

Das Kunststoff-Zentrum

[UNI EN ISO 21003-2]

PE-Xc PENTA 5 layers pipe with EVOH oxygen barrier

Application classes / Operating pressures (bar):

- size 12x2: Cl. 4/10 bar - 5/10 bar;
- size 16x2: Cl. 4/10 bar - Cl. 5/8 bar
- size 17x2: Cl. 4/8 bar - 5/8 bar

Permeability to oxygen (DIN 4726): < 0,32 mg/(m²d) at 40 °C; < 3,6 mg/(m²d) at 80 °C

Density: 940kg/m³

Thermal conductivity: 0.41 W/(mK)

Degree of reticulation: ≥ 60%

Coefficient of linear expansion: 0.15 mm/(m °C)

Minimum bending radius: 5 x external diameter pipe / Internal roughness: 7 µm

Water capacity: 0.05 l/m (12x2); 0.133 l/m (17x2)

Application: heating systems (not suitable for sanitary systems)

Dimension	m pack	Code	Price €/m
12 x 2 mm	240	28141852	2,30
16 x 2 mm (*)	200	28141860	2,20
16 x 2 mm (*)	240	28141862	2,20
16 x 2 mm (*)	600	28141864	2,20
17 x 2 mm	240	28141854	2,45
17 x 2 mm	600	28141856	2,45

5 layer pipe in high density polyethylene, cross-linked with an electronic system, compliant with the UNI EN ISO 21003-2 standard, equipped with an oxygen barrier in compliance with the DIN 4726 standard and SKZ HR 3.2 certified.

(*) Items available on request: 30 days to order confirm and for minimum lots.

Regression curves PE-Xc pipe: see technical attachments.

Application classes PE-Xc pipe (UNI EN ISO 21003-2): see section Technical Attachments.



SKZ

Das Kunststoff-Zentrum

[UNI EN ISO 15875-2]

PE-Xa 5 layers pipe with EVOH oxygen barrier

Classes of application / Operating pressures (bar): Cl. 4/10 bar - Cl. 5/8 bar

Oxygen permeability (DIN 4726): < 0.32 mg/(m²d) at 40 °C; < 3.6 mg/(m²d) at 80 °C

Density: 950 kg/m³

Degree of reticulation: ≥70%

Thermal conductivity: 0.41 W/mK

Average coefficient of linear expansion: 0.14 mm/m °C

Minimum bending radius: 5 x D pipe

Internal roughness: 7 µm

Water capacity: 0,133 l/m

Application: heating systems (not suitable for plumbing systems)

Dimension	m pack	Code	Price €/m
17 x 2 mm	240	28134470	2,45
17 x 2 mm	600	28134472	2,45

5 layer hose in high density polyethylene, cross-linked with peroxides, compliant with the UNI EN ISO 15875-2 standard, equipped with an oxygen barrier in compliance with the DIN 4726 standard and SKZ HR 3.2 certified.

Regression curves PE-Xa pipe: see technical attachments.

Application classes PE-Xa pipe (UNI EN ISO 15875-1): see section Technical Attachments.

Floor system



SKZ

Das Kunststoff-Zentrum

[UNI EN ISO 22391-2]

PE-RT 5 layers pipe with EVOH oxygen barrier

Classes of application / Operating pressure (bar):

size 16x2: Cl.4/8 bar - Cl. 5/6 bar

size 17x2: Cl.4/8 bar - Cl. 5/6bar

Oxygen permeability (DIN 4726): < 0,32 mg/(m²d) at 40 °C; < 3,6 mg/(m²d) at 80 °C

Density: 950 kg/m³ - Thermal conductivity: 0,4 W/mK

Average coefficient of linear expansion: 0.18 mm/m °C

Minimum bending radius: 5 x D pipe - Internal roughness: 7 µm

Water capacity: 0.11 l/m (16x2); 0.133 l/m (17x2)

Application: heating systems (not suitable for plumbing systems)

Dimension	m pack	Code	Price €/m
16 x 2 mm, red (*)	400	28130810	1,58
16 x 2 mm, blue (*)	400	28130814	1,58
17 x 2 mm, red	240	28130836	1,56
17 x 2 mm, red	600	28130832	1,54

Pipe in PERT Type II complying with ISO 22391-2 and provided with an oxygen barrier in conformity with standard DIN 4726.

(*) Items available on request: 30 days to order confirm and for minimum lots.

Regression curves PE-RT pipe: see Technical Attachments

Application classes PE-RT pipe (UNI EN ISO 21003-2):
see section Technical Attachments.

Accessories Emmeti Floor and Emmeti Dry Alu Floor



Superfluidishing additive for screeds

Dimension	kg/pack	Code	Price €/kg
	10	28130414	4,82
	25	28130416	5,32

It considerably reduces the mixing water, significantly increases the mechanical resistance of the screed by increasing its thermal conductivity.

It improves workability and reduces porosity and hygrometric shrinkage.

Dosage: 1 ÷ 1.5 kg per 100 kg of cement.



Protective for heating high or low temperature systems / air conditioning systems

Anti-corrosive protective for all metals (steel-copper-aluminium), antiscaling and biocide for heating systems high or low temperature and/or air conditioning systems, with antiscaling protectors (max 25 °F)

Technical data

Appearance: light yellow liquid - straw-coloured - pH: 7±0,5

Density (20 °C): 1,025±0,01 kg/l

Dispensing 5% (5 kg every 100 liter of water)

Kg/pack	Pcs. pack	Code	Price €/can
5	1	02706396	128,00

Floor system



Regenerating liquid for new or old low-temperature heating systems

Suitable for removing biomasses and metal oxides inside low temperature heating systems, even with heating installations.

It contains specific biodispersant bioacids to thoroughly remove any bacterial deposits and metal oxides.

It is recommended for cleaning old systems before or during the installation of a new boiler.

Non-acid and non-corrosive for metals and plastic material.

The product does not alter pH levels. Suitable for all heating systems, including systems with aluminium parts.

Technical data

Appearance: Clear colourless liquid-yellow - pH: 5.5±0.5

Density (20 °C): 1.035 kg/l

Dosage 5% (5 kg every 100 litres of water)

Dimension	Pcs. pack	Code	Price €/can
5 kg	1	02706304	136,90



System loading station

Delivery capacity: 5,2 - 50 litres/min - Static pressure H: 5 - 52 m. c. H₂O

Power supply: 230 V - 50 Hz - Current = 2,6 A

Electric power absorbed: 500 W max - Spin speed: 2900 rpm

Protection: IP44 - Tank volume: 50 litres

Dimension	Pcs. pack	Code	Price €
50 litres	1	02706862	1.696,00

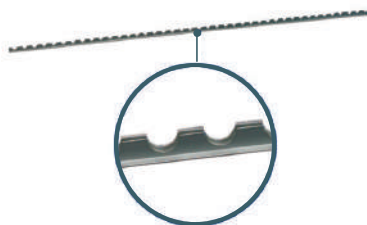
Fitted with two connection pipes L = 3 m



Insulating perimeter strip

Dimension	m pack	Code	Price €/m
5 x 150 mm	60	28130480	2,10
7 x 150 mm	60	28130482	2,26

In closed-cell expanded polyethylene, with adhesive surface for fixing to a wall and moveable polyethylene strip on the panel side, to seal possible interstices.



Profile for plastic expansion connection

Dimension	m pack	Code	Price €/m
2000 x 35 x 20 mm (WxHxD)	50	28130032	12,63

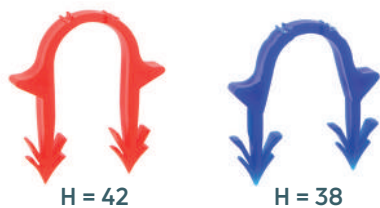
With adhesive back and housing for insulating strip thickness 7-8 mm



Insulating strip for plastic expansion connection

Dimension	m pack	Code	Price €/m
7 x 150 mm	60	28130486	1,24

In closed-cell expanded polyethylene, for profile for plastic expansion connection (code 28130032)



Pipe-fixing clip for Tacker

Dimension	Height	Pcs. pack	Code	Price €/pc.
Ø pipes 16-20 mm	H=42	300	28134454	0,24
Ø pipes 16-17 mm (*)	H=38	300	28134460	0,24

In plastic material, for fixing pipes to the Plan Floor and Roll Floor panels.

(*) For plan panels H=20 mm.



Reinforced pipe-fixing clip for taker

Dimension	Height	Pcs. pack	Code	Price €/pc.
Ø pipes 16-20 mm	H = 42	240	28130744	0,30



Clip-fixing tacker

Dimension	Pcs. pack	Code	Price €
	1	28130042	452,10

It allows fixing of pipes to the Plan Floor panes from uplight position without efforts.



Straddle clip

Dimension	Pcs. pack	Code	Price €/pc.
88 x 28 x 14 mm (WxHxD)	100	28134452	0,18

In plastic material, for applying to the bosses of panels to hold pipes down at critical points. Not suitable for panels with rigid thermoformed film (type Combi).

Article available when code 28130022 is exhausted.



Manual pipe-fixing clip

Dimension	Pcs. pack	Code	Price €/pc.
25 x 49 x 5 mm (WxHxD)	100	28134456	0,19

In plastic material, for fixing pipes at critical points.



Support bends

Dimension	Pcs. pack	Code	Price €/pc.
Ø pipes 14 ÷ 17 mm	10	28134464	0,96

They support pipes at the base of manifolds.



Tool for fixing wire clips

Dimension	Pcs. pack	Code	Price €
	1	28134462	853,20

To be used with clips code 28134458



3 mm wire mesh clip

Dimension	Pipe	Pcs. pack	Code	Price €/pc.
Net Ø wire 3 mm	Ø 16 ÷ 17 mm	1.000	28134458	0,16

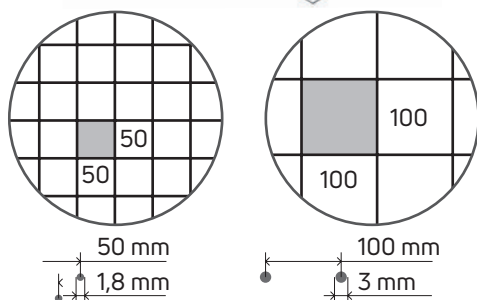
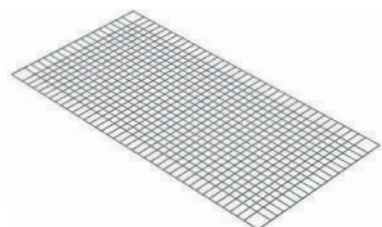
To be used with metallic wire code 28141000.
Medium consumption: 35 pcs/m²



Grille clip

Dimension	Pipe	Pcs. pack	Code	Price €/pc.
Grille Ø wire 3	Ø 16 ÷ 17 mm	200	28130720	0,30

To be used with wire netting code 28141000



Wire netting (sheets)

Dimension	m ² pack	Code	Price €/pack
1 x 2 m Ø wire 1.8 mm	40	28130074	299,20
1 x 2 m Ø wire 3 mm	30	28141000	336,90

Electrowelded mesh in galvanized steel:

- Ø 1.8 mm wire with 50x50 mm mesh, pack of 20 sheets.
- Ø 3 mm wire with 100x100 mm mesh, suitable for use with the appropriate 3-wire mesh clips code 28130720, pack of 15 sheets.



Guide for pipe anchoring Ø 16-17

Dimension	Pcs. pack	Code	Price €/pc.
1000 x 28 x 40 mm (WxHxD)	80	28130756	5,44

Modular guide for pipe anchoring Ø 16-17. Minimum passage 5 cm

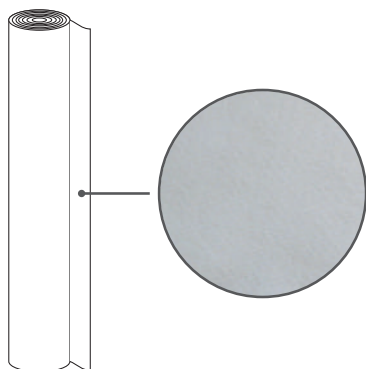
Floor system



Guide for pipe anchoring Ø 17-20-25

Dimension	Pcs. pack	Code	Price €/pc.
1000 x 40 x 50 mm (WxHxD)	50	28130725	6,02
1000 x 40 x 50 mm (WxHxD) (*)	50	28130740	7,09

Modular guide for pipe anchoring Ø 17-20-25.
Minimum passage 10 cm.
(*) with adhesive base



Cloth-non cloth felt

Dimension	m² pack	Code	Price €/ m²
2x25 m	50	28130048	6,39

In polypropylene.
Thickenss 4 mm.
Density: 500 gr/m²



Polymetric fibres for screeds

Structural polymeric fibres with a length of 30 mm designed to improve the tensile strength characteristics of concrete in the post-cracking phase.

They enable 'wet earth' type concrete to be reinforced, increasing ductility and toughness.

Suitable for making heated screeds.

Recommended dosage: 1÷3 kg/m³.

Dimension	Pcs. pack	Code	Price €/pc.
1 kg bag	1	28130418	37,62



[EN 14889-2]



Fixing clip

Dimension	Pcs. pack	Code	Price €/pc.
Ø 50 x L 70	50	28130037	0,46

For Ø 10 mm hole



Roofing sheet in regenerated polyethylene with grid (in roll)

Dimension	Pack m²	Pcs. pack	Code	Price €/pack
2 x 50 m	100	1	28141020	282,60

Single-fold sheet 2 x 1 m wide, 50 m roll, in regenerated amber colored polyethylene with 100 mm pitch grid, sheet thickness 0.2 mm.

Made with 100% recycled polyethylene.

Sd (vapor transmission): ≥ 100 m.

Floor system



Roll dispenser

Completely dismountable, for rolls up to 600 mts long.
Dimension of rolls: minimum Ø 35 cm, maximum Ø 100 cm, maximum h 50 cm

Dimension	Pcs. pack	Code	Price €
	1	28130041	622,90



Shear for plastic pipe

Dimension	Pcs. pack	Code	Price €
Ø 8÷25	1	28130760	147,70
Spare blade for cutter	1	28130761	34,56

Shears to cut thin-wall rigid plastic pipes without chippings.

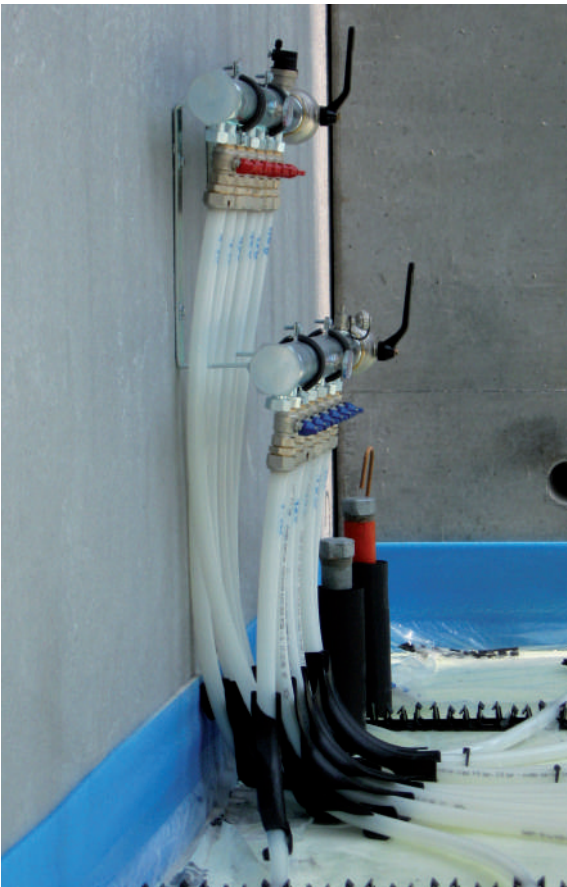
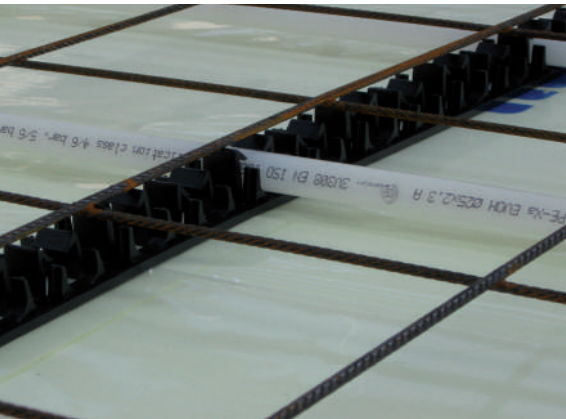
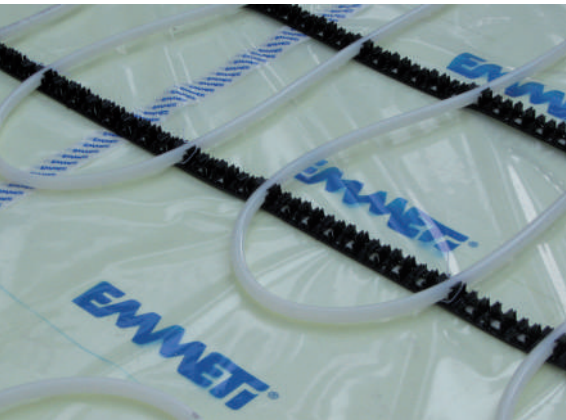
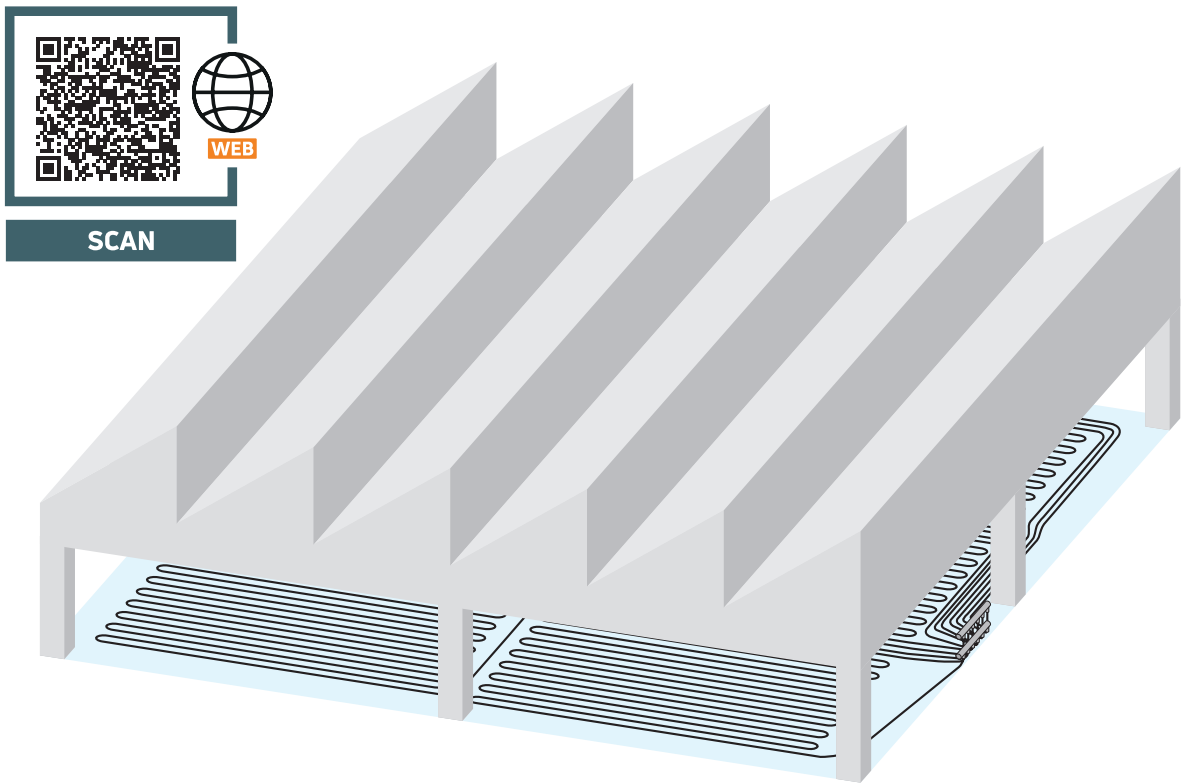


Emmeti adhesive tape

Dimension	Pcs. pack	Code	Price €/pack
75 mm x 132 m	1	90200040	37,57

Emmeti Industrial Floor

Floor heating and cooling industrial system



Industrial floor system



XPS 500 insulating panel in extruded polystyrene

Dimension	Slab pack	Pack m ²	Code	Price €	Price €/ m ²
1250 x 600 x 50 (*)	8	6	28134140	211,60	35,27
1250 x 600 x 60 (*)	7	5,25	28134142	222,20	42,33
1250 x 600 x 80 (*)	5	3,75	28134144	211,60	56,43

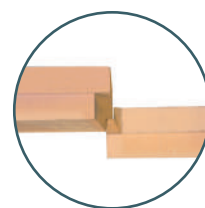
Insulating sheets in single-layer extruded polystyrene foam (XPS) with smooth surface and 4-sided rebated profiles.

(*) Availability on request: 8 weeks from order confirmation.



[UNI EN 13164]

Technical data	Norm	Model H50	Model H60	Model H80
Type	UNI EN 13164	XPS500	XPS500	XPS500
Compression resistance at 10% of crushing	UNI EN 826	≥ 500 kPa	≥ 500 kPa	≥ 500 kPa
Solicitation with crushing max 2% after 50 years	UNI EN 1606	180 kPa	180 kPa	180 kPa
Thermal conductivity	EN 12667	0,033 W/mK	0,033 W/mK	0,035 W/mK
Thermic resistance R _D	EN 12667	1,50 m ² K/W	1,80 m ² K/W	2,25 m ² K/W
Class to reaction to fire	UNI EN 13501-1	Euroclass E	Euroclass E	Euroclass E
Long-term water absorption by diffusion	UNI EN 12088	≤ 3%	≤ 2%	≤ 2%
Resistance factor diffusion of water vapor μ	UNI EN 12086	150	150	150
Dimensional stability at conditioning temperature and humidity (70°C; 90%)	UNI EN 1604	< 5%	< 5%	< 5%
Deformation under load to compression and conditioning temperature (40 kPa, 70 °C)	UNI EN 1605	≤ 5%	≤ 5%	≤ 5%
Tensile strength perpendicular to the faces	UNI EN 1607	TR200 kPa	TR200 kPa	TR200 kPa
Resistance to freezing - thawing	UNI EN 12091	FTCD1 Vol%	FTCD1 Vol%	FTCD1 Vol%
Calculation thickness S _{ins}	UNI EN 1264-3	50 mm	60 mm	80 mm
Length	UNI EN 822	1250 (±8) mm	1250 (±8) mm	1250 (±8) mm
Width	UNI EN 822	600 (±8) mm	600 (±8) mm	600 (±8) mm
Thickness	UNI EN 823	50 (±3) mm	60 (±3) mm	80 (±3) mm
Pack		6 m ²	5,25 m ²	3,75 m ²





XPS 300 SL insulating panel in extruded polystyrene

Dimension	Slabs pack	Pack m ²	Code	Price €	Price €/ m ²
1250 x 600 x 30 (*)	14	10,5	28134131	187,40	17,85
1250 x 600 x 40 (*)	10	7,5	28134133	214,10	28,55

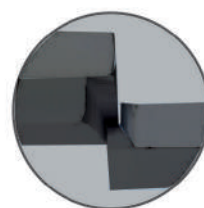
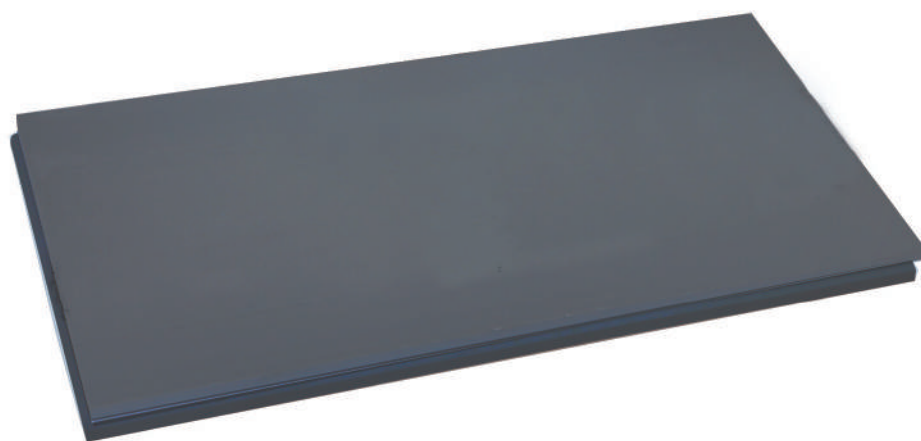
Insulating panels made of single-layer extruded polystyrene foam (XPS) with a smooth surface and battentati profiles on 4 sides.

(*) Available on request: 30 days from order confirmation



[UNI EN 13164]

Technical data	Norm	Model H 30	Model H40
Type	UNI EN 13164	XPS300	XPS300
Compression resistance at 10% of crushing	UNI EN 826	≥ 300 kPa	≥ 300 kPa
Solicitation with crushing max 2% after 50 years	UNI EN 1606	130 kPa	130 kPa
Thermal conductivity	EN 12667	0,030 W/mK	0,030 W/mK
Thermic resistance R _D	EN 12667	1,00 m ² K/W	1,35 m ² K/W
Class to reaction to fire	UNI EN ISO 11925	Euroclass E	Euroclass E
Water absorption	UNI EN 12088	≤ 3%	≤ 3%
Resistance factor diffusion of water vapor μ	UNI EN 12086	150	150
Dimensional stability at conditioning temperature and humidity (70°C; 90%)	UNI EN 1604	≤ 5%	≤ 5%
Deformation under load to compression and conditioning temperature (40 kPa, 70 °C)	UNI EN 1605	≤ 5%	≤ 5%
Calculation thickness S _{ins}	UNI EN 1264-3	30 mm	40 mm
Total lenght		1250 mm	1250 mm
Total width		600 mm	600 mm
Total thickness		30 mm	40 mm
Pack		10,5 m ²	7,5 m ²



Industrial floor system



Plan Floor insulating panel

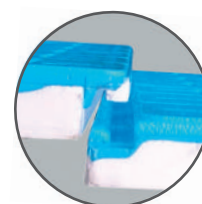
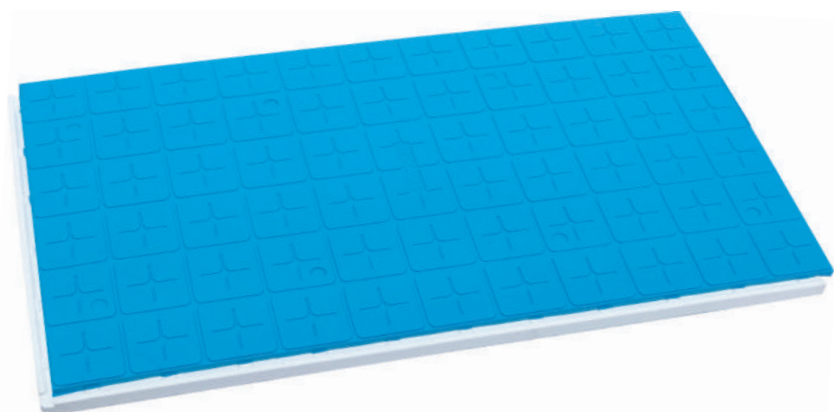
Dimension	Density	Pack m ²	Code	Price €	Price €/ m ²
1100 x 600 x 30 / H30	30 kg/m ³	10,56	28130072	258,40	24,47

Smooth panel in expanded polystyrene (EPS) printed for thermal insulation, with surface impressions for the laying of pipes and peripheral interlocking joints. Covered with a rigid polystyrene film. Footprints pipe 5 cm.

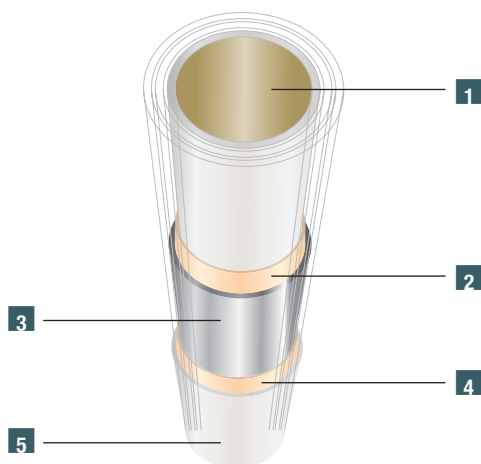
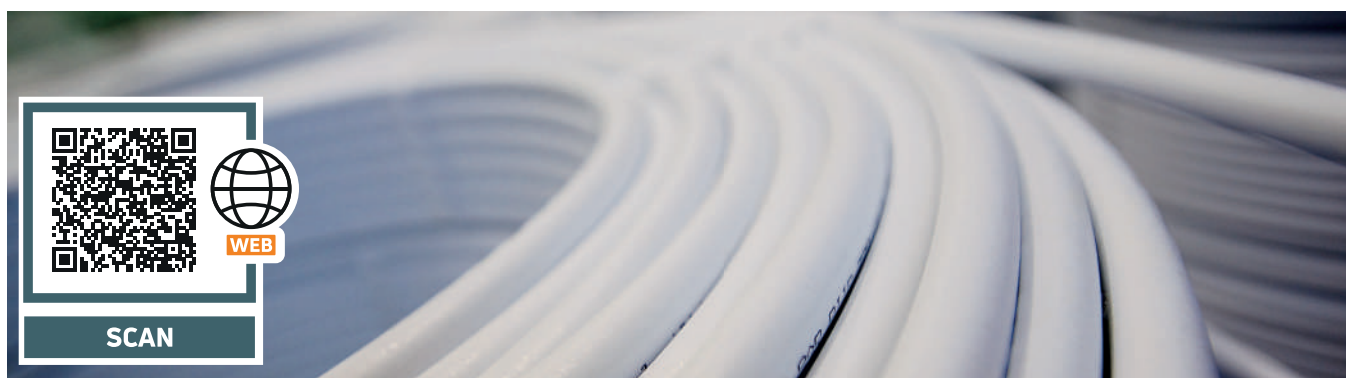


[UNI EN 13163]

Technical data	Norm	Model H30
Type	UNI EN 13163	EPS 200
Density	UNI EN 1602	30 kg/m ³
Compression resistance at 10% of crushing	UNI EN 826	≥ 200 kPa
Thermal conductivity $\lambda_D (\lambda_{ins})$	UNI EN 12667 (UNI EN 1264-3)	0,033 W/mK
Thermal resistance $R_{\lambda,ins} (S_{ins}/\lambda_{ins})$	UNI EN 1264-3: 2021	0,90 m ² K/W
Class to reaction to fire	UNI EN ISO 11925	Euroclass E
Water absorption	EN 12087	< 5%
Resistance factor diffusion of water vapor μ	UNI EN 12086	40 ÷ 100
Slab thickness S_{ins}	UNI EN 1264-3	30 mm
Total lenght		1120 mm
Total width		620 mm
Total thickness		30 mm
Coating film thickness		0,16 mm
Pipe spacing		50 mm
Pack		10,56 m ²



Pipes for Emmeti Industrial Floor



EMMETI Alpert pipe

Application classes (UNI EN ISO 21003 - see table in the Technical Annexes section "Classification of conditions of use"): 2/10 bar, 5/10 bar;

Maximum operating conditions for 50 years:

- Design temperature $T_p = 70^\circ\text{C}$

- Design pressure $p_d = 10$ bar

Maximum temperature for short periods: 95°C ;

Linear expansion coefficient: $0.026\text{ mm/m}^\circ\text{C}$;

Thermal conductivity: 0.45 W/mK

Oxygen permeability (DIN 4726): $0\text{ mg}/(\text{m}^2\cdot\text{d})$

Minimum bending radius: $5 \times \varnothing$ tube

Surface roughness of the inner tube: $7\text{ }\mu\text{m}$

Fire reaction class: EL (EN 13501-1)

Construction

1 Inner pipe PE-RT

2 Bonding layer connecting the inner pipe to the aluminium pipe

3 Horizontal-roller-position welding

4 Bonding layer connecting the outer pipe to the aluminium pipe

5 External pipe PE-RT

Dimension	m pack	Code	Price €/m
20 x 2 mm	100	28107016	2,81
20 x 2 mm	240	28107018	2,81

Multilayer pipe for plumbing and heating systems, compliant with the UNI EN ISO 21003 standard and made of composite material through a technologically advanced process with which a PE-RT pipe (non-cross-linked polyethylene with high resistance to high temperatures) is coupled to a aluminum core (0.25 mm thick) butt welded and externally covered with another layer of PE-RT.

Classification of service conditions and regression curves:

see section Technical Attachments.



[UNI EN ISO 21003]



SKZ

Das Kunststoff-Zentrum

[UNI EN ISO 21003-2]

PE-Xc PENTA 5 layers pipe with EVOH oxygen barrier

Application classes / Operating pressures (bar): Cl. 4/8 bar - Cl. 5/6 bars
 Permeability to oxygen (DIN 4726): < 0.32 mg/(m²d) at 40 °C; < 3.6 mg/(m²d) at 80 °C
 Density: 940 kg/m³
 Thermal conductivity: 0.41 W/(mK) - Degree of cross-linking: ≥ 60%
 Coefficient of linear expansion: 0.15 mm/(m °C)
 Minimum bend radius: 5 x outer diameter
 Internal roughness: 7 µm - Water content: 0.201 l/m
 Application: heating systems

Dimension	m pack	Code	Price €/m
20 x 2 mm	500	28141858	2,98

5 layer high-density polyethylene pipe, electronically cross-linked, manufactured according to the UNI EN ISO 21003-2 standard, equipped with an oxygen barrier in compliance with the DIN 4726 standard and SKZ HR 3.2 certified.

Regression curves PE-Xc pipe: see section Technical Attachments.

Application classes PE-X pipe (UNI EN ISO 21003-2):
 see section Technical Attachments.



[UNI EN ISO 15875-2]

PE-Xa 3 layers pipe with EVOH oxygen barrier

Classes of application / Operating pressures (bar): Cl. 4/6 bar - Cl. 5/6 bar
 Oxygen permeability (DIN 4726): < 0.32 mg/(m²d) at 40 °C; < 3,6 mg/(m²d) at 80 °C
 Density: 950 kg/m³ - Degree of reticulation: ≥70% - Softening temperature: 135 °C
 Breaking load: 18 MPa - Thermal conductivity: 0.41 W/mK - Average coefficient of linear expansion: 0.14 mm/m °C - Minimum bending radius: 5 x D pipe - Internal roughness: 7 µm
 Water capacity: l/m 0,201 (20x2) - Water capacity: l/m 0,327 (25x2,3)
 Application: heating systems

Dimension	m pack	Code	Price €/m
20 x 2 mm (*)	500	28130684	3,14

Pipe in high-density polyethylene, with peroxide crosslinking, certified according to standards UNI EN ISO 15875/2 and provided with an oxygen barrier in conformity with standard DIN 4726.
 (*) Item to be out of stock

Regression curves PE-Xa pipe: see section Technical Attachments.

Application classes PE-Xa pipe (UNI EN ISO 21003-2): see section
 Technical Attachments.



SKZ

Das Kunststoff-Zentrum

[UNI EN ISO 15875-2]

PE-Xa 5 layers pipe with EVOH oxygen barrier

Application classes / Operating pressures (bar): Cl. 4/8 bar - Cl. 5/6 bars
 Permeability to oxygen (DIN 4726): < 0.32 mg/(m²d) at 40 °C; < 3,6 mg/(m²d) at 80 °C
 Density: 950 kg/m³ - Degree of cross-linking: ≥70%
 Thermal conductivity: 0.41 W/mK
 Average linear expansion coefficient: 0.14 mm/m °C
 Minimum bending radius: 5 x D tube - Internal roughness: 7 µm
 Water content: 0.201 l/m (20x2)
 Water content: 0.327 l/m (25x2.3)
 Application: heating systems

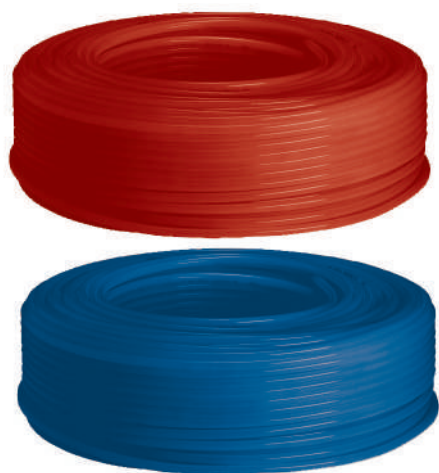
Dimension	m pack	Code	Price €/m
20 x 2 mm	500	28134474	3,27
25 x 2,3 mm	500	28134476	4,43

5 layer high-density polyethylene pipe, cross-linked with peroxides, certified in accordance with UNI EN ISO 15875-2 and equipped with an oxygen barrier in accordance with DIN 4726 and SKZ HR 3.2 certified.

Regression curves PE-Xa pipe: see section Technical Attachments.

Application classes PE-Xa pipe (UNI EN ISO 21003-2):
 see section Technical Attachments.

Floor system



SKZ

Das Kunststoff-Zentrum

[UNI EN ISO 22391-2]

PE-RT 5 layers pipe with EVOH oxygen barrier

Classes of application / Operating pressure (bar): CL 4/6 bar - CL 5/4 bar
 Oxygen permeability (DIN 4726): < 0,32 mg/(m²d) at 40 °C; < 3,6 mg/(m²d) at 80 °C
 Density: 950 kg/m³ - Thermal conductivity: 0,4 W/mK
 Average coefficient of linear expansion: 0.18 mm/m °C
 Minimum bending radius: 5 x D pipe - Internal roughness: 7 µm
 Water capacity: 0.201 l/m
 Application: heating systems (not suitable for plumbing systems)

Dimension	m pack	Code	Price €/m
20 x 2 mm, red (*)	300	28130812	2,22
20 x 2 mm, blue (*)	300	28130816	2,22

Pipe in PERT Type II complying with ISO 22391-2 and provided with an oxygen barrier in conformity with standard DIN 4726.

(*) Items available on request: 30 days to order confirm and for minimum lots.

Regression curves PE-RT pipe: see technical attachments

Application classes PE-RT pipe (UNI EN ISO 21003-2):
 see section Technical Attachments.

Accessories for Emmeti Industrial Floor



Insulating perimeter strip

Dimension	m pack	Code	Price €/m
10 x 250 mm	50	28130484	4,53

In close-cell expanded polyethylene, with adhesive surface for fixing to a wall and moveable polyethylene strip on the panel side, to seal possible interstices



Reinforced pipe-fixing clip for taker

Dimension	Height	Pcs. pack	Code	Price €/pc.
Ø pipes 16-20 mm	H = 42	240	28130744	0,30



Manual pipe-fixing clip

Dimension	Pcs. pack	Code	Price €/pc.
34 x 49 x 4 mm (L x H x W)	100	28134456	0,19

In plastic material, for fixing pipes at critical points.



Straddle clip

Dimension	Pcs. pack	Code	Price €/pc.
88 x 28 x 14 mm (L x H x W)	100	28134452	0,18

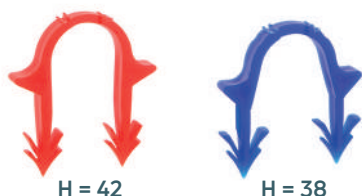
In plastic material, for applying to the bosses of panels to hold pipes down at critical points.

Not suitable for panels with rigid thermoformed film (type Combi).



Grille clip

Dimension	Pipe	Pcs. pack	Code	Price €/pc.
Grille Ø 6	Ø 20 mm	100	28130028	0,55
Grille Ø 6	Ø 25 mm	100	28130746	0,55



Pipe-fixing clip for Tacker

Dimension	Height	Pcs. pack	Code	Price €/pc.
Ø pipes 16-20 mm ⁽¹⁾	H=42	300	28134454	0,24
Ø pipes 16-17 mm (*) ⁽²⁾	H=38	300	28134460	0,24

In plastic material, for fixing pipes to the Plan Floor and Roll Floor panels.

(*) For plan panels H=20 mm.



Guide for pipe anchoring Ø 17-20-25

Dimension	Pcs. pack	Code	Price €/pc.
1000 x 40 x 50 mm (WxHxD)	50	28130725	6,02
1000 x 40 x 50 mm (WxHxD) (*)	50	28130740	7,09

Modular guide for pipe anchoring Ø 17-20-25. Minimum passage 10 cm.

(*) with adhesive base



Roofing sheet in regenerated polyethylene with grid (in roll)

Dimension	Pcs. m²	Pcs. pack	Code	Price €/pack
2 x 50 m	100	1	28141020	282,60

Single-fold sheet 2 x 1 m wide, 50 m roll, in regenerated amber colored polyethylene with 100 mm pitch grid, sheet thickness 0.2 mm. Made with 100% recycled polyethylene.

Sd (vapor transmission): ≥ 100 m.



Emmeti adhesive tape

Dimension	Pcs. pack	Code	Price €/pack
75 mm x 132 m	1	90200040	37,57



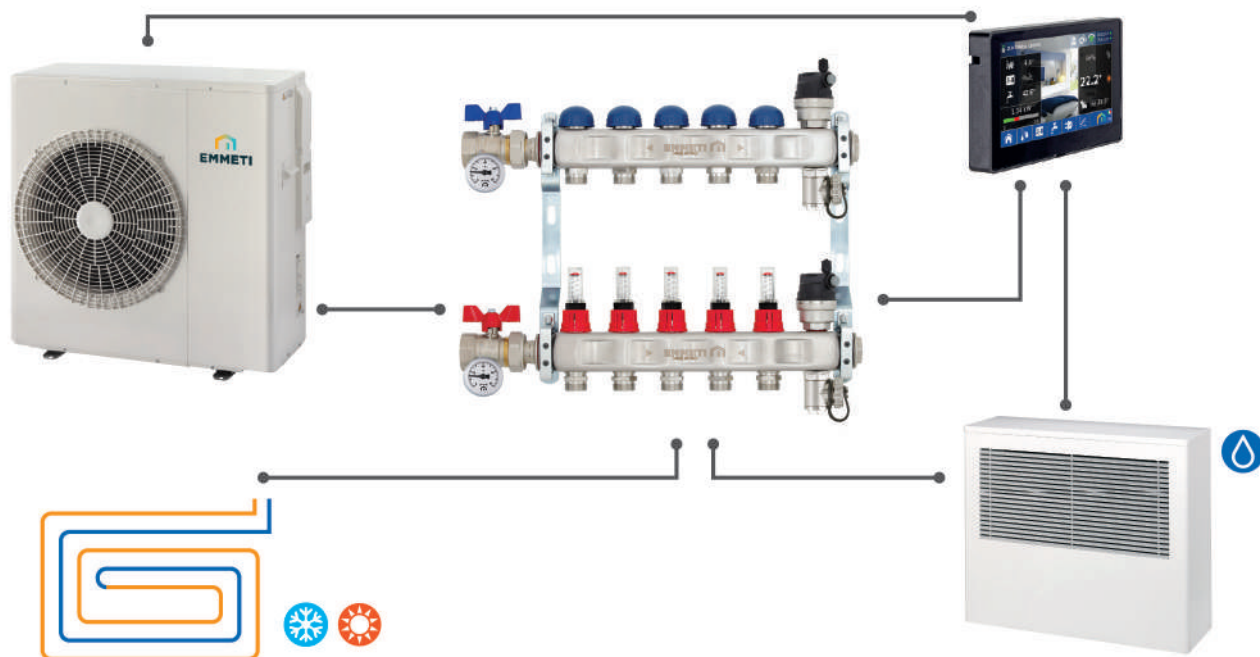
Support bends

Dimension	Pcs. pack	Code	Price €/pc.
Ø pipes 25 mm	10	28130748	4,78
Ø pipes 20 mm	10	28130027	4,53

In synthetic material, reinforced with glass fibre. They hold the PE-X pipes at the base of the Topway headers

Emmeti Clima Floor

Floor heating and cooling



Benefits

Emmeti Clima Floor is the safest and most comfortable solution for using your floors to provide winter heating and summer cooling. Thermal energy, heating or cooling, will always be perfectly distributed around your rooms, with no more annoying draughts, noisy fans, or dust deposits. Your heating and cooling system will also be totally invisible.

With Emmeti Clima Floor, low incoming water temperature during the winter months actually boosts the efficiency of the condensing boilers, leading to significant savings in fuel consumption.

During the summer, water temperature is regulated by electronic controllers to maintain a constant value of 15 °C to 20 °C. This drastically reduces the power needed by the chillers, which can therefore be a lot smaller than those required for conventional fan convector systems.

Emmeti proposes also the new inverter heat pump MIRAI SMI, equipped with the innovative controller SMART MT. By the SMART MT controller it is possible to manage all the promoters related to the plant management algorithms, and it is also possible to control temperature and humidity of the main room in the house.

Characteristics

The complete range of dedicated heating components in the Emmeti Floor System is complemented by a range of special cooling components.

In summer (cooling) mode, the system is managed by an electronic controller that maintains constant temperature and humidity levels in all rooms served by the system.

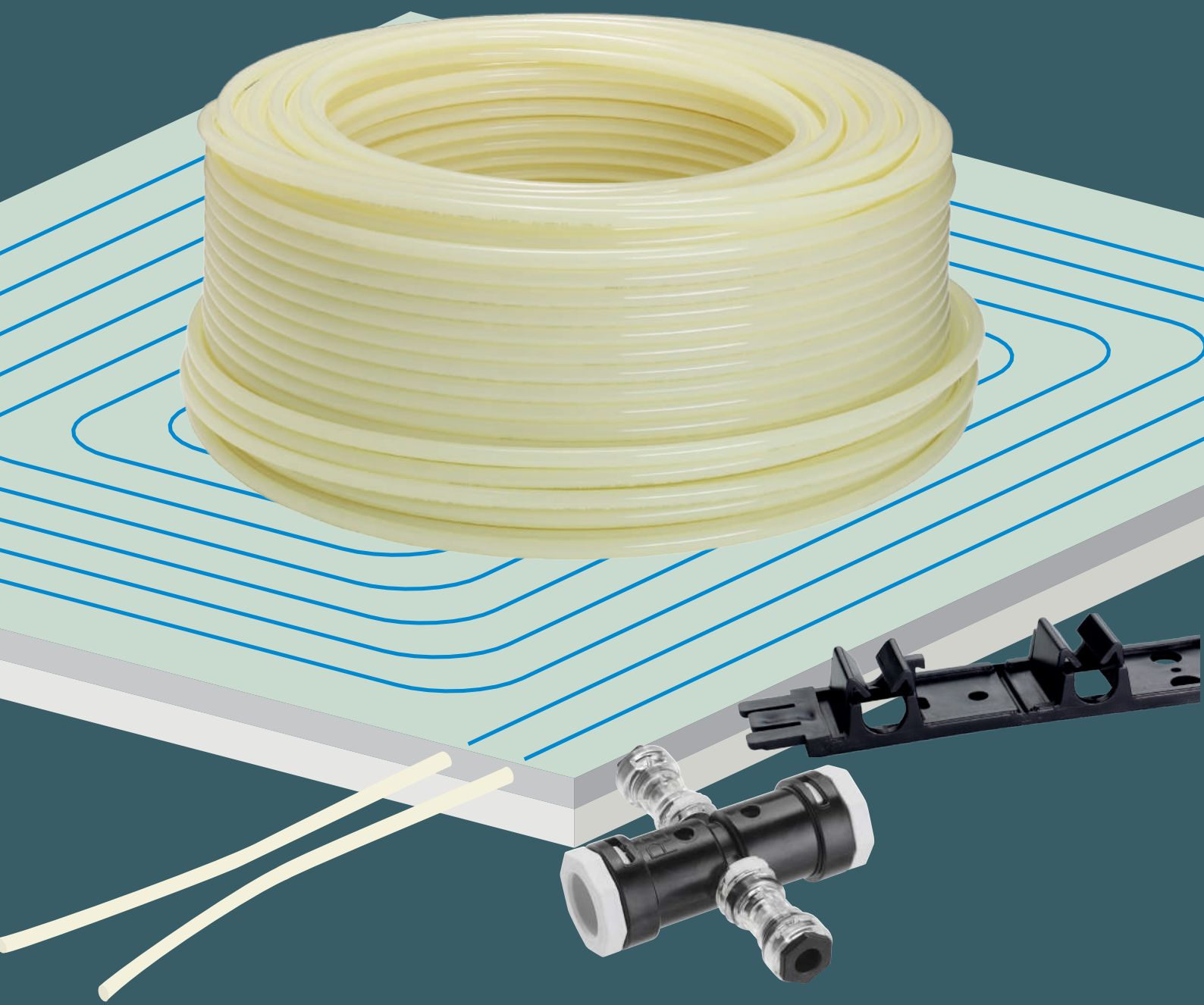
Room temperature is controlled by continuously adjusting the temperature of the heat transfer water by means of an electronic mixer valve. Relative humidity is monitored by dedicated sensors and, if airborne humidity begins to approach dew point, dehumidifiers are switched on to reduce it.

Dehumidifiers Dmy Floor for Emmeti Clima Floor

SEE "AIR CONDITIONING CATALOGUE PRICE LIST"



Emmeti wall and ceiling Wall and ceiling heating and cooling systems



- > Emmeti Wall
Under plaster system



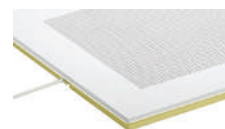
107

- > Emmeti Plasterboard
Plasterboard heating and cooling system



110

- > Emmeti Ray Module
Metal modules heating and cooling system



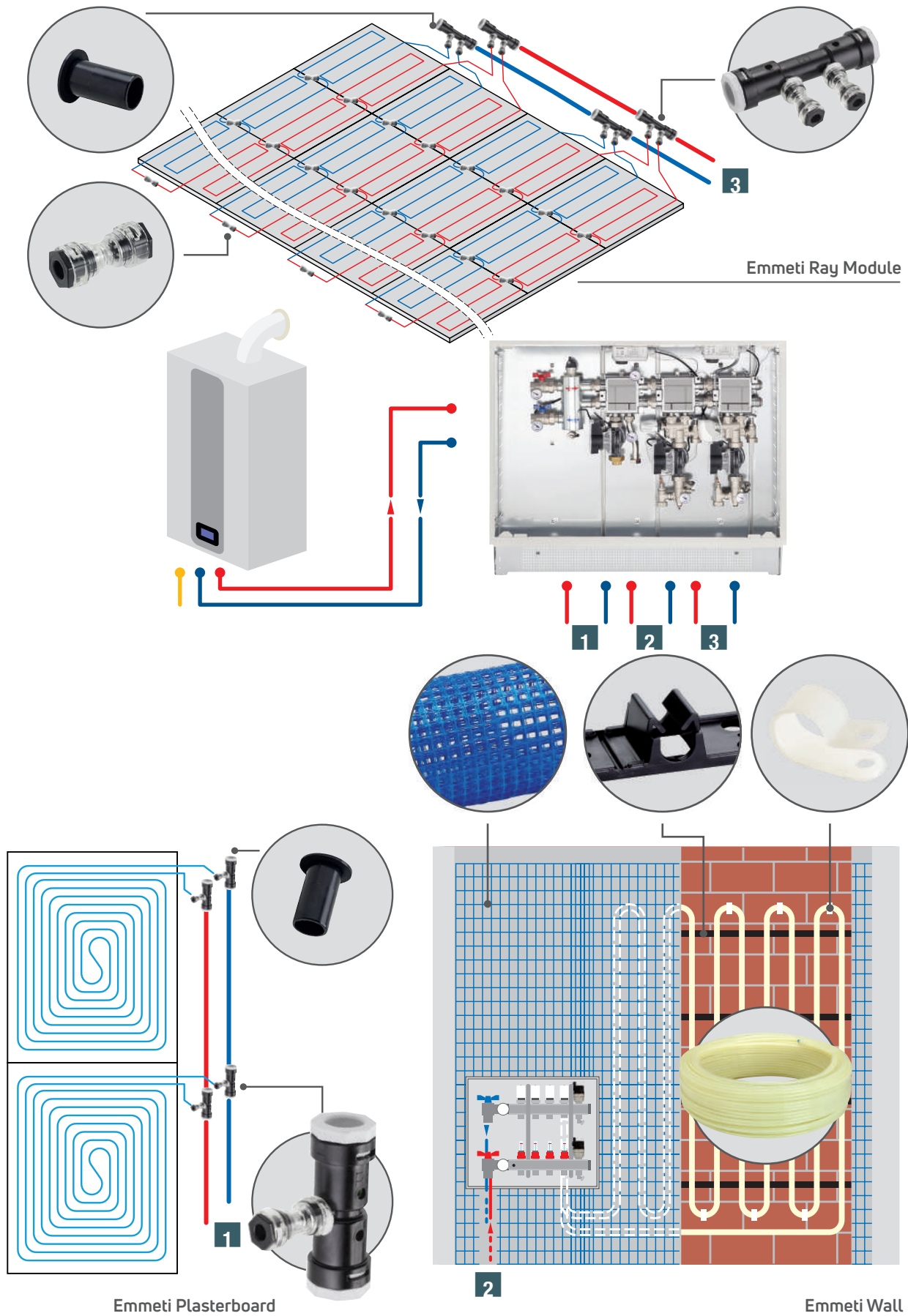
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- > Connectors and
distributors



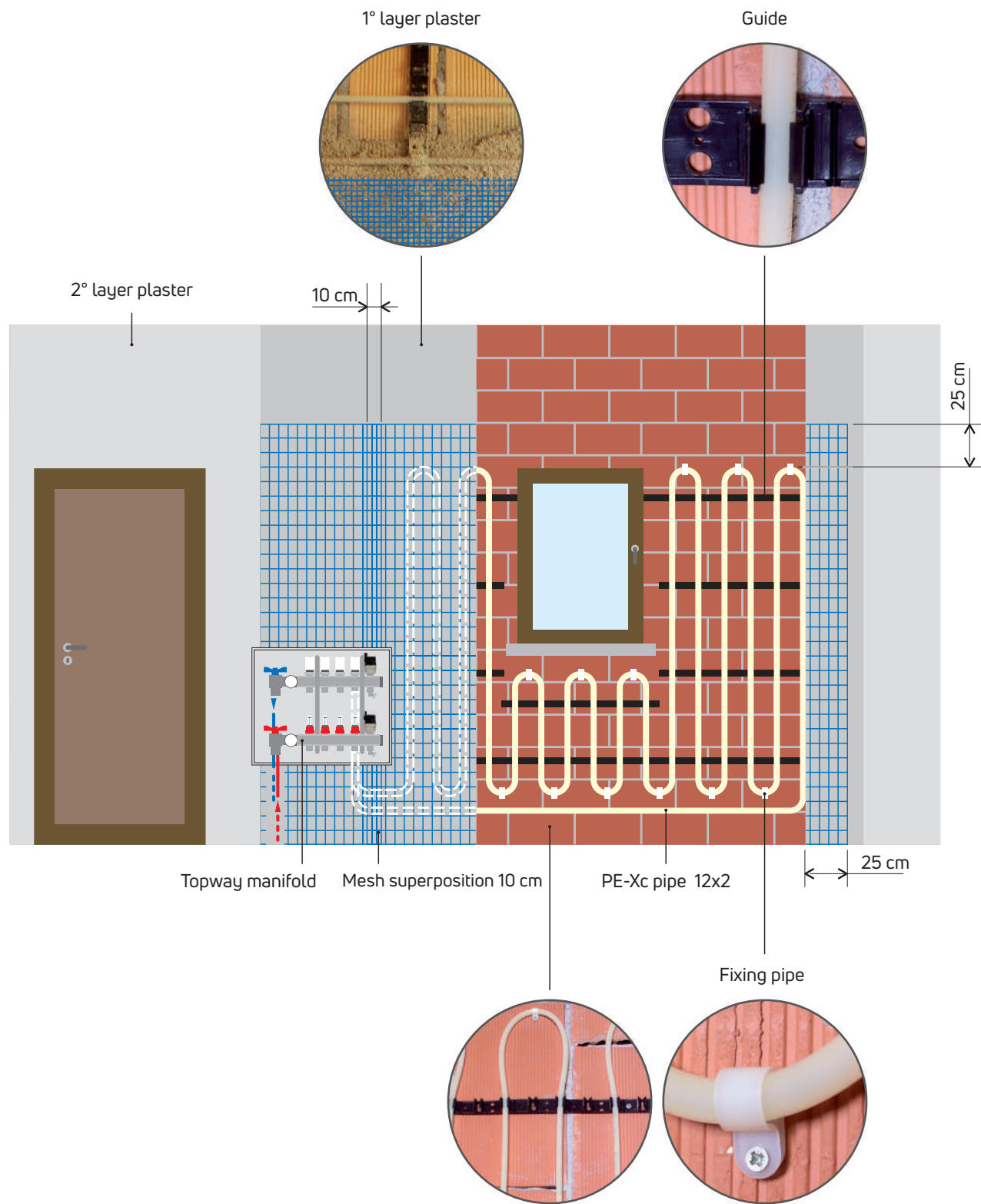
125

Example of installation



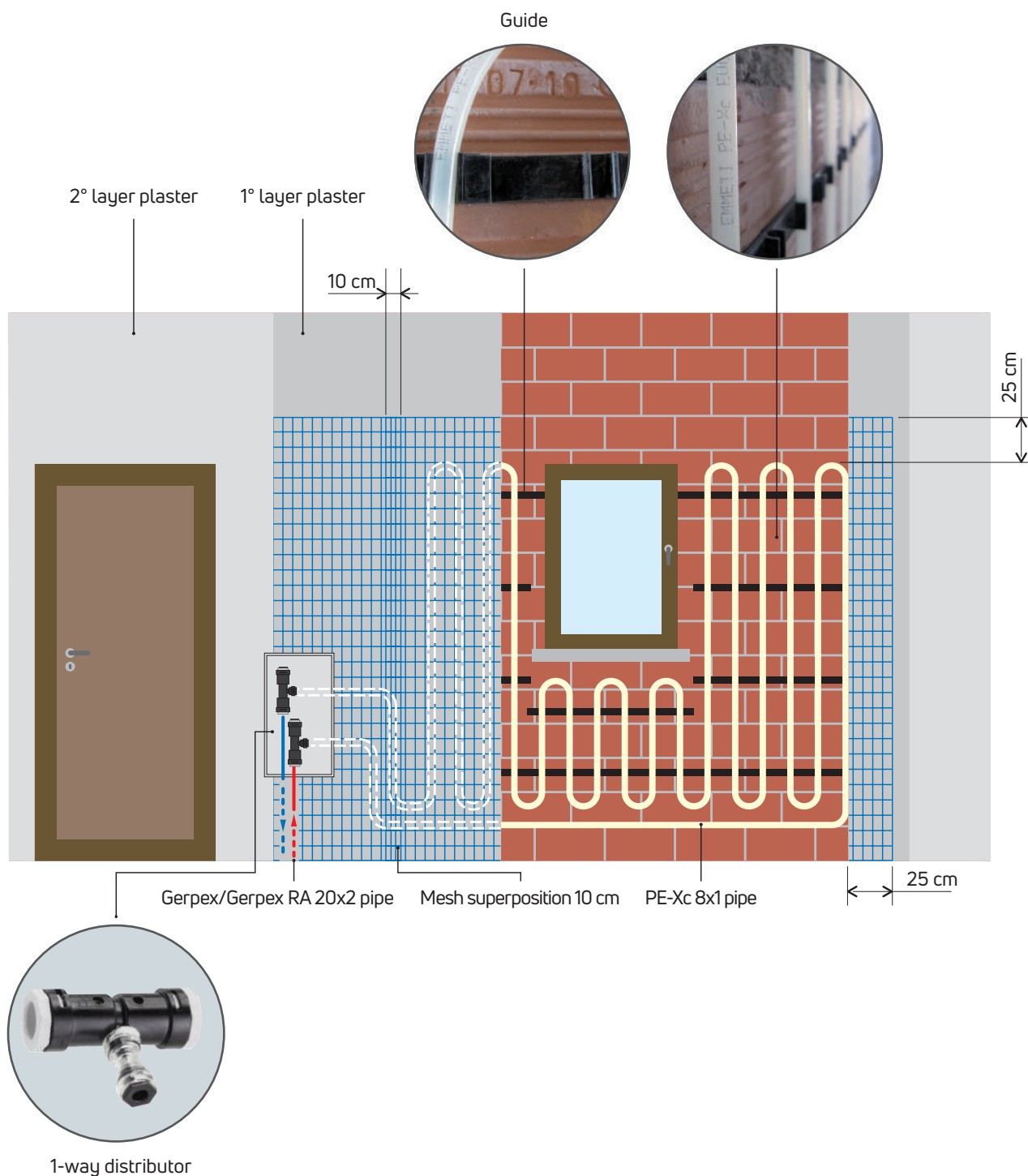
Emmeti Wall

Under plaster system Emmeti Wall - System 12



Under plaster system

Under plaster system Emmeti Wall - System 8



Under plaster system



SKZ

Das Kunststoff-Zentrum
[UNI EN ISO 15875-2]

PE-Xc pipe with EVOH oxygen barrier 5 layers

Classes of application / Operating pressures (bar): Cl. 4/4 bar - Cl. 5/8 bar
Oxygen permeability (DIN 4726): < 0.32 mg/(m²d) at 40 °C; < 3.6 mg/(m²d) at 80 °C
Density: 930 kg/m³ - Thermal conductivity: 0.4 W/mK - Degree of reticulation: ≥60%
Average coefficient of linear expansion: 0.15 mm/(m °C)
Minimum bending radius: 5 x D pipe - Internal roughness: 7 µm
Water capacity: 0.028 l/m - Application: heating systems

Dimension	m pack	Code	Price €/m
8 x 1 mm	100	28141800	1,80

5 layer pipe in medium density polyethylene, cross-linked by an electronic system, in accordance with DIN 4724, equipped with oxygen barrier in compliance with DIN 4726 and certified SKZ HR 3.2.

Application classes PE-Xc (UNI EN ISO 15875-1): see section Technical Attachments



SKZ

Das Kunststoff-Zentrum
[UNI EN ISO 21003-2]

PE-Xc PENTA pipe with 5 layer EVOH oxygen barrier

Application classes / Operating pressures (bar): Cl. 4/10 bar - 5/10 bar
Oxygen permeability (DIN 4726): < 0.32 mg/(m²d) at 40 °C; < 3.6 mg/(m²d) at 80 °C
Density: 940kg/m³ - Thermal conductivity: 0.41W/(mK)
Degree of crosslinking: ≥60% - Coefficient of linear expansion: 0.15 mm/(m °C)
Minimum bend radius: 5 x outside diameter - Internal roughness: 7 µm
Water content: 0.05 l/m - Application: heating systems

Dimension	Mts. pack	Code	Price €/m
12 x 2 mm	240	28141852	2,30

5 layer pipe in high density polyethylene, cross-linked with an electronic system, compliant with the UNI EN ISO 21003-2 standard, equipped with an oxygen barrier in compliance with the DIN 4726 standard and SKZ HR 3.2 certified.

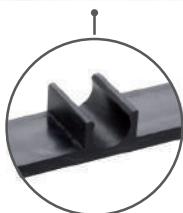
PE-Xc pipe application classes (UNI EN ISO 21003-1) and regression curves: see section Technical Attachments



Guide for pipe anchoring Ø 12 mm

Dimension	Pcs. pack	Code	Price €/pc.
900 x 20 x 35 mm (WxHxD)	30	28130724	4,57

Modular guide for pipe anchoring Ø 12 mm, with minimum step 60 mm



Guide for pipe anchoring Ø 8 mm

Dimension	Pcs. pack	Code	Price €/pc.
500 x 9 x 15 mm (WxHxD)	150	28130752	2,10

Modular guide for pipe anchoring Ø 8 mm, with minimum step 50 mm



Fixing pipe for pipe Ø 12 mm

Dimension	Pcs. pack	Code	Price €/pc.
For pipe Ø 12 mm	50	28130723	0,41



Roll of mesh in fibreglass for plaster

Dimension	Pack m²	Code	Price €/m²
50 x 1 mm	50	28130726	4,53



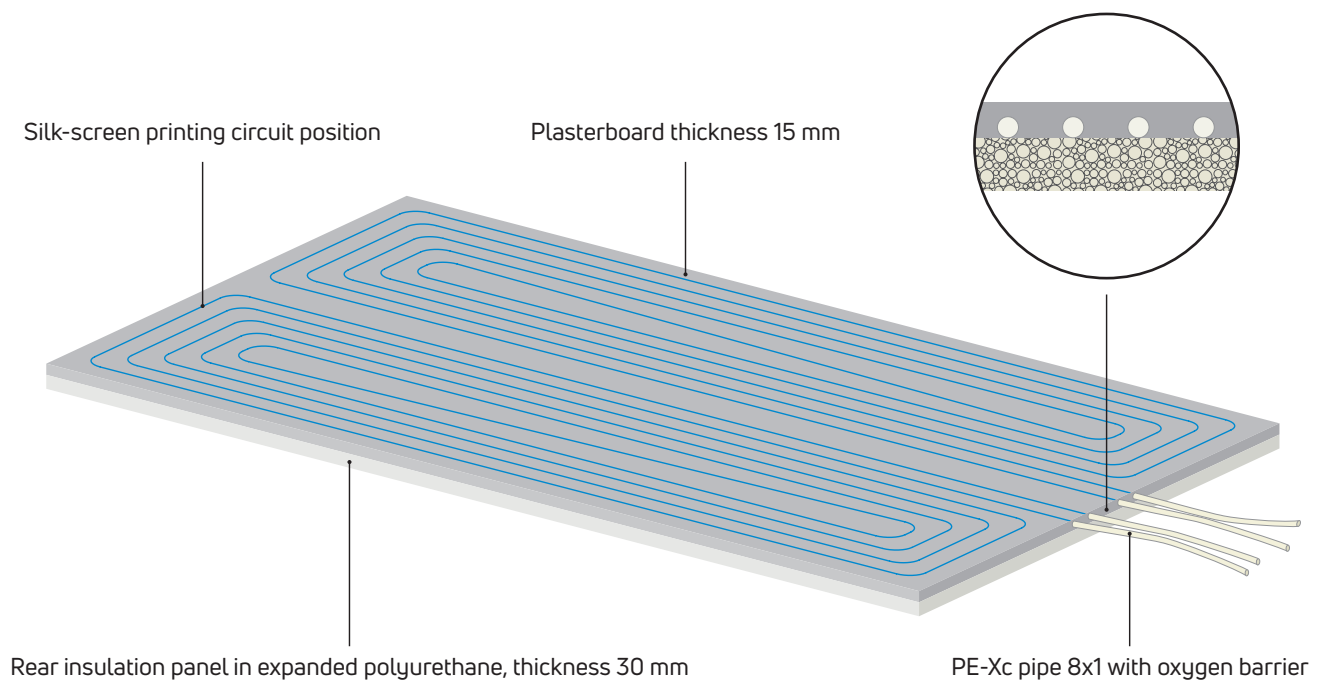
Shear for plastic pipe

Dimension	Pcs. pack	Code	Price €
Ø 8÷25	1	28130760	147,70
Spare blade for cutter	1	28130761	34,56

Shears to cut thin-wall rigid plastic pipes without chippings.

Emmeti Plasterboard

Plasterboard heating and cooling system



Plasterboard system



[UNI EN 13163] [EN 520]

Prefabricated radiant panel in plasterboard MULTI Vertical

Dimension	Nr. internal circuits	m ² /panel	Code	Price/panel €	€/m ²
2000 x 1200 x 45 mm	2 or 4	2,40	28134398	320,80	133,67

Prefabricated and sectionable radiant panel composed of 2 or 4 spiral tube circuits PE-Xc DN 8x1 with oxygen barrier compliant with DIN 4726, incorporated in a type A plasterboard sheet, 15 mm thick, coupled with an EPS 250 insulating panel, 30 mm thick.

Fire reaction class: B-s1, d0 (EN 13501-1).

The panel can be divided into two 2000x600 panels or four 1000x600 panels or two 1200x1000 panels.

The connection pipes are housed in special compartments obtained in the EPS layer, facilitating logistics and movement of the panels.

Panel dimensions [mm]	m ² /panel	Active area m ²
2000 x 1200	2,40	2,28
2000 x 600	1,20	1,10
1000 x 600	0,60	0,54

Plasterboard technical data	Norm	U.M.	Referring
Type	EN 520 - 3.2	-	Type A
Thickness	EN 520 - 5.4	mm	15 ± 0,5
Out of squareness	EN 520 - 5.5	mm/m	≤ 2,5
Weight		kg/m ²	12,90
Class of reaction to fire	EN 13501-1	-	A2-s1, d0 (B)
Flexural breaking load	EN 520 - 5.7	N	Long. 650 - Transv. 250
Surface hardness	EN 1520 - 5.12	mm	-
Thermal conductivity λ	EN 12524	W:mK	0,21
Resistance factor upon diffusion of steam μ	EN 12524	-	Dry range: 10 - Wet range: 4

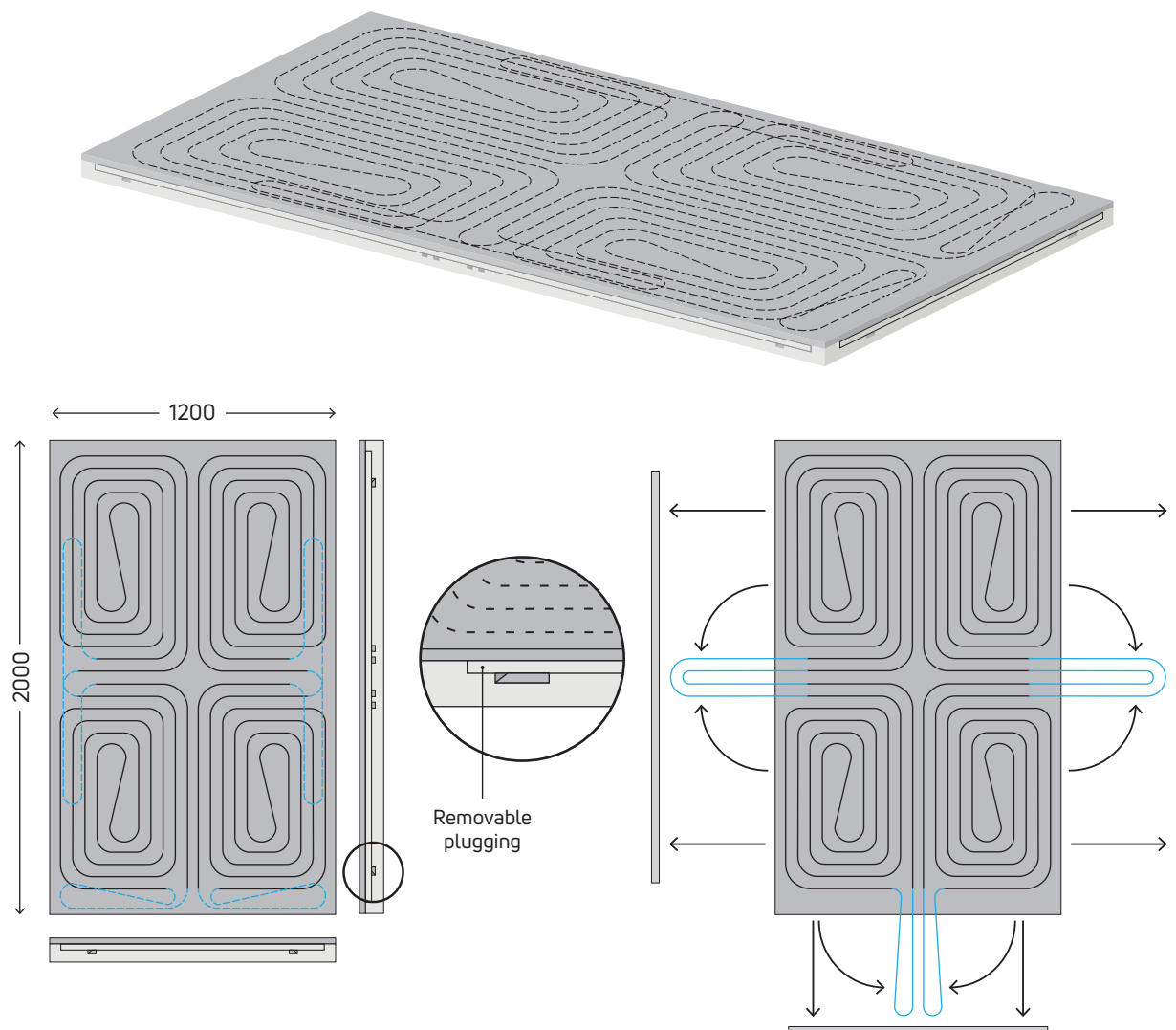
Edges	Longitudinal	Head
2000 x 1200	2 thinned	2 straight

EPS technical data	Norm	U.M.	Referring
Type	EN 13163	-	EPS 250
Thickness	UNI EN 823	mm	30 ± 2
Compression resistance	EN 826	KPa	≥250
Thermal conductivity λ	EN 12939	W/m K	0,032
Water absorption due to partial immersion	EN 12087	%	WL(T)3 ≤ 3,0
Class to reaction to fire	EN 13501-1	Euroclass	E

Pipe technical data	Norm	U.M.	Referring
Type	DIN 4724		PE-Xc
Size		mm	8 x 1
Oxygen permeability	DIN 4726	mg/(m ² d)	≤ 0,32 (40 °C)
Thermal conductivity λ	DIN 52612	W/mK	0,4
Average linear expansion coefficient		mm/m °C	0,15
Degree of reticulation	UNI EN 579	%	≥ 60
Minimum radius of curvature		mm	5 x D tubo
Medium surface roughness		μ	7
Lenght of individual circuit: m	2 x 19,5 (panels 2000x1200) - 19,5 (panel 2000x600) - 9,80 (panel 1000x600)		
Circuit/passage lenght		cm	Spiral/5
Water content		U/m	0,028

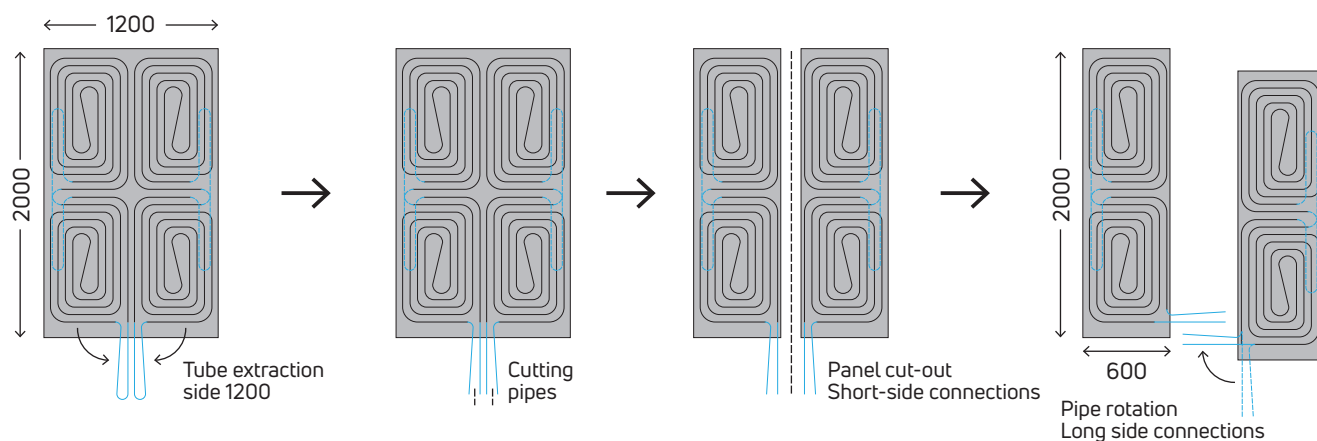
Plasterboard system

MULTI Vertical panel - 2000x1200



Panel MULTI Vertical configurations - 2000x1200

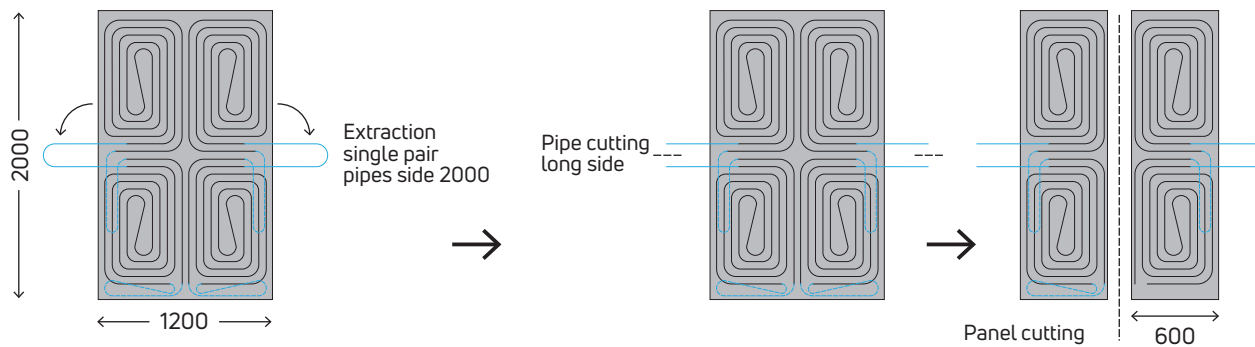
Size 2000x600 - Short side or long side connections, at the end



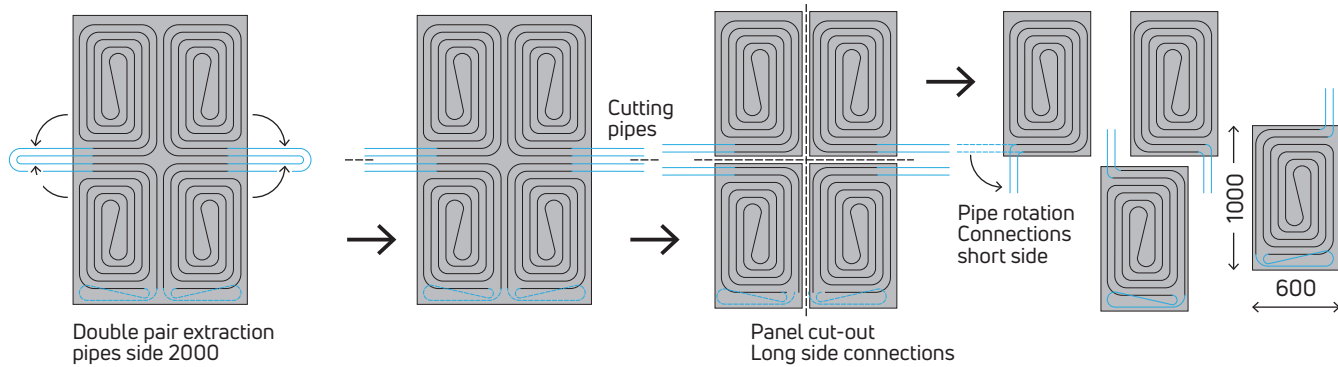
Plasterboard system

Panel MULTI Vertical configurations - 2000x1200

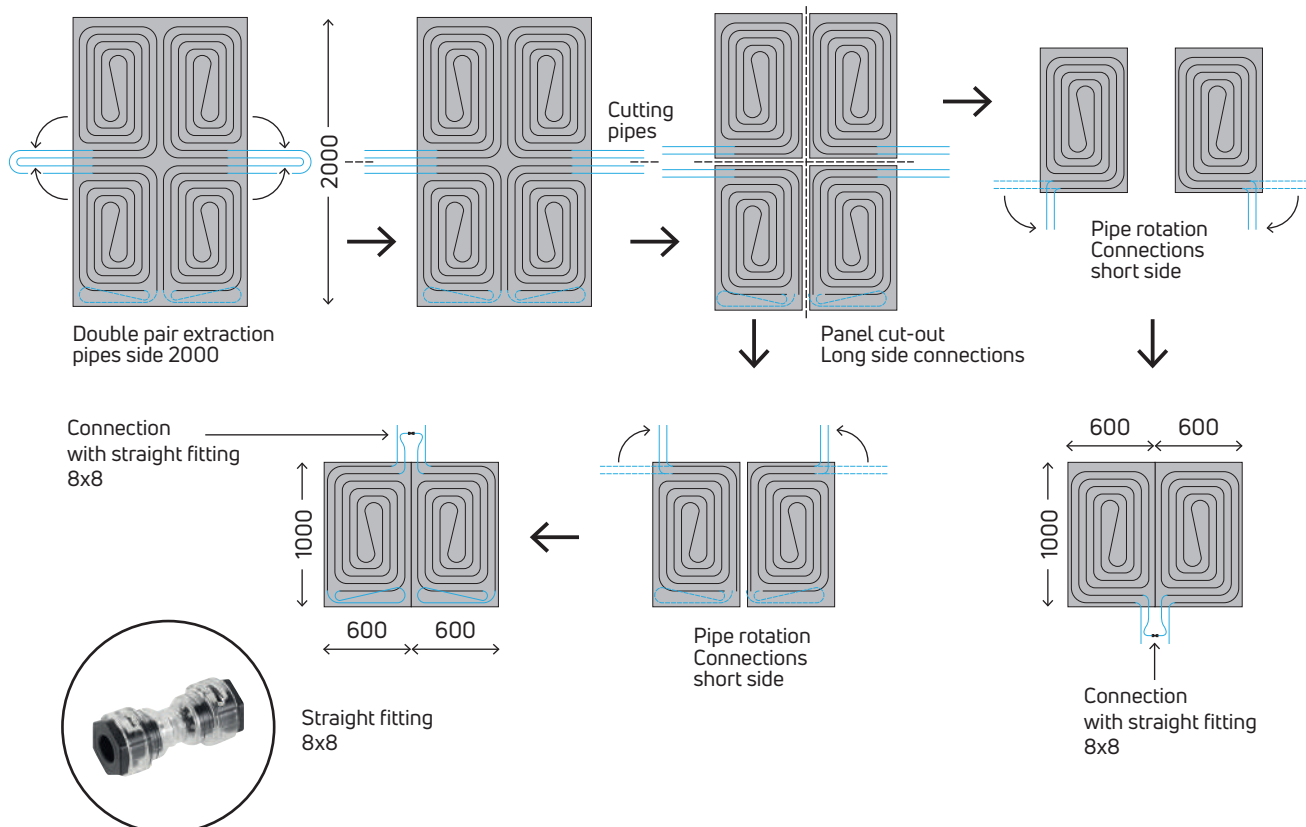
Size 2000x600 - Long side connections, centre



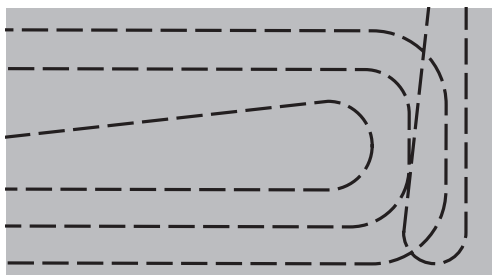
Size 1000x600 - Short and long side connections



Size 1200x1000 - Series connection of 1000x600 panels with 8x8 intermediate fittings



Plasterboard system



Prefabricated radiant panel in plasterboard MULTI Horizontal

Dimension	Nr. internal circuits	m ² /panel	Code	Price/panel €	€/m ²
2000 x 1200 x 45 mm	2 or 4	2,40	28134388	320,80	133,67

Prefabricated, sectionable radiant panel consisting of 2 or 4 pipe snail circuits in PE-Xc DN 8x1 with oxygen barrier in accordance with DIN 4726, embedded in a 15 mm thick plasterboard type A board coupled with a 30 mm thick EPS 250 insulation panel.

Fire reaction class: B-s1, d0 (EN 13501-1).

The panel is divisible into two 1000x1200 panels or four 500x1200 panels.

The connection pipes are housed in special compartments cut into the EPS layer, facilitating logistics and handling of the panels.



[UNI EN 13163] [EN 520]

Dimension panel [mm]	m ² /panel	Active area m ²
2000 x 1200	2,40	2,28
1000 x 1200	1,20	1,10
500 x 1200	0,60	0,54

Plasterboard technical data	Norm	U.M.	Referring
Type	EN 520 - 3.2	-	Type A
Thickness	EN 520 - 5.4	mm	15 ± 0,5
Out of squareness	EN 520 - 5.5	mm/m	≤ 2,5
Weight		kg/m ²	12,90
Class of reaction to fire	EN 13501-1	-	A2-s1, d0 (B)
Flexural breaking load	EN 520 - 5.7	N	Long. 650 - Transv. 250
Surface hardness	EN 1520 - 5.12	mm	-
Thermal conductivity λ	EN 12524	W:mK	0,21
Resistance factor upon diffusion of steam μ	EN 12524	-	Dry range: 10 - Wet range: 4

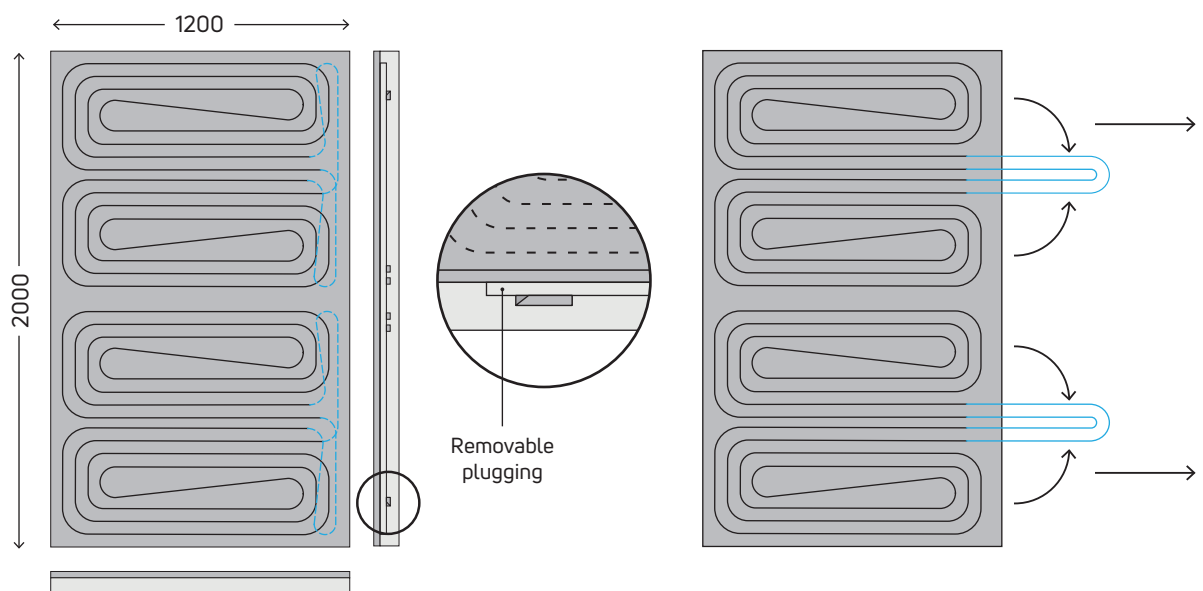
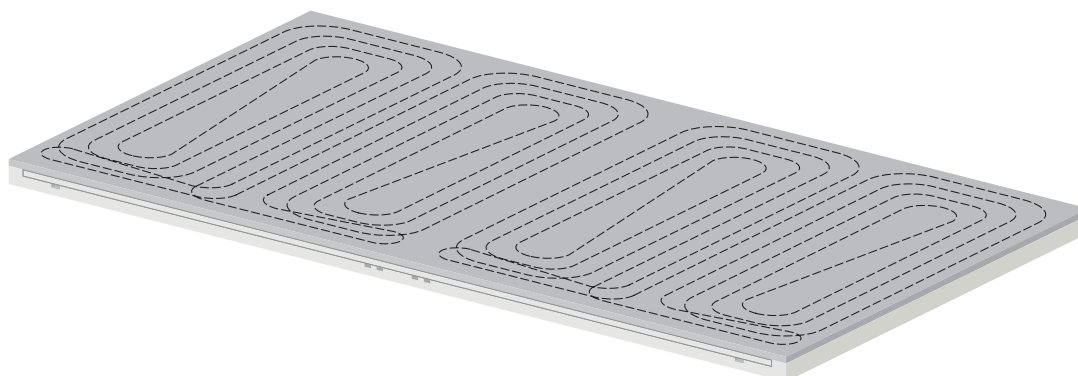
Edges	Longitudinal	Head
2000 x 1200	2 thinned	2 straight

EPS technical data	Norma	U.M.	Referring
Type	EN 13163	-	EPS 250
Thickness	UNI EN 823	mm	30 ± 2
Compression resistance	EN 826	KPa	≥250
Thermal conductivity λ	EN 12939	W/m K	0,032
Water absorption due to partial immersion	EN 12087	%	WL(T)3 ≤ 3,0
Class of reaction to fire	EN 13501-1	Euroclass	E

Pipe technical data	Norm	U.M.	Referring
Type	DIN 4724		PE-Xc
Size		mm	8 x 1
Oxygen permeability	DIN 4726	mg/(m ² d)	≤ 0,32 (40 °C)
Thermal conductivity λ	DIN 52612	W/mK	0,4
Average linear expansion coefficient		mm/m °C	0,15
Degree of reticulation	UNI EN 579	%	≥ 60
Minimur radius of curvature		mm	5 x D tubo
Medium surface roughness		μ	7
Lenght of individual circuit : m	2 x 18,5 (panels 2000x1200) - 18,5 (panel 1000x1200) - 9,30 (panel 500x1000)		
Circuit/passage lenght		cm	Spiral/5
Water content		l/m	0,028

Plasterboard system

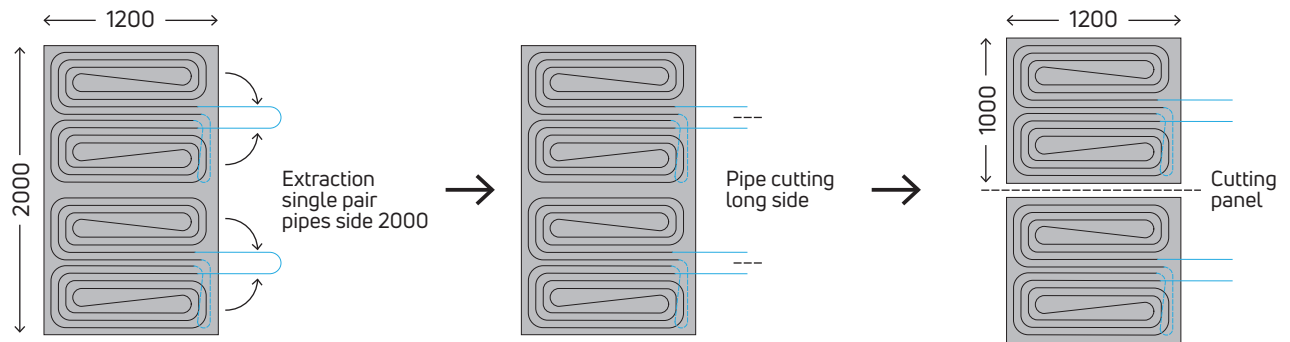
MULTI Horizontal panel - 2000x1200



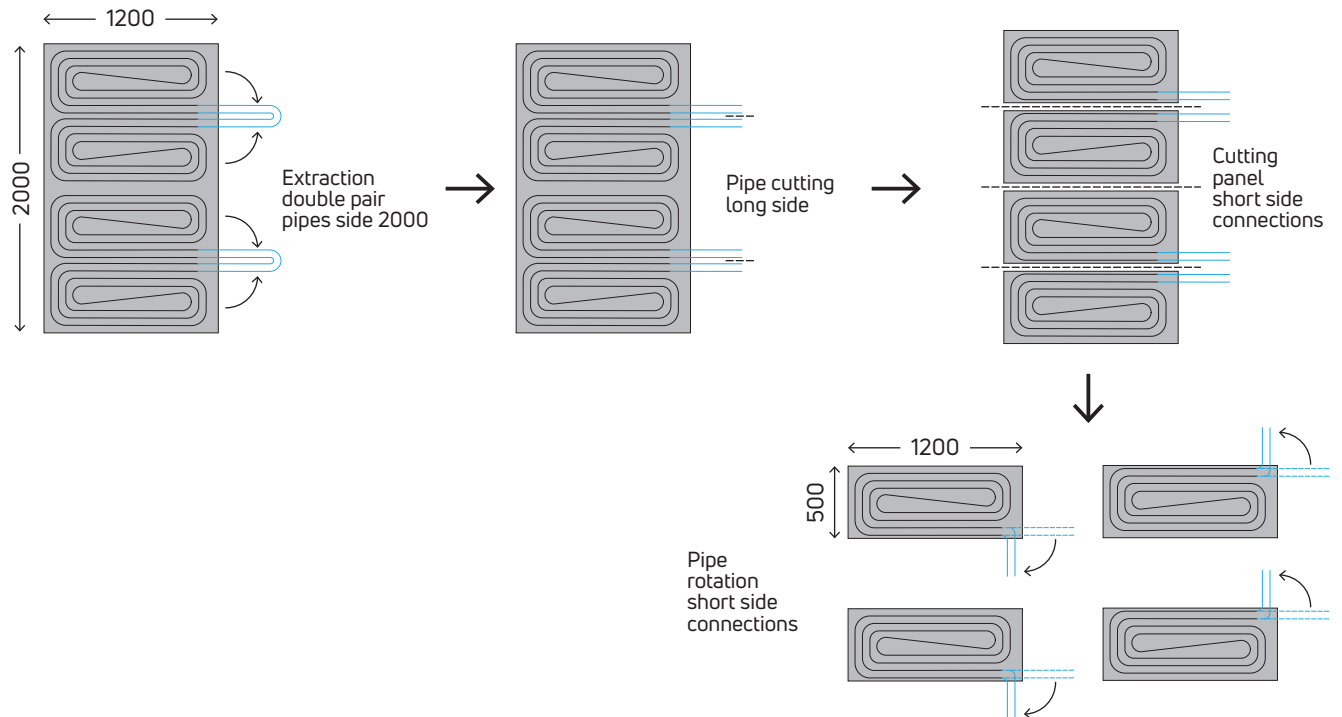
Plasterboard system

Panel MULTI Horizontal configurations - 2000x1200

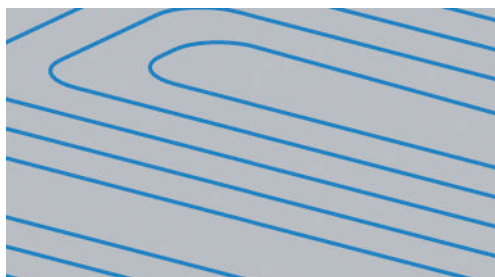
Size 1200x1000 - Short side connections



Size 1200 x 500 - Short side or long side connections at the end



Plasterboard system



[UNI EN 13163] [EN 520]

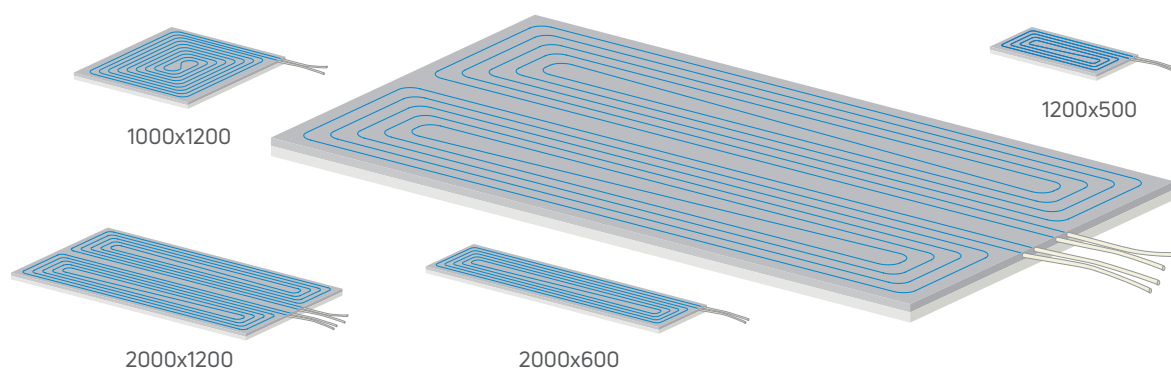
Prefabricated radiant panels in plasterboard type A and EPS

Dimension	Nr. internal circuits	m ² / panel	Active area m ²	Code	Price / panel €	€/m ²
2000 x 1200 x 45 mm	2	2,40	2,145	28134341	265,00	110,42
1000 x 1200 x 45 mm	1	1,20	1,0725	28134343	132,70	110,58
500 x 1200 x 45 mm	1	0,60	0,5175	28134353	66,21	110,35
2000 x 600 x 45 mm	1	1,20	1,0725	28134345	132,70	110,58

Prefabricated radiant panel consisting of 1 or 2 circuits spiral pipe PE-Xc DN 8x1 with oxygen barrier according to DIN 4726, embedded in a plasterboard type A, thickness 15 mm, coupled to an insulating panel in EPS 250 thick 30 mm.

Fire reaction class: B-s1, d0 (EN 13501-1).

Plasterboard technical data	Norm	U.M.	Referring
Type	EN 520 - 3.2	-	Type A
Thickness	EN 520 - 5.4	mm	15 ± 0,5
Out of squareness	EN 520 - 5.5	mm/m	≤ 2,5
Weight		Kg/m ²	12,90
Class of reaction to fire	EN 13501-1	-	A2-s1, d0 (B)
Flexural breaking load	EN 520 - 5.7	N	Long. 650 - Transv. 250
Surface hardness	EN 1520 - 5.12	mm	-
Thermal conductivity λ	EN 12524	W/mK	0,21
Resistance factor upon diffusion of steam μ	EN 12524	-	Dry range: 10 - Wet range: 4
Edges	Longitudinal		Head
2000 x 1200	2 thinned		2 straight
1000 x 1200	2 thinned		2 straight
500 x 1200	2 straight		2 thinned
2000 x 600	1 thinned - 1 straight		2 straight
EPS technical data	Norm	U.M.	Referring
Type	EN 13163	-	EPS 250
Thickness	UNI EN 823	mm	30 ± 2
Compression resistance	EN 826	KPa	≥250
Thermal conductivity λ	EN 12939	W/m K	0,032
Water absorption due to partial immersion	EN 12087	%	WL(T)3 ≤ 3,0
Fire classification	EN 13501-1	Euroclass	E
Pipe technical data	Norm	U.M.	Referring
Type	DIN 4724		PE-Xc
Size		mm	8 x 1
Oxygen permeability	DIN 4726	mg/(m ² d)	≤ 0,32 (40 °C)
Thermal conductivity λ	DIN 52612	W/mK	0,4
Average linear expansion coefficient		mm/m °C	0,15
Degree of reticulation	UNI EN 579	%	≥ 60
Minimum radius of curvature		mm	5 x D pipe
Medium surface roughness		μ	7
Lenght of individual circuit		m	19,31 (panel 2000x1200 and 2000x600) - 20,17 (panel 1000x1200) 9,31 (panel 500x1200)
Circuit/passage lenght		cm	Spiral/5
Water capacity		l/m	0,028



Plasterboard system



Prefabricated radiant panels in plasterboard type H2 and EPS

Dimension	Nr. internal circuits	m ² / panel	Active area m ²	Code	Price / panel €	€/m ²
1000 x 1200 x 45 mm	1	1,20	1,0725	28134349	139,70	116,42

Prefabricated radiant panel consisting of 1 or 2 circuits spiral pipe PE-Xc DN 8x1 with oxygen barrier according to DIN 4726, embedded in a plasterboard H2 type (reduced deaerated water), 15 mm thick, coupled with a insulation panel EPS 250 30 mm thick.

Fire reaction class: B-s1, d0 (EN 13501-1).



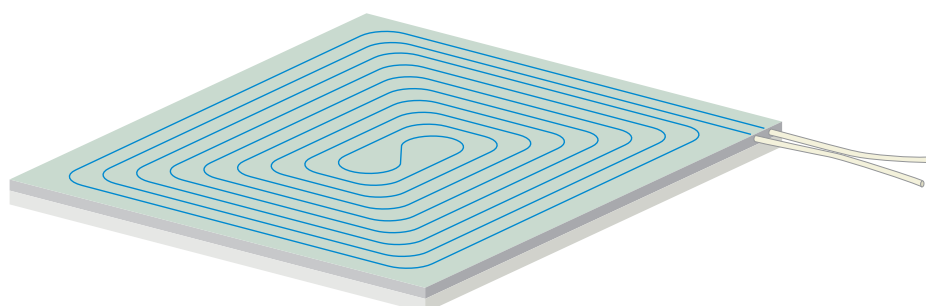
[UNI EN 13163] [EN 520]

Plasterboard technical data	Norm	U.M.	Referring
Type	EN 520 - 3.2	-	Type H2
Thickness	EN 520 - 5.4	mm	15 ± 0,5
Out of squareness	EN 520 - 5.5	mm/m	≤ 2,5
Weight		Kg/m ²	12,9
Class of reaction to fire	EN 13501-1	-	A2-s1, d0 (B)
Flexural breaking load	EN 520 - 5.7	N	Long. 650 - Transv. 250
Surface hardness	EN 1520 - 5.12	mm	-
Thermal conductivity λ	EN 12524	W/mK	0,21
Resistance factor upon diffusion of steam μ	EN 12524	-	Dry range: 10 - Wet range: 4
Surface water absorption	EN 520-5.9.1	g/m ²	< 180
Total water absorption	EN 520-5.9.2	%	≤ 10

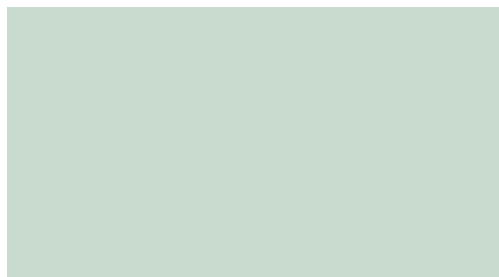
Edges	Longitudinal	Head
1000 x 1200	2 thinned	2 straight

EPS technical data	Norm	U.M.	Referring
Type	EN 13163	-	EPS 250
Thickness	UNI EN 823	mm	30 ± 2
Compression resistance	EN 826	KPa	≥ 250
Thermal conductivity λ	EN 12939	W/m K	0,036
Water absorption due to partial immersion	EN 12087	%	WL(T)3 ≤ 3,0
Fire classification	EN 13501-1	Euroclass	E

Pipe technical data	Norm	U.M.	Referring
Type	DIN 4724		PE-Xc
Size		mm	8 x 1
Oxygen permeability	DIN 4726	mg/(m ² d)	≤ 0,32 (40 °C)
Thermal conductivity λ	DIN 52612	W/m K	0,4
Average linear expansion coefficient		mm/m °C	0,15
Degree of reticulation	UNI EN 579	%	≥ 60
Minimur radius of curvature		mm	5 x D pipe
Medium surface roughness		μ	7
Lenght of individual circuit		m	21,5
Circuit/passage lenght		cm	Spiral/5
Water content		l/m	0,028



Plasterboard system



[UNI EN 13163] [EN 520]

Prefabricated buffering panel in plasterboard type H2 and EPS

Dimension	m ² /panel	Code	Price / panel €	€/m ²
2000 x 1200 x 45 mm	2,40	28134350	154,90	64,54

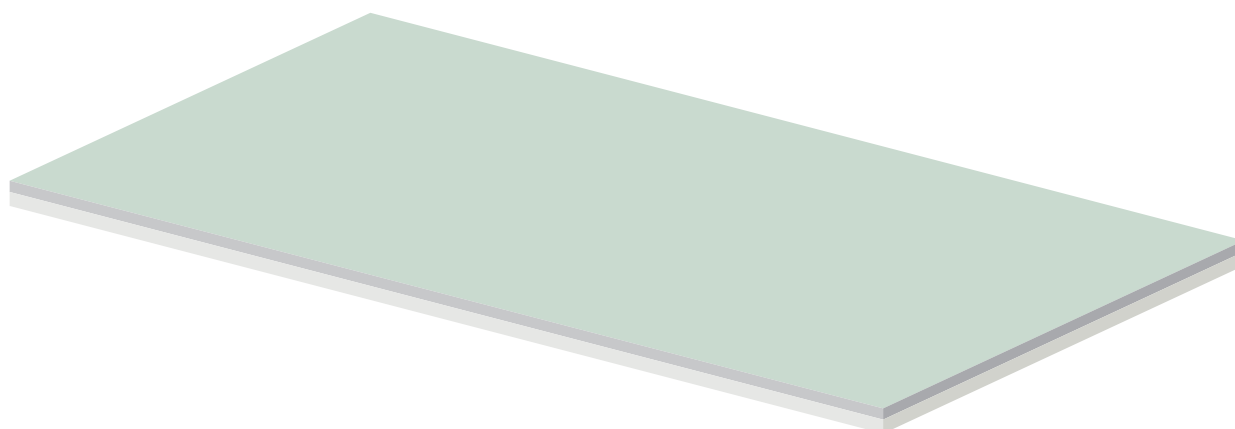
Prefabricated panels composed of slab in normal plasterboard, type H2, 15 mm thickness, coupled with plate EPS 250, 30 mm thickness.

Fire reaction class: B-s1, d0 (EN 13501-1).

Plasterboard technical data	Norm	U.M.	Referring
Type	EN 520 - 3.2	-	Type H2
Thickness	EN 520 - 5.4	mm	15 ± 0,5
Out of squareness	EN 520 - 5.5	mm/m	≤ 2,5
Weight		Kg/m ²	12,9
Class of reaction to fire	EN 13501-1	-	A2-s1, d0 (B)
Flexural breaking load	EN 520 - 5.7	N	Long. 650 - Transv. 250
Surface hardness	EN 520 - 5.12	mm	-
Thermal conductivity λ	EN 12524	W/mK	0,21
Resistance factor upon diffusion of steam μ	EN 12524	-	Dry range: 10 - Wet range: 4
Surface water absorption	EN 520-5.9.1	g/m ²	< 180
Total water absorption	EN 520-5.9.2	%	≤ 10

Edges	Longitudinal	Head
2000 x 1200	2 thinned	2 straight

EPS technical data	Norm	U.M.	Referring
Type	EN 13163	-	EPS 250
Thickness	UNI EN 823	mm	30 ± 2
Compression resistance	EN 826	KPa	≥250
Thermal conductivity λ	EN 12939	W/m K	0,032
Water absorption due to partial immersion	EN 12087	%	WL(T)3 ≤ 3,0
Fire classification	EN 13501-1	Euroclass	E



Plasterboard system



Prefabricated buffering panel in plasterboard type A and EPS

Dimension	m ² /panel	Code	Price / panel €	€/m ²
2000 x 1200 x 45 mm	2,40	28134346	141,10	58,79

Prefabricated panels composed of slab in normal plasterboard, Type A, 15 mm thickness, coupled with plate EPS 250, 30 mm thickness.

Fire reaction class: B-s1, d0 (EN 13501-1).

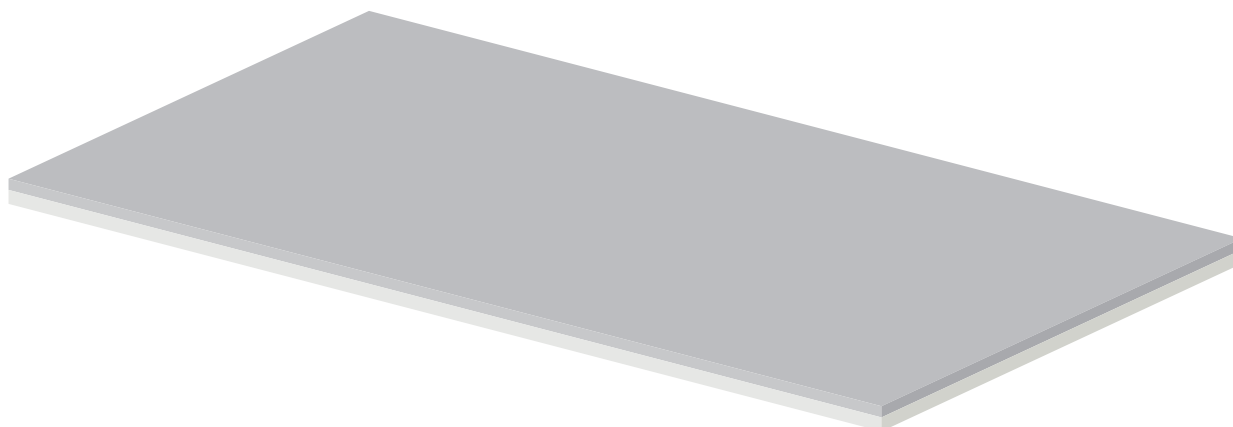


[UNI EN 13163] [EN 520]

Plasterboard technical data	Norm	U.M.	Referring
Type	EN 520 - 3.2	-	Type A
Thickness	EN 520 - 5.4	mm	15 ± 0,5
Out of squareness	EN 520 - 5.5	mm/m	≤ 2,5
Weight		Kg/m ²	12,9
Class to reaction of fire	EN 13501-1	-	A2-s1, d0 (B)
Flexural breaking load	EN 520 - 5.7	N	Long. 650 - Transv. 250
Surface hardness	EN 520 - 5.12	mm	-
Thermal conductivity λ	EN 12524	W/mK	0,21
Resistance factor upon diffusion of steam μ	EN 12524	-	Dry range: 10 - Wet range: 4

Edges	Longitudinal	Head
2000 x 1200	2 thinned	2 straight

EPS technical data	Norm	U.M.	Referring
Type	EN 13163	-	EPS 250
Thickness	UNI EN 823	mm	30 ± 2
Compression resistance	EN 826	KPa	≥250
Thermal conductivity λ	EN 12939	W/m K	0,032
Water absorption due to partial immersion	EN 12087	%	WL(T)3 ≤ 3,0
Fire classification	EN 13501-1	Euroclass	E



Plasterboard system



SKZ

Das Kunststoff-Zentrum

[UNI EN ISO 15875-2]

PE-Xc pipe with EVOH oxygen barrier 5 layers

Classes of application / Operating pressures (bar): Cl. 4/4 bar - Cl. 5/4 bar
 Oxygen permeability (DIN 4726): < 0.32 mg/(m²d) at 40 °C; < 3,6 mg/(m²d) at 80 °C
 Density: 930 kg/m³
 Thermal conductivity: 0.4 W/mK
 Degree of reticulation: ≥60%
 Average coefficient of linear expansion: 0.15 mm/(m °C)
 Minimum bending radius: 5 x D pipe
 Internal roughness: 7 µm
 Water capacity: 0.028 l/m
 Application: heating systems

Dimension	m pack	Code	Price €/m
8 x 1 mm	100	28141800	1,80

5 layer pipe in medium density polyethylene, cross-linked by an electronic system, in accordance with DIN 4724, equipped with oxygen barrier in compliance with DIN 4726 and certified SKZ HR 3.13.

Application classes PE-Xc pipe (UNI EN ISO 15875-1): see section Technical Attachments.



Insulating pipe in roll in elastomer foam

Maximum operating temperature: +110 °C
 Thermal conductivity: 0,033 W/mK at 0 °C; 0,035 W/mK at 20 °C;
 0,037 W/mK at 40 °C;
 Water vapour diffusion resistance factor: µ=10000
 Fire reaction class: B_L - s₂, d0 (UNI N 13501-1)

Dimension	Thickness	m pack	Code	Price €/pack
Ø 8	6 mm	80	03967902	103,30



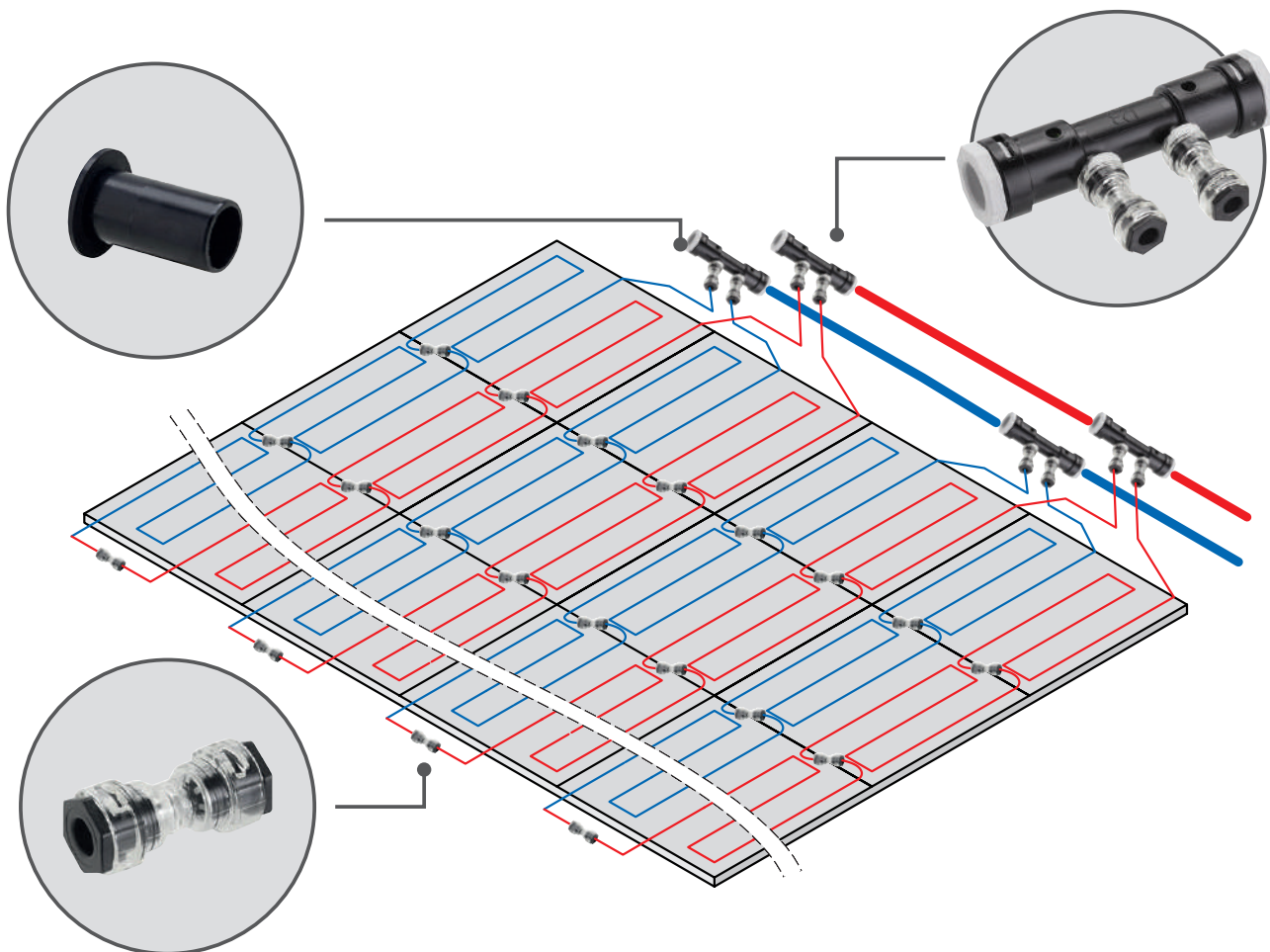
Shear for plastic pipe

Dimension	Pcs. pack	Code	Price €
Ø 8÷25	1	28130760	147,70
Spare blade for cutter	1	28130761	34,56

Shears to cut thin-wall rigid plastic pipes without chippings.

Emmeti Ray Module

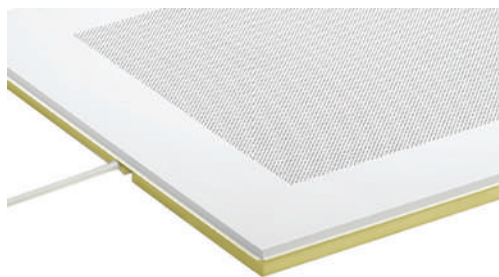
Metal modules heating and cooling system



Ray Module is the radiant ceiling climate control system intended for buildings for tertiary and commercial use and for use in hospitals, schools and exhibitions where there is a suspended false ceiling accessible for inspection. The reduced thermal needs of new buildings allows to obtain the high thermohygrometric comfort level produced by cold radiant ceilings also for heating purposes. With the radiant ceiling, the air treatment system will be designed for reduced capacities with clear benefits in terms of overall dimensions of the conduits, sensation of well-being in the rooms and energy savings.

Ray Module consists of two circuits made with a PE-Xc 8x1 pipe with oxygen barrier combined with an aluminium thin sheet glued to the coating panel, to be installed on a 24 mm T-shaped suspended structure. The upper part of the exchanger is insulated by means of a 30 mm thick rock wool slab. The panels are connected with push-fit fittings up to max. 6 elements for each series.

Metal modules system



Perforated metal radiant square panel

Size	Nr. internal circuits	m ² /square panel	Code	Price/square €
600x600 white lower	2	0,36	28134384	102,50

600x600 mm metal square panel used for radiant false ceilings accessible for inspection and consisting of standard 600x600 mm square panels installed on T-shaped exposed structures with a 24 mm base. It consists of a white 5/10 thick aluminium radiant surface, with a lower 8 mm 90° profile, coupled to a felt in TNT VILEDON and equipped with an **insulating layer of 30 mm stone wool (*)**, with 2 circuits inside PE-Xc 8x1 pipe with oxygen barrier.

Class of reaction fire: B-s2, d0 (EN 13501-1)

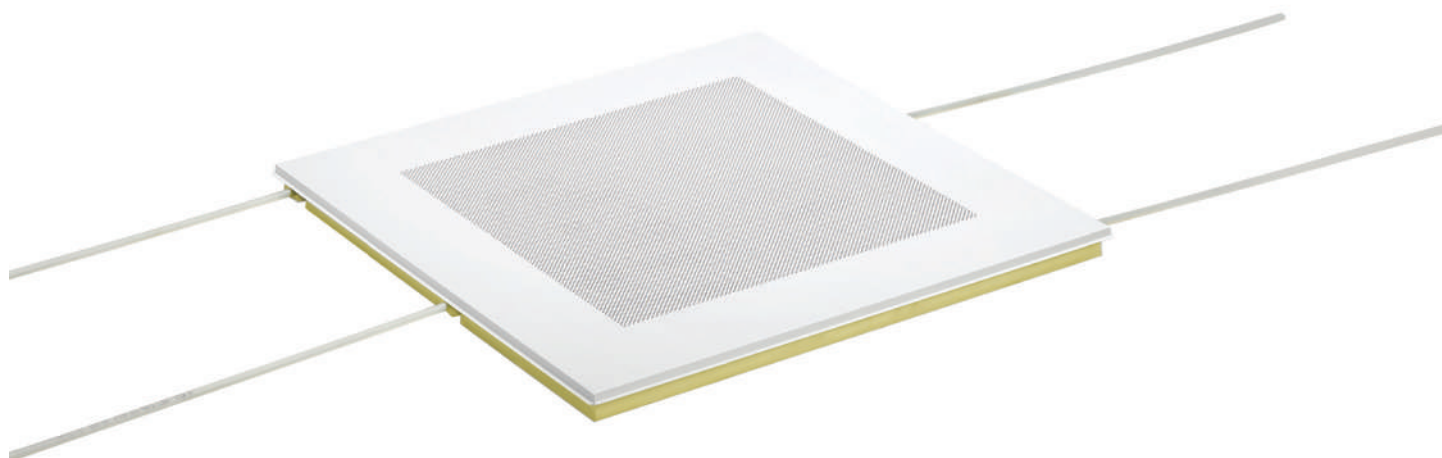
Drilling: 25% area; hole diameter 2 mm; smooth side panel: 100 mm

Article on request: 40 days from order confirmation.

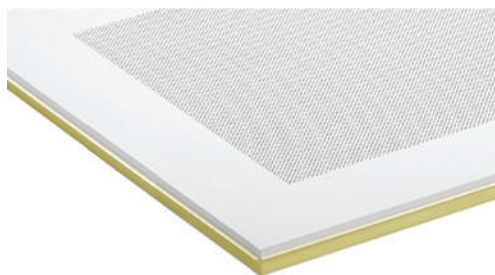
METAL RADIANT SQUARE PANEL technical data	Norm	Referring
Reaction to fire	EN 13964:2007, 4.4.2.2	A2 s1 d0
Flexural strength	EN 13964:2007, 4.6.2	Class 1
Sound absorption	EN 13964:2007, 4.7.2	Class C

ROCK WOOL technical data	Norm	U.M.	Referring
Nominal density	EN 1602	kg/m ³	80
Thermal conductivity λ	EN 12667	W/mK	0.035
Water absorption	EN 1609	kg/m ²	WS $\geq$ 1
Fire classification	EN 13501-1	Euroclass	A1

PIPE technical data	Norm	U.M.	Referring
Type	DIN 4724		PE-Xc
Dimension		mm	8x1
Oxygen permeability	DIN 4726	mg/(m ² d)	$\leq$ 0,32 (40 °C)
Thermal conductivity λ	DIN 52612	W/mK	0.4
Average linear expansion coefficient		mm/m °C	0.15
Degree of reticulation	UNI EN 579	%	$\geq$ 60
Minimum radius of curvature		mm	5 x D pipe
Average surface roughness		μ	7
Lenght of individual circuit		m	1.7 (2.2 includes free ends)
Circuit/passage lenght		cm	Serpentine 10
Water capacity		l/m	0.028



Metal modules system



Perforated metal passive square panel

Size	Nr. internal circuits	m ² /square panel	Code	Price/square €
600x600 white lower	-	0,36	28134386	58,57

600x600 mm metal square panel used for radiant false ceilings accessible for inspection and consisting of standard 600x600 mm square panels installed on T-shaped exposed structures with a 24 mm base. It consists of a white 5/10 thick aluminium radiant surface, with a lower 8 mm 90° profile, coupled to a felt in TNT VILEDON and equipped with an **insulating layer of 30 mm stone wool (*)**.

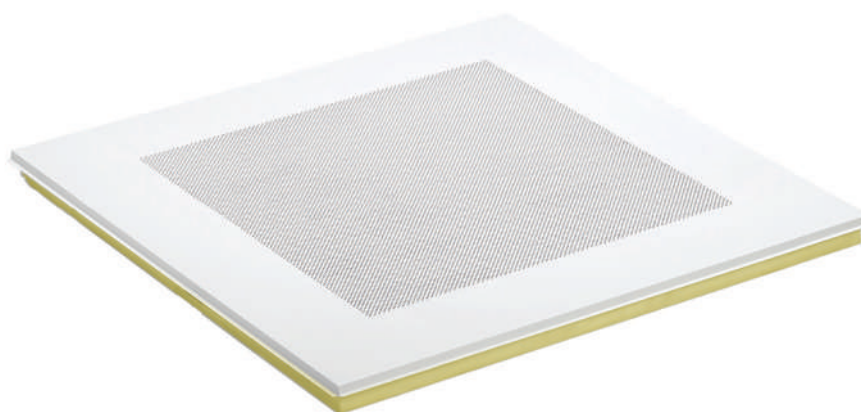
Class of reaction fire: B-s2, d0 (EN 13501-1)

Drilling: 25% area; hole diameter 2 mm; smooth side panel: 100 mm

Article on request: 40 days from order confirmation.

METAL RADIANT SQUARE PANEL technical data	Norm	Referring
Reaction to fire	EN 13964:2007, 4.4.2.2	A2 s1 d0
Flexural strength	EN 13964:2007, 4.6.2	Class 1
Sound absorption	EN 13964:2007, 4.7.2	Class C

ROCK WOOL technical data	Norm	U.M.	Referring
Nominal density	EN 1602	kg/m ³	80
Thermal conductivity λ	EN 12667	W/mK	0.035
Water absorption	EN 1609	kg/m ²	WS $\geq$ 1
Fire classification	EN 13501-1	Euroclass	A1



Connectors and distributors

Connectors and distributors for multilayer pipe Gerpex RA 20x2 and pipe PE-Xc 8x1

Description

Push-fit connection fittings equipped with a double hydraulic sealing O-ring (inside PEX/AL/PEX 20x2 pipe, outside PE-Xc 8x1 pipe) and pipe-guide adaptor.

The mechanical seal is ensured by a stainless steel ring fitted with teeth that grip the external wall of the pipes, placed behind the O-rings to prevent possible damage to the surface of the pipes. If necessary, the pipe can be disconnected from the fitting using the patented bayonet system.

The 20x2 multilayer pipe will always be correctly inserted thanks to the small circular openings on the body, while the 8x1 pipe is helped by the transparent material terminals in this size are made of.

Technical data

Body: in 6.6 nylon reinforced with glass fibre

O-ring: in EPDM

Serrated hose-clamp: in stainless steel

Maximum temperature: 60 °C

Minimum temperature: 2 °C

Maximum pressure at 60 °C: 2 bar

Maximum pressure at 20 °C: 5 bar



Straight connector

Dimension	Pcs. pack	Code	Price €
20x20	2	28134300	16,95
8x8	10	28134400	7,86



Kit 2 straight fittings intercepted

Dimension	Pcs. pack	Code	Price €
8x8	1	28134328	83,82

Suitable to intercept a circuit without draining the system



Tee connector

Dimension	Pcs. pack	Code	Price €
20x20x20	2	28134304	24,84



1-way distributor

Dimension	Pcs. pack	Code	Price €
20x8x20	2	28134410	24,74

Connectors and distributors for multilayer pipe



2-ways distributor

Dimension	Pcs. pack	Code	Price €
20x8x8x20	2	28134412	32,73



1-way opposed distributor

Dimension	Pcs. pack	Code	Price €
20x8x8x20	2	28134414	33,28



2-ways opposed distributor

Dimension	Pcs. pack	Code	Price €
20x8x8x8x20	2	28134416	55,80



Plug

Dimension	Pcs. pack	Code	Price €
20	20	28134314	1,58
8	20	28134316	1,35

Suitable for plugging unused holes of fittings and distributors of a matching size



Pipe drilling

Dimension	Pcs. pack	Code	Price €
8/20	1	28134329	2,09

Suitable to mark on the pipes 20x2 and 8x1 the correct insertion depth when used with fittings and distributors with black 8x1 terminal. Also provided in the manual supplied with the system, with each shipment.



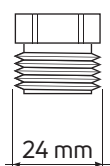
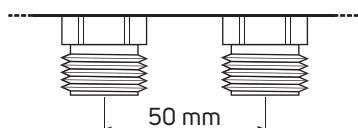
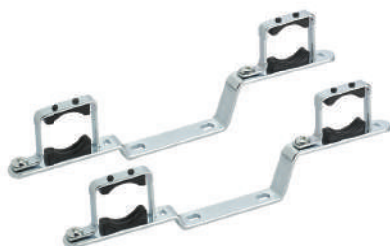
Pair of Insulating shells for fittings and distributors

Dimension	Pcs. pack	Code	Price €
For straight connector 20x20	1	28135020	51,98
For Tee connector	1	28135022	48,01
For 1-way distributor	1	28135024	36,26
For 2-ways distributor	1	28135026	46,27
For 1-way opposed distributor	1	28135028	39,54
For 2-way opposed distributor	1	28135030	39,69

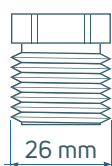
In closed cell polyethylene foam, edges with double-sided tape.
Can be used with previous fittings codes 28134300, 28134304, 28134306, 28134308, 28134310 and 28134312 from the 2017 and preceding Heating and Plumbing and Solar Energy catalogues.

Connectors and distributors for multilayer pipe

Topway S Compact - distribution manifold



24x19



Eurocone

Stainless steel distribution manifold

Complete with:

Built-in flowmeters (0÷4 l/min)

Valves with manual adjustment predisposed for electrothermal heads

Nr. 2 water drain valve 1/2" with plug - Nr. 2 metal brackets for installation in metal box or wall

Size	Ways	Thread	Pcs. pack	Code	Price €
1"	2+2	24x19	1	01282620	160,10
1"	3+3	24x19	1	01282622	183,00
1"	4+4	24x19	1	01282624	213,30
1"	5+5	24x19	1	01282626	243,50
1"	6+6	24x19	1	01282628	274,40
1"	7+7	24x19	1	01282630	304,80
1"	8+8	24x19	1	01282632	334,80
1"	9+9	24x19	1	01282634	375,90
1"	10+10	24x19	1	01282636	407,60
1"	11+11	24x19	1	01282638	436,20
1"	12+12	24x19	1	01282640	464,90
1"	2+2	3/4" Eurocone	1	01282320	164,00
1"	3+3	3/4" Eurocone	1	01282322	189,40
1"	4+4	3/4" Eurocone	1	01282324	221,20
1"	5+5	3/4" Eurocone	1	01282326	252,90
1"	6+6	3/4" Eurocone	1	01282328	284,70
1"	7+7	3/4" Eurocone	1	01282330	316,90
1"	8+8	3/4" Eurocone	1	01282332	349,00
1"	9+9	3/4" Eurocone	1	01282334	380,60
1"	10+10	3/4" Eurocone	1	01282336	412,40
1"	11+11	3/4" Eurocone	1	01282338	444,30
1"	12+12	3/4" Eurocone	1	01282340	476,40

Accessories for Topway Compact manifold



Pair of thermal Tee with manually air vent valve and adjustable bibcock

Size	Pcs. pack	Code	Price €
1"	1	01306158	56,04

With O-Ring.

Supplied with manually air vent valve 1/2" and charge/drain water bibcocks 1/2" with adjustable connection 3/4".

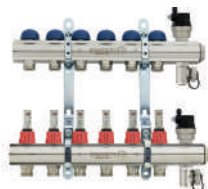
Manifolds, boxes and mixing groups



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Topway S Compact
and Topway S-D
stainless steel
manifolds and
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- > Topway, Topway
Compact, Topway R
e Topway M
brass manifolds
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- > Control T
electrothermic
heads **163**



- > Electric
boxes **164**



- > Industrial
manifolds **165**



- > Metalbox
metal boxe
for manifolds **167**



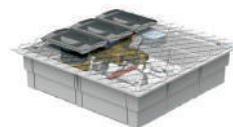
- > Mixer
steel
coplanar manifold **169**



- > Modular
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- > Hydrobox Basic
built-in box
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- > Multiplex
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with bibcocks **173**



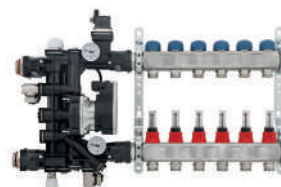
- > Termobox
plastic boxe
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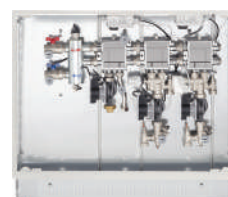
- > Modulo
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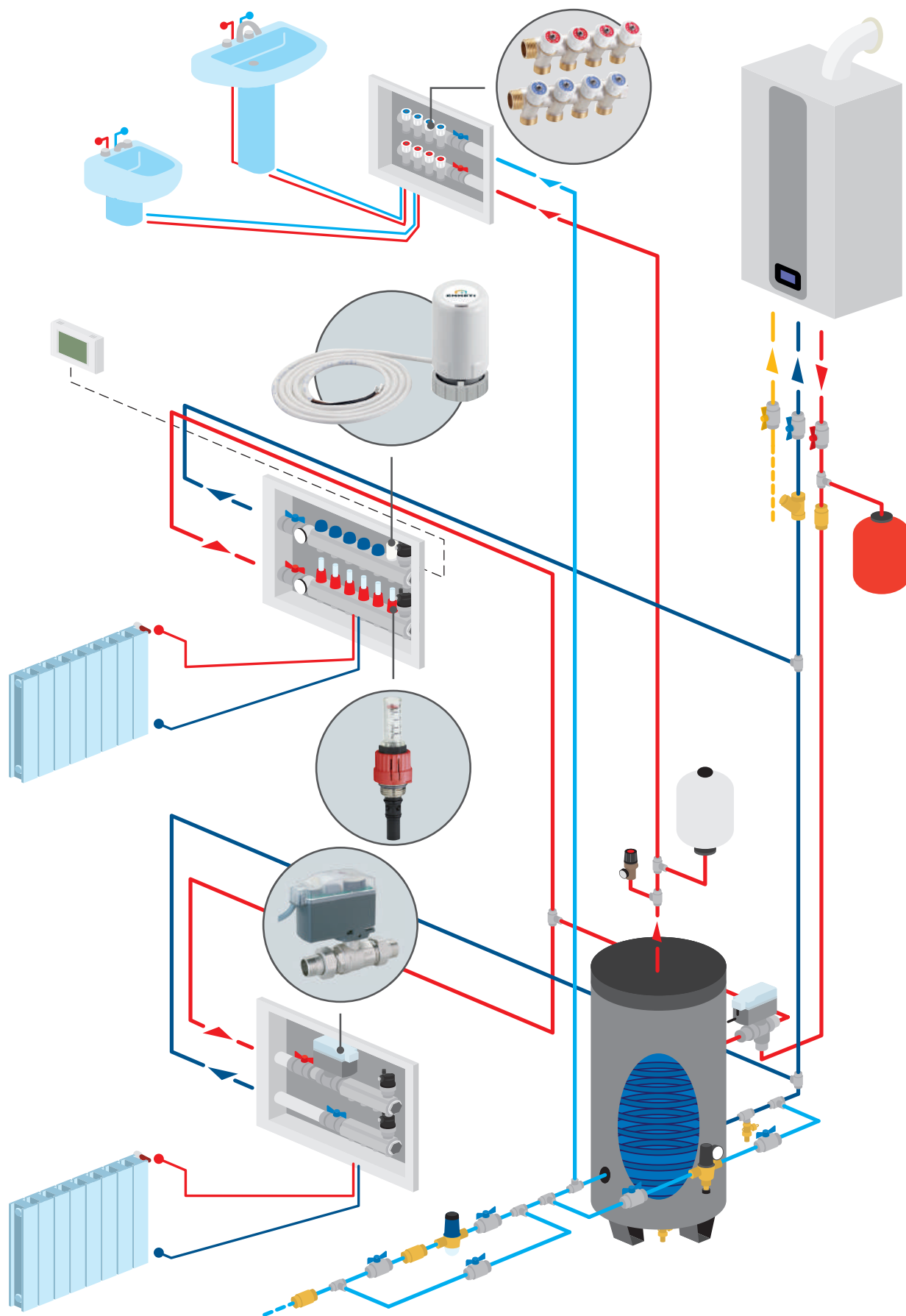
- > Mixing groups
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distribution groups
and accessories **198**

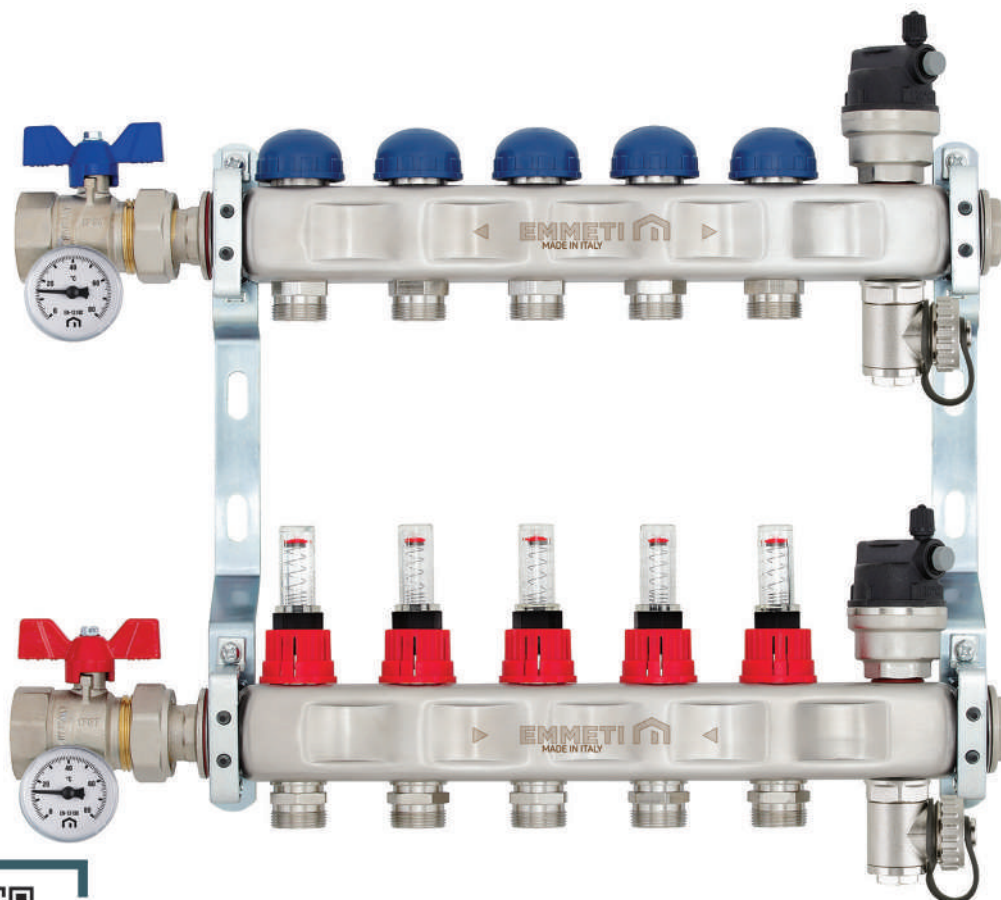


Example of installation



Topway S

Stainless steel distribution manifold



Advantages

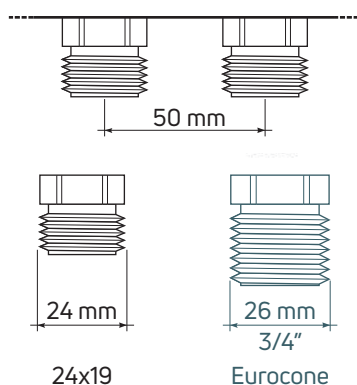
- High resistance material: stainless steel AISI 304 (brushed finish) for safer use and greater durability;
- Fixing supports supplied;
- Automatic air vent valves;
- Patented flow meters;
- Easy to connect: 24x19 or 3/4" Eurocone takeoffs;
- Possibility of connecting from 2 to 12 circuits;
- Return manifolds with valves controlled by electro-thermic actuators (M30x1,5).

Technical Data

Stainless steel AISI 304 manifolds with a high nickel content and copper-free for increased corrosion resistance.
Seals: peroxide EPDM o-rings.
Maximum temperature: 90 °C.
Maximum pressure: 6 bar.
Head threads: G1" F.
Takeoff threads: 24x19 - 3/4" Eurocone, distance between connections 50 mm.

Dimensions: see section Technical Attachments.

Stainless steel distribution manifold



Topway S - stainless steel distribution manifold 1"

WITH FLOW METERS 0÷4 l/min INCORPORATED

Supplied with:

Lockshields with built-in flow meters (0÷4 l/min)

Manual regulation valves for electro-thermic actuators

No. 2 blanking plugs 1" with o-ring seal

No. 2 drain valves 1/2"

No. 2 air vent valves 1/2" with bleed (lateral+manual)

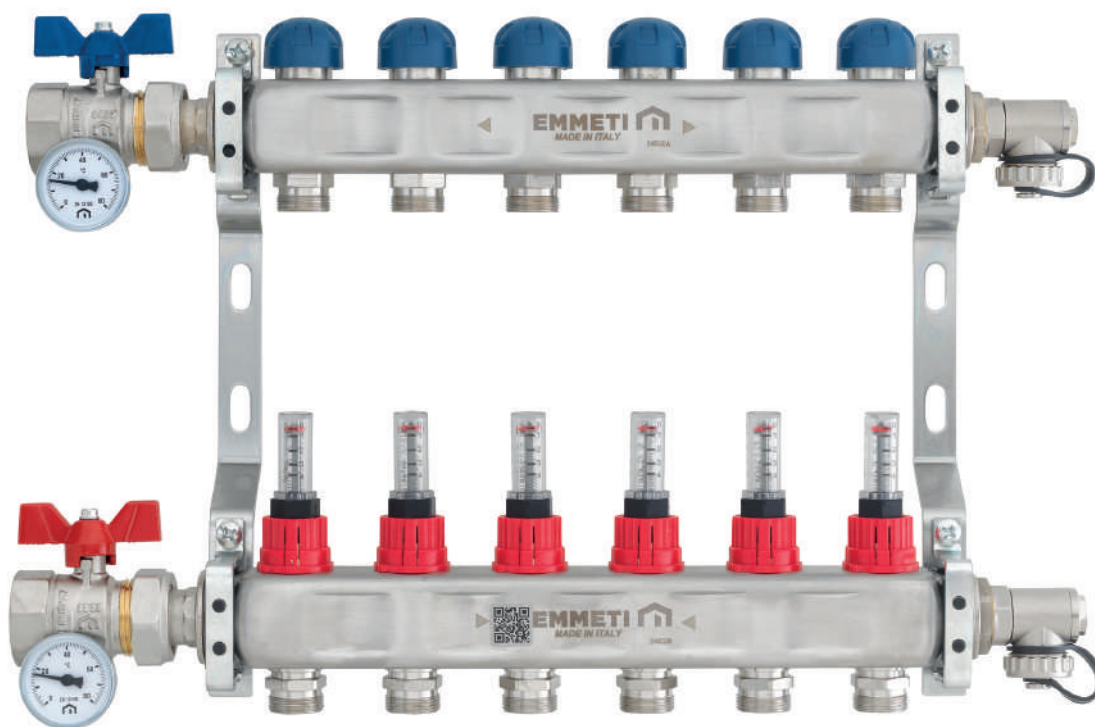
No. 2 double metal brackets

Note: to be completed with n. 2 Progress ball valves 1" with red and blue butterfly handles, with or without thermometer holder and thermometer (not included).

Dimension	Ways	Takeoffs	Pcs. pack	Code	Price €
1"	2+2	24x19	1	01282200	182,30
1"	3+3	24x19	1	01282202	210,50
1"	4+4	24x19	1	01282204	240,90
1"	5+5	24x19	1	01282206	271,40
1"	6+6	24x19	1	01282208	301,90
1"	7+7	24x19	1	01282210	332,50
1"	8+8	24x19	1	01282212	362,50
1"	9+9	24x19	1	01282214	404,30
1"	10+10	24x19	1	01282216	437,90
1"	11+11	24x19	1	01282218	466,00
1"	12+12	24x19	1	01282220	494,40
1"	2+2	3/4" Eurocone	1	01282290	185,50
1"	3+3	3/4" Eurocone	1	01282292	215,40
1"	4+4	3/4" Eurocone	1	01282294	247,50
1"	5+5	3/4" Eurocone	1	01282296	279,60
1"	6+6	3/4" Eurocone	1	01282298	311,70
1"	7+7	3/4" Eurocone	1	01282300	344,10
1"	8+8	3/4" Eurocone	1	01282302	375,40
1"	9+9	3/4" Eurocone	1	01282304	419,00
1"	10+10	3/4" Eurocone	1	01282306	454,40
1"	11+11	3/4" Eurocone	1	01282308	484,20
1"	12+12	3/4" Eurocone	1	01282310	514,00

Topway S Compact

Compact stainless steel distribution manifold



SCAN

Advantages

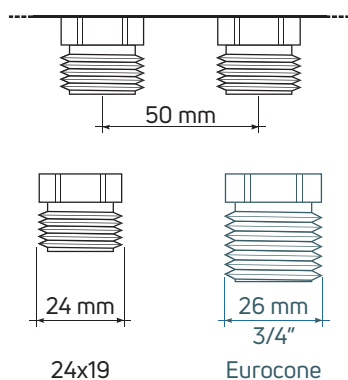
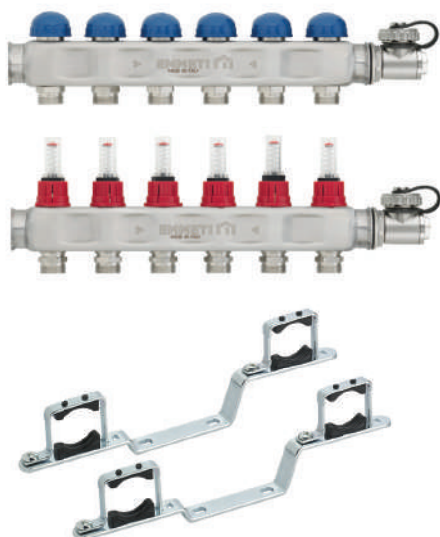
- High resistance material: stainless steel AISI 304 (brushed finish) for safer use and greater durability;
- Fixing supports supplied;
- Patented flow meters;
- Easy to connect: 24x19 or 3/4" Eurocone takeoffs;
- Possibility of connecting from 2 to 12 circuits;
- Return manifolds with valves controlled by electro-thermic actuators (M30x1,5).

Technical Data

Stainless steel AISI 304 manifolds with a high nickel content and copper-free for increased corrosion resistance.
Seals: peroxide EPDM o-rings.
Maximum temperature: 90 °C.
Maximum pressure: 6 bar.
Head threads: G1" F.
Takeoff threads: 24x19 - 3/4" Eurocone, distance between connections 50 mm.

Dimensions: see section **Technical Attachments**.

Compact stainless steel distribution manifold



Topway S Compact - 1" stainless steel compact distribution manifold

Complete with:

Built-in flowmeters (0÷4 l/min)

Valves with manual adjustment predisposed for electrothermal heads

Nr. 2 water drain valve 1/2" with plug

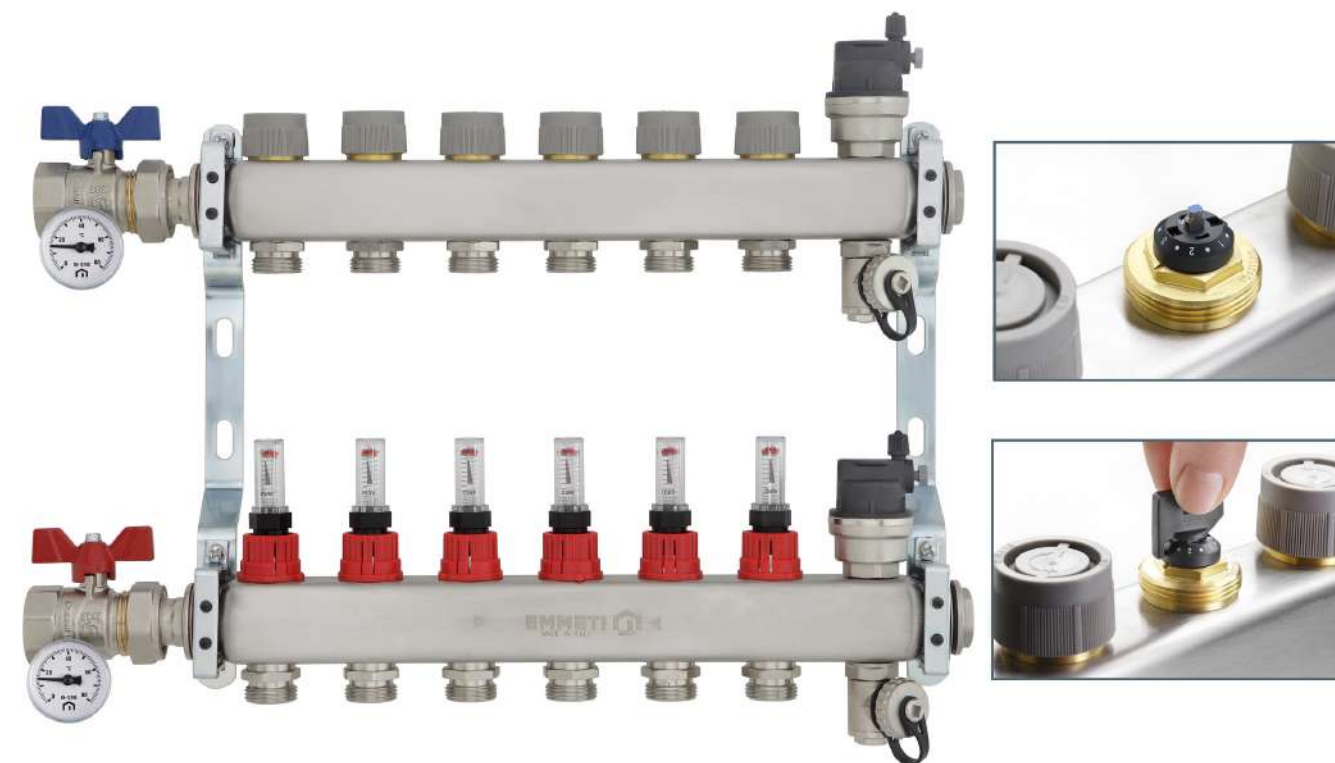
Nr. 2 metal brackets

Dimension	Ways	Thread	Pcs. pack	Code	Price €
1"	2+2	24x19	1	01282620	160,10
1"	3+3	24x19	1	01282622	183,00
1"	4+4	24x19	1	01282624	213,30
1"	5+5	24x19	1	01282626	243,50
1"	6+6	24x19	1	01282628	274,40
1"	7+7	24x19	1	01282630	304,80
1"	8+8	24x19	1	01282632	334,80
1"	9+9	24x19	1	01282634	375,90
1"	10+10	24x19	1	01282636	407,60
1"	11+11	24x19	1	01282638	436,20
1"	12+12	24x19	1	01282640	464,90

1"	2+2	3/4" Eurocone	1	01282320	164,00
1"	3+3	3/4" Eurocone	1	01282322	189,40
1"	4+4	3/4" Eurocone	1	01282324	221,20
1"	5+5	3/4" Eurocone	1	01282326	252,90
1"	6+6	3/4" Eurocone	1	01282328	284,70
1"	7+7	3/4" Eurocone	1	01282330	316,90
1"	8+8	3/4" Eurocone	1	01282332	349,00
1"	9+9	3/4" Eurocone	1	01282334	380,60
1"	10+10	3/4" Eurocone	1	01282336	412,40
1"	11+11	3/4" Eurocone	1	01282338	444,30
1"	12+12	3/4" Eurocone	1	01282340	476,40

Topway S-D

Stainless steel distribution manifold, with automatic dynamic balancing of the flow rate of the individual circuits



SCAN

Advantages

Topway S-D stainless steel manifold is characterized by the return bars, equipped with special inserts (dynamic valves) with continuous flow regulation and a membrane mechanism that guarantees automatic hydraulic balancing of the radiant heating and cooling systems, regardless of the differential pressure. Even in the presence of highly oscillating differential pressures, which can occur in the event of opening or closing sections of the system, the flow rate is kept constant within the adjustment range. To set the project flow rate, the appropriate numbered ring nut (liters / min) is rotated using the special plastic key supplied. The insert has an interception device which, in combination with electrothermal actuators, M30x1.5 connection, and room thermostats, can be used to regulate the temperature of the single room. The delivery manifold is equipped with interception devices complete with indicators to check the actual passage of the flow.

Technical data

Distribution bars: AISI 304 stainless steel with high nickel content and without copper for greater resistance to corrosion.

Sealing gasket: peroxide EPDM.

Maximum operating temperature: + 80 °C

Minimum operating temperature: + 2 °C

Maximum operating pressure: 6 bar (600 kPa)

Flow rate adjustment range: 0.5-5 l / min

Head threads: G1 "F.

Outlets threads: 3/4 "Eurocone

Center line between ports: 50 mm

Actuator connection thread: M30x1.5

Piston stroke: 1.8 mm

Closing dimension: 11.8 mm

Closing force (actuator): 90 - 150 N

Adjustment range:

Δp max : 150 kPa (1,5 bar)

Δp min. (0,5 - 2 l/min): 10 kPa (0,10 bar)

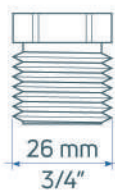
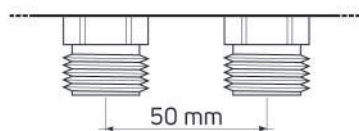
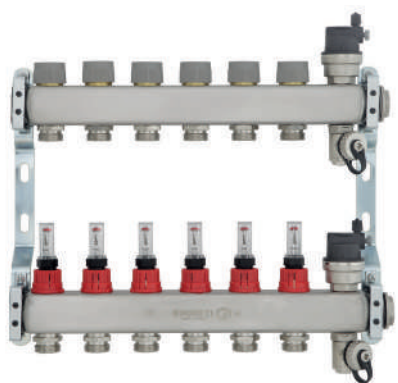
Δp min. (>2 - 2,8 l/min): 15 kPa (0,15 bar)

Δp min. (>2,8 - 5 l/min): 20 kPa (0,20 bar)

For values lower than Δp min. the valve works like a normal valve with thermostatic option, therefore the flow rate varies according to the differential pressure.

Dimensions: see section Technical Attachments.

Stainless steel distribution manifold



Eurocone

1" Topway S-D pre-assembled distribution manifold in steel with automatic dynamic balancing of the flow rate of the individual circuits

Supplied with:

Lockshields with built-in flow indicators

Dynamic valves with continuous flow regulation, 0.5 - 5 l / min, designed for electro-thermal heads

Nr. 2 blind plugs 1" with o-ring gasket

Nr. 2 water drain valves 1/2"

Nr. 2 air vent valves 1/2" with vent (automatic + manual)

Nr. 2 double metal supports

Nr. 1 key for adjusting the dynamic valves (supplied)

Note: to be completed with no. 2 Progress ball valves 1" with butterfly handle red and blue, with filler, with or without thermometer (not included).

Dimension	Way	Thread	Pcs. pack	Code	Price €
1" (*)	2+2	3/4" Eurocone	1	01330022	261,70
1" (*)	3+3	3/4" Eurocone	1	01330024	337,60
1" (*)	4+4	3/4" Eurocone	1	01330026	410,90
1" (*)	5+5	3/4" Eurocone	1	01330028	485,30
1" (*)	6+6	3/4" Eurocone	1	01330030	561,60
1" (*)	7+7	3/4" Eurocone	1	01330032	637,30
1" (*)	8+8	3/4" Eurocone	1	01330034	713,00
1" (*)	9+9	3/4" Eurocone	1	01330036	790,90
1" (*)	10+10	3/4" Eurocone	1	01330038	865,30
1" (*)	11+11	3/4" Eurocone	1	01330040	944,60
1" (*)	12+12	3/4" Eurocone	1	01330042	1.019,00

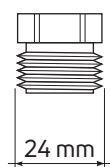
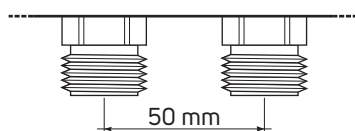
(*) Items available on request

Topway S single bar

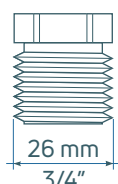
Stainless steel distribution manifold in single bar



Topway S



24x19

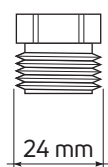
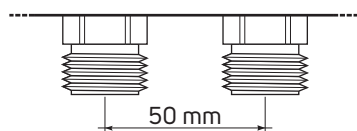


Eurocone

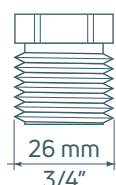
Topway S - single bar return manifold, with valves and with additional way

Dimension	Ways	Thread	Pcs. pack	Code	Price €
1"	2	24x19	2	01282760	51,99
1"	3	24x19	2	01282762	65,78
1"	4	24x19	2	01282764	79,90
1"	5	24x19	2	01282766	93,69
1"	6	24x19	2	01282768	108,10
1"	7	24x19	2	01282770	121,80
1"	8	24x19	2	01282772	135,80
1"	9	24x19	2	01282774	149,60
1"	10	24x19	2	01282776	163,50
1"	11	24x19	2	01282777	177,30
1"	12	24x19	2	01282779	191,00
1"	2	3/4" Eurocone	2	01282910	51,31
1"	3	3/4" Eurocone	2	01282912	66,39
1"	4	3/4" Eurocone	2	01282914	82,20
1"	5	3/4" Eurocone	2	01282916	96,74
1"	6	3/4" Eurocone	2	01282918	110,20
1"	7	3/4" Eurocone	2	01282920	126,50
1"	8	3/4" Eurocone	2	01282922	141,30
1"	9	3/4" Eurocone	2	01282924	160,70
1"	10	3/4" Eurocone	2	01282926	176,00
1"	11	3/4" Eurocone	2	01282928	190,70
1"	12	3/4" Eurocone	2	01282930	205,90

Stainless steel distribution manifold in single bar



24x19

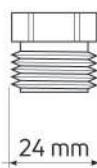
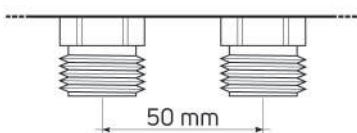


Eurocone

Topway S - single bar flow manifold, with flow meters and with additional way

Dimension	Ways	Thread	Pcs. pack	Code	Price €
1"	2	24x19	2	01282790	57,58
1"	3	24x19	2	01282792	74,13
1"	4	24x19	2	01282794	90,96
1"	5	24x19	2	01282796	107,70
1"	6	24x19	2	01282798	124,60
1"	7	24x19	2	01282800	141,20
1"	8	24x19	2	01282802	157,80
1"	9	24x19	2	01282804	174,40
1"	10	24x19	2	01282806	191,00
1"	11	24x19	2	01282808	207,60
1"	12	24x19	2	01282810	224,10
1"	2	3/4" Eurocone	2	01282940	56,15
1"	3	3/4" Eurocone	2	01282942	73,66
1"	4	3/4" Eurocone	2	01282944	91,96
1"	5	3/4" Eurocone	2	01282946	109,10
1"	6	3/4" Eurocone	2	01282948	124,40
1"	7	3/4" Eurocone	2	01282950	143,40
1"	8	3/4" Eurocone	2	01282952	160,30
1"	9	3/4" Eurocone	2	01282954	182,70
1"	10	3/4" Eurocone	2	01282956	200,40
1"	11	3/4" Eurocone	2	01282958	217,90
1"	12	3/4" Eurocone	2	01282960	235,50

Topway S Compact

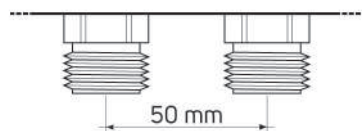


24x19

Topway S Compact - single bar return manifold, with valves, without additional way

Dimension	Ways	Thread	Pcs. pack	Code	Price €
1"	2	24x19	2	01282820	45,50
1"	3	24x19	2	01282822	60,00
1"	4	24x19	2	01282824	74,94
1"	5	24x19	2	01282825	89,21
1"	6	24x19	2	01282828	101,70
1"	7	24x19	2	01282830	117,80
1"	8	24x19	2	01282832	132,10
1"	9	24x19	2	01282834	150,80
1"	10	24x19	2	01282836	165,30
1"	11	24x19	2	01282838	180,00
1"	12	24x19	2	01282840	194,20

Availables on request



24x19

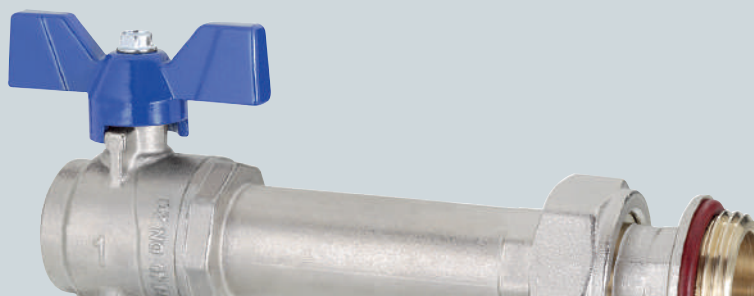
Topway S Compact - single bar flow manifold, with flow meters, without additional way

Dimension	Ways	Thread	Pcs. pack	Code	Price €
1"	2	24x19	2	01282850	49,71
1"	3	24x19	2	01282852	66,29
1"	4	24x19	2	01282854	83,38
1"	5	24x19	2	01282856	99,75
1"	6	24x19	2	01282858	114,30
1"	7	24x19	2	01282860	127,50
1"	8	24x19	2	01282862	138,80
1"	9	24x19	2	01282864	154,60
1"	10	24x19	2	01282866	166,00
1"	11	24x19	2	01282868	177,70
1"	12	24x19	2	01282870	189,20

Availables on request

Accessories for stainless steel manifolds

Ball valves kit for stainless steel manifolds



Technical data

Valve body thread with Female connection: UNI EN 10226-1 (ISO 7-1: 1994)

Male connection valve sleeve thread: UNI EN ISO 228-1

Shank and nut thread: UNI EN ISO 228-1

REDUCED PASSAGE

Flow direction: in both directions

Minimum and maximum working temperature: -20 °C / + 120 °C **

Maximum pressure (T = 120 °C): 10 bar

Nominal pressure (T = 20 °C): PN 40

** In the absence of steam; use with water and glycol mixtures for temperatures below 0 °C

The valves must be used in the fully open or closed position.

Sealing O-Ring

Upper shaft seal O-Ring: VITON 70 Sh A (ASTM D2240)

Lower shaft seal O-Ring: EPDM Peroxide 70 Sh A (ASTM D2240)

Shank O-Ring: Peroxide EPDM 70 Sh A (ASTM D2240)



Right-angle Progress ball valves with pipe union and thermometer

Dimension	Pcs. pack	Code	Price €
1"	1	01306714	93,64

UNI EN ISO 228/1 threads - Reduced pitch (DN 20) - Thermometer scale 0-80 °C
Use the pair of red O-rings for valve installation on steel Topway S manifolds and the pair of black O-rings for valve installation on Topway brass manifolds. Both pairs of O-rings are supplied in the package.



Right-angle Progress ball valves with pipe union

Dimension	Pcs. pack	Code	Price €
1"	1	01306712	72,56

UNI EN ISO 228/1 threads - Reduced pitch (DN 20)
Use the pair of red O-rings for valve installation on steel Topway S manifolds and the pair of black O-rings for valve installation on Topway brass manifolds. Both pairs of O-rings are supplied in the package.



Right-angle Progress ball valve with pipe union and thermometer

Dimension	Pcs. pack	Code	Price €
1"	1	01306858	86,82

UNI EN ISO 228/1 threads - Reduced bore (DN 20) - Thermometer scale 0-80 °C
Use the pair of red O-Rings for valve installation on Topway S steel manifolds, and the pair of black O-Rings for valve installation on Topway brass manifolds. Both pairs of O-Rings are supplied in the package.

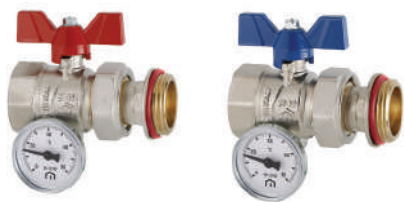


Right-angle Progress ball valve with pipe union

Dimension	Pcs. pack	Code	Price €
1"	1	01306856	67,01

UNI EN ISO 228/1 threads - Reduced passage (DN 20)
Use the pair of red O-Rings for valve installation on Topway S steel manifolds, and the pair of black O-Rings for valve installation on Topway brass manifolds. Both pairs of O-Rings are supplied in the package.

Accessories for stainless steel manifolds



Straight Progress ball valves with pipe union, and thermometer

Dimension	Pcs. pack	Code	Price €
1"	1	01306710	71,42

UNI EN ISO 228/1 threads - Reduced bore (DN 20) - Thermometer scale 0-80 °C
Use the pair of red O-Rings for valve installation on Topway S steel manifolds, and the pair of black O-Rings for valve installation on Topway brass manifolds. Both pairs of O-Rings are supplied in the package.

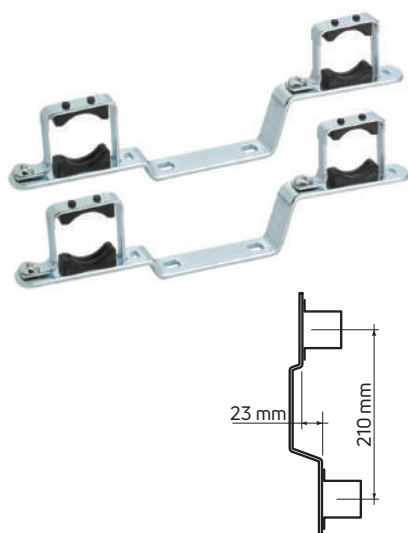


Straight Progress ball valves with pipe union

Dimension	Pcs. pack	Code	Price €
1"	1	01306708	53,68

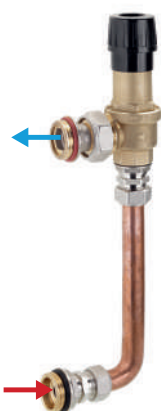
UNI EN ISO 228/1 threads - Reduced passage (DN 20)
Use the pair of red O-Rings for valve installation on Topway S steel manifolds, and the pair of black O-Rings for valve installation on Topway brass manifolds. Both pairs of O-Rings are supplied in the package.

Accessories for stainless steel manifolds



Pair of double metal holder

Dimension	Take off	Pcs. pack	Code	Price €/pair
1"	210 mm	1	01306826	15,33



Terminal kit with by-pass for steel and brass manifolds

Maximum working temperature: 110 °C.

Maximum working pressure: 6 bar.

Dimension	Pcs. pack	Code	Price €
For manifolds size 1" (*)	1	01307010	247,20

Thread UNI EN ISO 228-1

(*) Code 01307010 is equipped with a red O-ring on the upper union, for coupling with Topway S steel manifolds; to use the item in combination with the Topway brass manifolds, replace the red O-ring with the black one supplied in the package.

Dimensions and technical data: see section Technical Attachments.

Accessories for stainless steel manifolds



Extension kit for Topway S manifolds

Dimension	Pcs. pack	Code	Price €
2 ways, 24x19	1	01300012	129,40
3 ways, 24x19	1	01300014	157,10
4 ways, 24x19	1	01300016	185,10

Complete with 2 swivel nipples 1" M-M.

Dimensions: see section Technical Attachments.



Additional way kit for Topway S 1' manifolds

Dimension	Pcs. pack	Code	Price €
1 way, 24x19	1	01300006	49,97

Use the 2 tees supplied in the kit to install the 2 air vent valves and 2 taps supplied with the manifold.

Install the flow meter and valve supplied in the kit on the collector way left free.

Dimensions: see section Technical Attachments.



Splitter fitting

Connection dimension	Pcs. pack	Code	Price €/pc.
24x19	2	01300000	23,97
3/4" Eurocone	2	28130606	23,50

Splitter fitting for manifolds with 24x19 or 3/4" Eurocone outlets, takeoffs 50 mm.

Takeoffs between splitter outlets: 36 mm.

Thread UNI EN ISO 228-1

Dimensions: see section Technical Attachments.



Kit lockshield with incorporated flow meter 0÷4 l/min

Dimension	Pcs. pack	Code	Price €/pc.
0÷4 l/min	4	01306810	10,04



Lockshield / flow meter seat

Dimension	Pcs. pack	Code	Price €/pc.
For manifold 1" - 24x19	4	01306812	4,98
For manifold 1" - 3/4" eurocone	4	01306814	5,85



Tecno-Varia air bleed valve 1/2" with plastic casing

Dimension	Pcs. pack	Code	Price €
1/2"	1	00400020	12,24

Accessories for stainless steel manifolds



Charge and drain valve, nickel-plated with Male 3/4" adjustable connection

Dimension	Pcs. pack	Code	Price €/pc.
1/2"	4	01306824	14,81
1"	2	01300002	24,02



Couple of terminal with manual vent valve and adjustable bibcock

Dimension	Pcs. pack	Code	Price €/couple
1" with O-ring	1	01306158	56,04

Supplied with:

- 1/2" manual vent valve

- 1/2" water bibcock for water charge/drain with adjustable 3/4" connection.

For use on Topway S steel manifolds, replace the black O-Rings with the red ones supplied. It can also be used in combination with Topway manifold (with appropriate black o-rings in the package).



Kit thermostatic shutter

Dimension	Pcs. pack	Code	Price €/pc.
For manifolds 1" - 24x19	4	01306816	8,64
For manifolds 1" - 3/4" Eurocone	4	01306818	10,97



Nickel-plated blind plug

Dimension	Pcs. pack	Code	Price €/pc.
1/2" M with O-ring	30	90004930	2,15
1" M with O-ring	15	90004830	4,35
24 x 19 F blind monoblocco with O-ring	20	01321462	3,38

Thread UNI EN ISO 228-1



Nickel plated reduction

Dimension	Pcs. pack	Code	Price €/pc.
1" M x 3/8" F	15	90005060	6,93
1" M x 1/2" F	15	90004850	6,93
1" M x 3/4" F	15	90006870	4,25

With o-ring

Thread UNI EN ISO 228-1



Nickel-plated nipple, o-ring seal

Dimension	Pcs. pack	Code	Price €/pc.
1" M x 1" M	2	01306872	8,89

With o-ring

Thread UNI EN ISO 228-1



Swivel nipple

Dimension	Pcs. pack	Code	Price €/pc.
1" M x 1" M	2	01307426	18,04

With O-Ring.

Thread EN ISO 228-1

For combination with Topway S steel manifolds, replace the two black O-Rings pre-mounted with the two red O-Rings supplied in the package.



Thermometer Ø 40

Dimension	Pcs. pack	Code	Price €
0-80 °C	1	90006866	8,69

Accessories for stainless steel manifolds



Tee union with pipe union for thermometer

Dimension	Pcs. pack	Code	Price €
24x19	1	90011760	13,08

24 mm gas thread and 19 screw threads for inch.



Hand wheel for manual control

Dimension	Pcs. pack	Code	Price €/pc.
	6	01306112	2,24



Insulating shell for Topway S manifolds

Dimension	Pcs. pack	Code	Price €
1"	1	01306862	35,52

In closed cell cross-linked expanded polyethylene. No. of branch holes: 13, interval 50 mm. To be cut to dimension according to the number of ways of the collector to be insulated.



Pair of insulating shells for right-angle kit valves, with or without thermometer holder, for Topway S manifolds

Dimension	Pcs. pack	Code	Price €/pair
1"	1	01306864	18,28

In closed-cell crosslinked extruded polyethylene.



Pair of insulating shells for straight valve kit, with or without thermometer holder, for Topway S manifolds

Dimension	Pcs. pack	Code	Price €/pair
1"	1	01306866	18,46

In closed-cell crosslinked extruded polyethylene.



Kit expansion vessel for connection to the distribution manifold Topway in boxes Metalbox

Dimension	Pcs. pack	Code	Price €
8 liters	1	07245370	119,60
10 liters	1	07245380	123,80

Complete with:

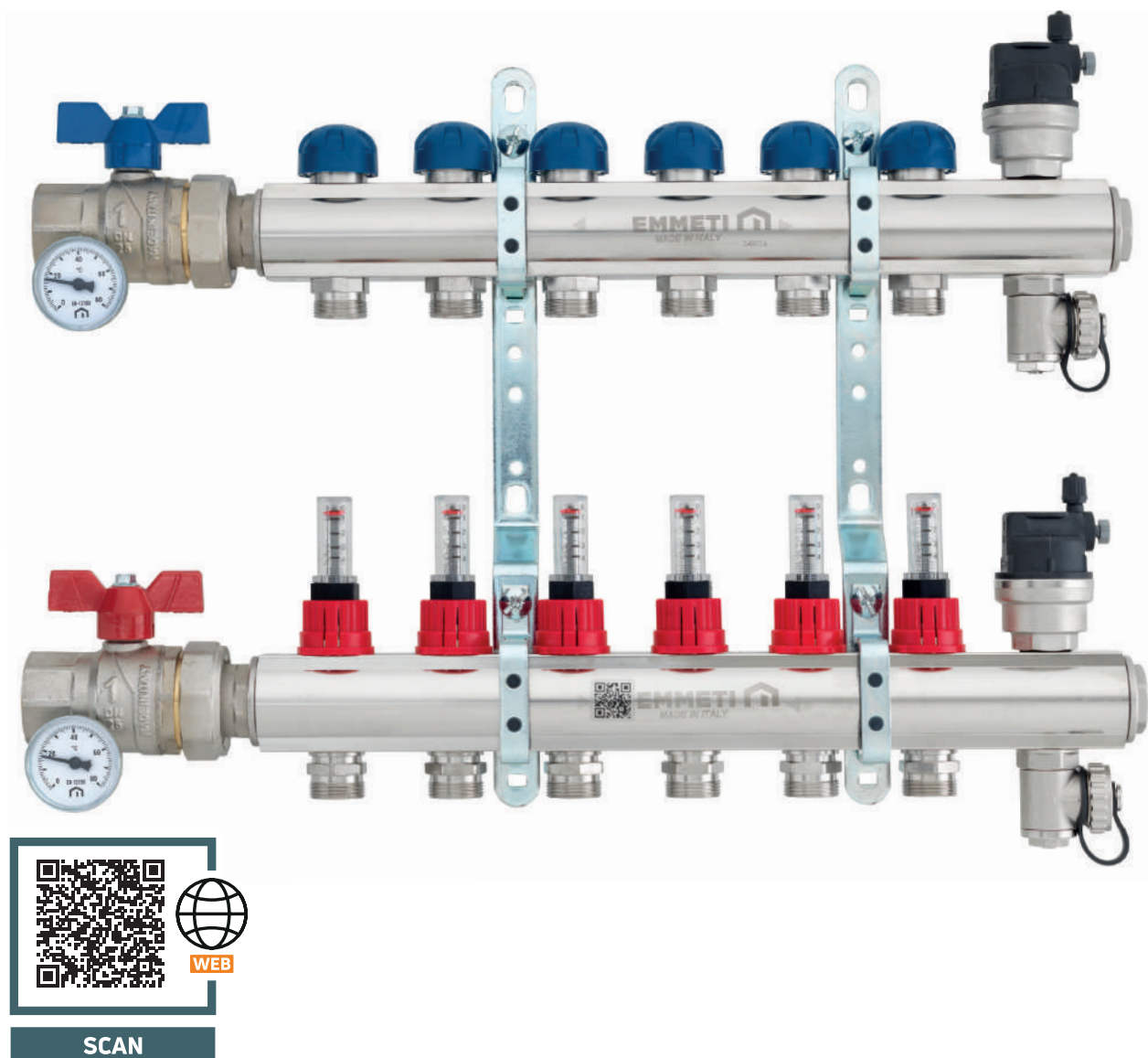
Expansion vessel 8 or 10 liters; mounting plate with screws for installation in box Metalbox; copper pipe Ø 18x1 prepared for connection tap loading / unloading 1/2" diameter copper pipe 10x1 derivation with nut 3/8" connection for expansion vessel; sealing block for copper pipe Ø 18x1; shank 1/2" - 24x19 with o-ring for connection manifold Topway S 1"; gasket 3/8".

Note: Kit expansion vessel 10 liter can only be installed in boxes for partition of 120 mm.

Width 260 mm x height 490 mm

Dimensions: see section Technical Attachments.

Nickel-plated brass distribution manifold



Uses

The Topway bar manifold, with its multitude of components and accessories, is the perfect solution to current system engineering needs. It offers flexible solutions for various system configurations. This manifold makes it possible to set the temperature in any room through the installation of electro-thermal actuators so as to automatically control each circuit using a thermostat. Special attention has been given to speed and ease of installation. All of the parts combine easily with one another. Adjustment and control can be performed with precision using flow rate measurement devices that are already built into the manifold. The performance features of the product, along with its high level of quality, ensured by the materials used and the demanding production controls, make it reliable and functional over time, reducing maintenance and allowing substantial energy savings. Topway distribution manifolds are tested 100% prior to packaging.

Construction

All Topway manifold distribution headers and accessories are nickel plated / brass.
Brass header retrieved through a bar drawing process
TN UNI EN 12168 CW614N.
Seals in EPDM

Technical data

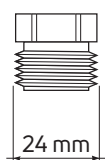
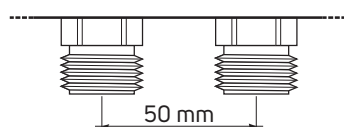
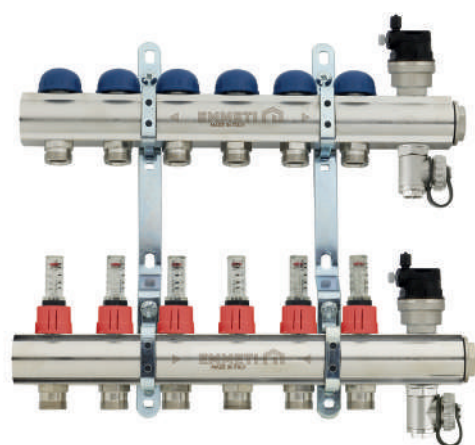
Maximum operating temperature: 90°
Maximum working pressure: 6 bar
Head thread G 3/4" - 1" - 1 1/4"
Outlets thread 24x19 - 3/4" Eurocone

Note: 24x19 thread - 24 mm gas thread and 19 screw threads for inch.
Note: seal on thread of heads ONLY with o-ring.

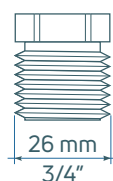
DO NOT USE tapered threads.

Dimensions: see section Technical Attachments.

Nickel-plated brass distribution manifold



24x19



Eurocone

Pre-assembled distribution manifold nickel-plated, 24x19 takeoffs (flow and return) and 3/4" eurocone takeoffs (flow and return)

WITH 0÷4 l/min FLOW-METERS

Supplied together with:

- Lockshields with flow meters included on inlet (0÷4 l/min)
- Manual adjustment valves set up to take thermo-electric heads
- Nr. 2 blanking plugs 1" or 1 1/4" complete with o-ring
- Nr. 2 water drain valves 1/2" with plug
- Nr. 2 Tecno-Varia air vent 1/2" with bleed (lateral + manual)
- Nr. 2 double metal brackets 1" or 1 1/4"

Note:

to be completed with n. 2 Progress ball valves 1" or 1 1/4" with red and blue butterfly handles, with or without thermometer holder and thermometer (not included).

Dimension	Ways	Thread	Pcs. pack	Code	Price €
1"	2+2	24x19	1	01298540	232,80
1"	3+3	24x19	1	01298542	268,80
1"	4+4	24x19	1	01298544	307,50
1"	5+5	24x19	1	01298546	346,70
1"	6+6	24x19	1	01298548	385,70
1"	7+7	24x19	1	01298550	424,60
1"	8+8	24x19	1	01298552	462,90
1"	9+9	24x19	1	01298554	516,30
1"	10+10	24x19	1	01298556	559,40
1"	11+11	24x19	1	01298558	595,40
1"	12+12	24x19	1	01298560	631,60
1 1/4"	4+4	24x19	1	01298424	331,00
1 1/4"	5+5	24x19	1	01298426	374,60
1 1/4"	6+6	24x19	1	01298428	419,00
1 1/4"	7+7	24x19	1	01298430	463,50
1 1/4"	8+8	24x19	1	01298432	506,30
1 1/4"	9+9	24x19	1	01298434	562,10
1 1/4"	10+10	24x19	1	01298436	608,90
1 1/4"	11+11	24x19	1	01298438	650,60
1 1/4"	12+12	24x19	1	01298440	691,90
1" (*)	2+2	3/4" Eurocone	1	01298570	237,00
1" (*)	3+3	3/4" Eurocone	1	01298572	275,00
1" (*)	4+4	3/4" Eurocone	1	01298574	316,00
1" (*)	5+5	3/4" Eurocone	1	01298576	357,10
1" (*)	6+6	3/4" Eurocone	1	01298578	398,00
1" (*)	7+7	3/4" Eurocone	1	01298580	439,50
1" (*)	8+8	3/4" Eurocone	1	01298582	479,50
1" (*)	9+9	3/4" Eurocone	1	01298584	535,20
1" (*)	10+10	3/4" Eurocone	1	01298586	580,30
1" (*)	11+11	3/4" Eurocone	1	01298588	618,40
1" (*)	12+12	3/4" Eurocone	1	01298590	656,50
1 1/4" (*)	6+6	3/4" Eurocone	1	01298458	428,90
1 1/4" (*)	7+7	3/4" Eurocone	1	01298460	473,70
1 1/4" (*)	8+8	3/4" Eurocone	1	01298462	517,70
1 1/4" (*)	9+9	3/4" Eurocone	1	01298464	575,10
1 1/4" (*)	10+10	3/4" Eurocone	1	01298466	624,60
1 1/4" (*)	11+11	3/4" Eurocone	1	01298468	666,40
1 1/4" (*)	12+12	3/4" Eurocone	1	01298470	709,30

Takeoffs 50 mm

(*) Items available on request

Topway Compact

Compact nickel-plated brass distribution manifold



Uses

The Topway bar manifold, with its multitude of components and accessories, is the perfect solution to current system engineering needs. It offers flexible solutions for various system configurations. This manifold makes it possible to set the temperature in any room through the installation of electro-thermal actuators so as to automatically control each circuit using a thermostat.

Special attention has been given to speed and ease of installation. All of the parts combine easily with one another.

Adjustment and control can be performed with precision using flow rate measurement devices that are already built into the manifold. The performance features of the product, along with its high level of quality, ensured by the materials used and the demanding production controls, make it reliable and functional over time, reducing maintenance and allowing substantial energy savings.

Topway distribution manifolds are tested 100% prior to packaging.

Construction

All Topway manifold distribution headers and accessories are nickel plated / brass.

Brass header retrieved through a bar drawing process

TN UNI EN 12168 CW614N.

Seals in EPDM.

Technical data

Maximum operating temperature:

- 90° C with flow meters

- 110 °c with lockshields

Maximum working pressure:

- 6 bar with flow meters

- 10 bar with lockshields

Head thread: G 1"

Outlets thread: 24x19 and 3/4" Eurocone

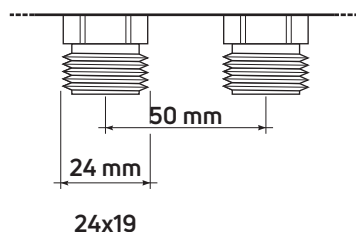
Note: 24x19 thread - 24 mm gas thread and 19 screw threads for inch.

Note: seal on thread of heads ONLY with o-ring.

DO NOT USE tapered threads.

Dimensions: see section Technical Attachments.

Compact nickel-plated brass distribution manifold



Topway Compact - distribution compact manifold nickel-plated with thread 24x19 (flow and return) and flow meters.

Complete with:

Built-in flowmeters (0÷4 l/min)

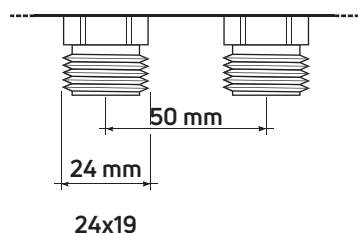
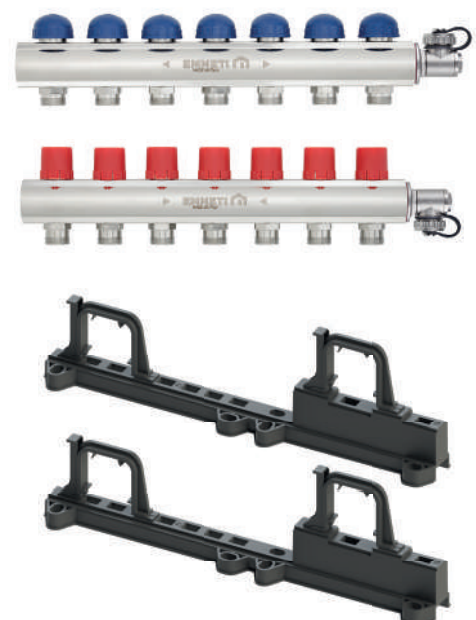
Valves with manual adjustment predisposed for electrothermal heads

Nr. 2 water drain valve 1/2" with plug

Nr. 2 double metal brackets 1"

Note: to be completed with n. 2 Progress ball valves 1" with red and blue butterfly handles, with or without thermometer holder and thermometer (not included).

Dimension	Ways	Thread	Pcs. Pack	Code	Price €
1"	2+2	24x19	1	01290620	154,50
1"	3+3	24x19	1	01290622	183,40
1"	4+4	24x19	1	01290624	218,70
1"	5+5	24x19	1	01290626	256,50
1"	6+6	24x19	1	01290628	294,80
1"	7+7	24x19	1	01290630	332,00
1"	8+8	24x19	1	01290632	372,00
1"	9+9	24x19	1	01290634	409,80
1"	10+10	24x19	1	01290636	462,50
1"	11+11	24x19	1	01290638	505,80
1"	12+12	24x19	1	01290640	541,50



Topway Compact - distribution compact manifold nickel-plated thread 24x19 (flow and return) with lockshields

Complete with:

Regulation lockshields

Manually regulation valves prepared for electro-thermic heads

Nr. 2 water drain valve 1/2" with plug

Nr. 2 supports for installation in metal box or wall

Note: to be completed with n. 2 Progress ball valves 1" with red and blue butterfly handles, with or without thermometer holder and thermometer (not included).

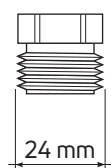
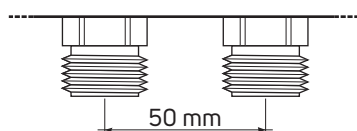
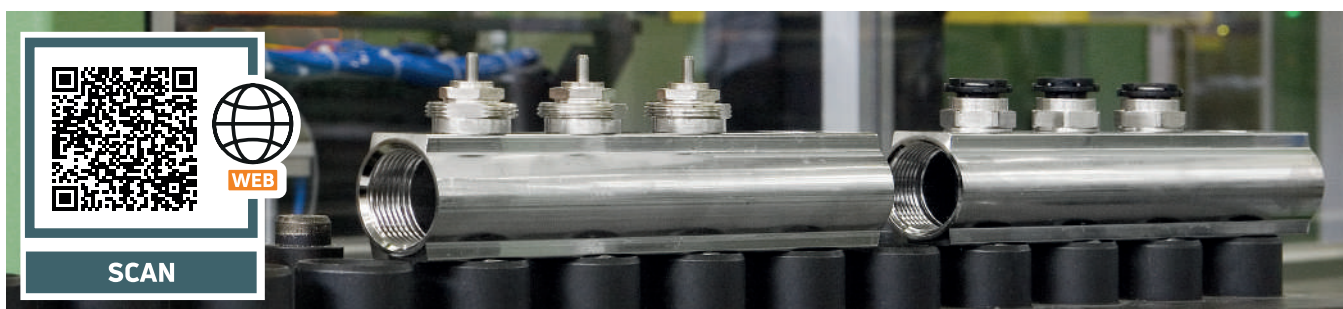
For installation in metal cabinet, for 80 mm brick thickness, insert the collars of the brackets on the B-B references.

Dimension	Ways	Thread	Pcs. pack	Code	Price €
1" (*)	2+2	24x19	1	01297790	195,20
1" (*)	4+4	24x19	1	01297794	258,00
1" (*)	11+11	24x19	1	01297808	499,70

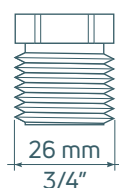
(*) Items to be out of stock

Topway single bars

Single bars brass distribution manifolds



24x19



Eurocone

Topway - 1" and 1 1/4" distribution manifold nickel-plated, 24x19 takeoffs (return) and 3/4" eurocone (return)

Supplied with:

Manual valves with valve-caps, set up to take thermo-electric heads

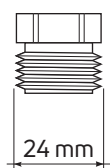
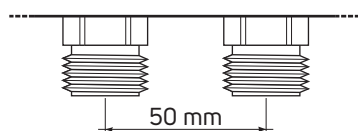
Additional connections 1/2" Female for bleed valve and drain cock

Dimension	Ways	Thread	Pcs. pack	Code	Price €/pc.
1"	2	24x19	2	01293890	64,67
1"	3	24x19	2	01293892	81,64
1"	4	24x19	2	01293894	100,30
1"	5	24x19	2	01293896	117,70
1"	6	24x19	2	01293898	134,50
1"	7	24x19	2	01293900	153,50
1"	8	24x19	2	01293902	170,70
1"	9	24x19	2	01293904	195,10
1"	10	24x19	2	01293906	214,30
1"	11	24x19	2	01293908	231,40
1"	12	24x19	2	01293910	248,40
1 1/4"	4	24x19	2	01294694	115,20
1 1/4"	5	24x19	2	01294696	134,80
1 1/4"	6	24x19	2	01294698	154,20
1 1/4"	7	24x19	2	01294700	175,50
1 1/4"	8	24x19	2	01294702	194,90
1 1/4"	9	24x19	2	01294704	220,50
1 1/4"	10	24x19	2	01294706	241,80
1 1/4"	11	24x19	2	01294708	261,10
1 1/4"	12	24x19	2	01294710	280,70
1" (*)	3	3/4" Eurocone	2	01293922	85,11
1" (*)	4	3/4" Eurocone	2	01293924	104,90
1" (*)	5	3/4" Eurocone	2	01293926	123,50
1" (*)	7	3/4" Eurocone	2	01293930	161,70
1" (*)	8	3/4" Eurocone	2	01293932	179,90
1" (*)	9	3/4" Eurocone	2	01293934	205,50
1" (*)	10	3/4" Eurocone	2	01293936	225,90
1" (*)	11	3/4" Eurocone	2	01293938	244,00
1" (*)	12	3/4" Eurocone	2	01293940	262,20

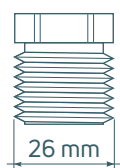
(*) Items to be out of stock

Dimensions: see section Technical Attachments.

Single bars brass distribution manifolds



24x19



Eurocone

Topway - 1" and 1 1/4" flow manifold nickel-plated, with lockshields 24x19 takeoffs (flow) and 3/4" eurocone takeoffs (flow)

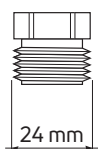
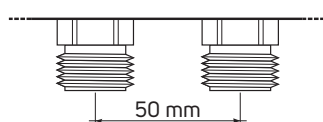
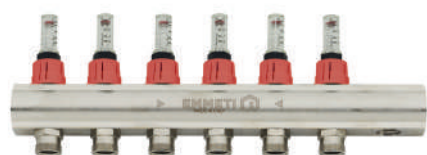
Supplied with: double-adjustable lockshields

Additional connections 1/2" Female for drain valve and air vent

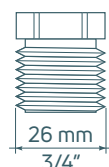
Dimension	Ways	Thread	Pcs. pack	Code	Price €/pc.
1"	2	24x19	2	01298620	68,24
1"	3	24x19	2	01298622	85,27
1"	4	24x19	2	01298624	104,20
1"	5	24x19	2	01298626	121,80
1"	6	24x19	2	01298628	138,80
1"	7	24x19	2	01298630	157,80
1"	8	24x19	2	01298632	174,90
1"	9	24x19	2	01298634	199,70
1"	10	24x19	2	01298636	218,80
1"	11	24x19	2	01298638	236,20
1"	12	24x19	2	01298640	253,50
1 1/4"	4	24x19	2	01298864	119,70
1 1/4"	5	24x19	2	01298866	139,20
1 1/4"	6	24x19	2	01298868	159,40
1 1/4"	7	24x19	2	01298870	181,20
1 1/4"	8	24x19	2	01298872	200,80
1 1/4"	9	24x19	2	01298874	226,80
1 1/4"	10	24x19	2	01298876	248,80
1 1/4"	11	24x19	2	01298878	268,20
1 1/4"	12	24x19	2	01298880	288,00

It is possible to convert the holder into a flow meter using the special flow meter kit.

Dimensions: see section Technical Attachments.



24x19



Eurocone

Topway - 1" and 1 1/4" flow manifold nickel-plated, with lockshields with flow meters, 24x19 takeoffs (flow) and 3/4" eurocone (flow)

Supplied with: lockshields with flow meters (0÷4 l/min)

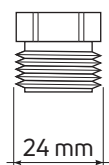
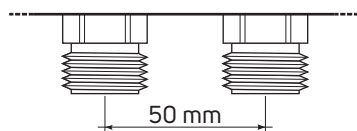
Additional connections 1/2" Female for drain valve and air vent

Dimension	Ways	Thread	Pcs. pack	Code	Price €/pc.
1"	2	24x19	2	01298120	71,17
1"	3	24x19	2	01298122	91,23
1"	4	24x19	2	01298124	113,00
1"	5	24x19	2	01298126	133,50
1"	6	24x19	2	01298128	153,20
1"	7	24x19	2	01298130	175,40
1"	8	24x19	2	01298132	195,40
1"	9	24x19	2	01298134	223,00
1"	10	24x19	2	01298136	245,30
1"	11	24x19	2	01298138	265,40
1"	12	24x19	2	01298140	285,40
1 1/4"	4	24x19	2	01298364	128,40
1 1/4"	5	24x19	2	01298366	151,40
1 1/4"	6	24x19	2	01298368	174,00
1 1/4"	7	24x19	2	01298370	198,70
1 1/4"	8	24x19	2	01298372	220,90
1 1/4"	9	24x19	2	01298374	250,10
1 1/4"	10	24x19	2	01298376	274,90
1 1/4"	11	24x19	2	01298378	297,40
1 1/4"	12	24x19	2	01298380	320,10
1" (*)	2	3/4" Eurocone	2	01298150	72,86
1" (*)	3	3/4" Eurocone	2	01298152	93,99
1" (*)	4	3/4" Eurocone	2	01298154	116,80
1" (*)	6	3/4" Eurocone	2	01298158	158,90
1" (*)	7	3/4" Eurocone	2	01298160	182,00
1" (*)	8	3/4" Eurocone	2	01298162	203,00
1" (*)	9	3/4" Eurocone	2	01298164	231,40
1" (*)	10	3/4" Eurocone	2	01298166	254,60
1" (*)	11	3/4" Eurocone	2	01298168	275,70
1" (*)	12	3/4" Eurocone	2	01298170	296,70

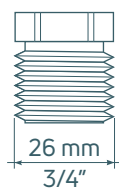
(*) Items to be out of stock

Dimensions: see section Technical Attachments.

Single bars brass distribution manifolds



24x19

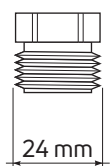
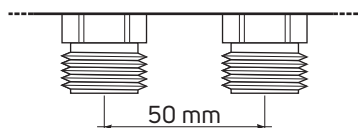


Eurocone

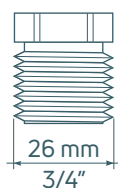
Topway - 1" distribution manifold nickel-plated, 24x19 takeoffs (return) and 3/4" eurocone (return), without additional way

Supplied with manual valves with valve-caps, set up to take thermo-electric heads

Dimension	Ways	Thread	Pcs. pack	Code	Price €/pc.
1"	2	24x19	2	01294130	62,58
1"	3	24x19	2	01294132	79,58
1"	4	24x19	2	01294134	96,54
1"	5	24x19	2	01294136	115,30
1"	6	24x19	2	01294138	132,60
1"	7	24x19	2	01294140	149,50
1"	8	24x19	2	01294142	168,60
1"	9	24x19	2	01294144	185,50
1"	10	24x19	2	01294146	210,10
1"	11	24x19	2	01294148	229,20
1"	12	24x19	2	01294150	246,10



24x19



Eurocone

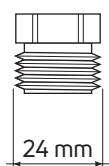
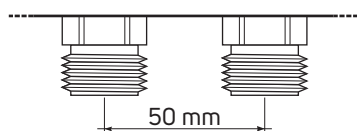
Topway - 1" flow manifold nickel-plated, with lockshields 24x19 takeoffs (flow) and 3/4" eurocone takeoffs (flow), without additional way

Supplied with double-adjustable lockshields

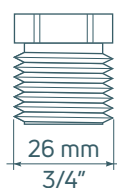
Dimension	Ways	Thread	Pcs. pack	Code	Price €/pc.
1"	2	24x19	2	01298800	66,16
1"	3	24x19	2	01298802	83,16
1"	4	24x19	2	01298804	100,50
1"	5	24x19	2	01298806	119,40
1"	6	24x19	2	01298808	136,90
1"	7	24x19	2	01298810	153,60
1"	8	24x19	2	01298812	172,70
1"	9	24x19	2	01298814	190,00
1"	10	24x19	2	01298816	214,70
1"	11	24x19	2	01298818	234,00
1"	12	24x19	2	01298820	251,20

It is also possible to insert the flow meter cartridge into the new lockshield

Single bars brass distribution manifolds



24x19



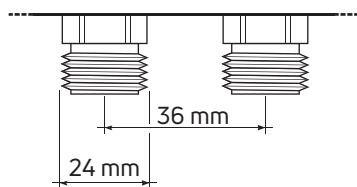
Eurocone

Topway - 1" flow manifold nickel-plated, with lockshields with flow meters, 24x19 takeoffs (flow) and 3/4" eurocone (flow), without additional way

Supplied with:

Lockshields with flow meters (0÷4 l/min)

Dimension	Ways	Thread	Pcs. pack	Code	Price €
1"	2	24x19	2	01298480	69,07
1"	3	24x19	2	01298482	89,13
1"	4	24x19	2	01298484	109,10
1"	5	24x19	2	01298486	130,90
1"	6	24x19	2	01298488	151,40
1"	7	24x19	2	01298490	171,30
1"	8	24x19	2	01298492	193,30
1"	9	24x19	2	01298494	213,30
1"	10	24x19	2	01298496	241,10
1"	11	24x19	2	01298498	263,30
1"	12	24x19	2	01298500	283,20



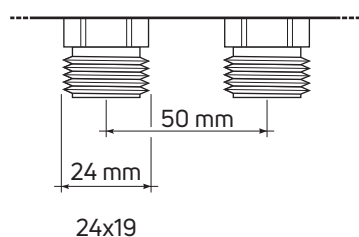
24x19

Topway - 3/4" distribution manifold nickel-plated, complete with 24x19 takeoffs connections

Supplied with hole 1/2" Female on upper side bleed valve

Dimension	Ways	Pcs. pack	Code	Price €
3/4"	2	4	01293260	28,04
3/4"	3	4	01293262	37,41
3/4"	4	4	01293264	46,84
3/4"	5	4	01293266	56,63
3/4"	6	4	01293268	65,96
3/4"	7	4	01293270	75,27
3/4"	8	4	01293272	85,29
3/4"	9	4	01293274	94,38
3/4"	10	4	01293276	101,00
3/4"	11	4	01293278	109,80
3/4"	12	4	01293280	118,20

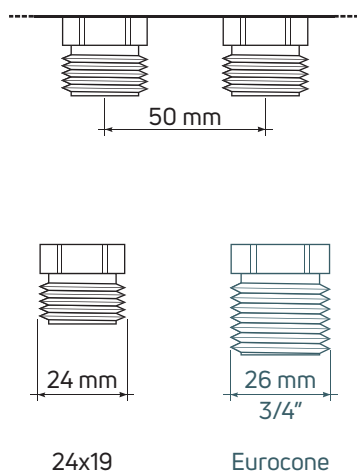
Single bars brass distribution manifolds



Topway - 3/4" distribution manifold nickel-plated, complete with 24x19 takeoffs connections

Supplied with hole 1/2" Female on upper side for bleed valve

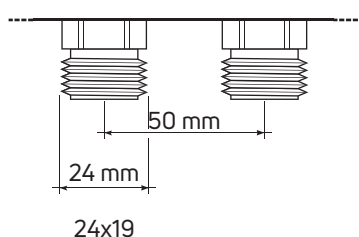
Dimension	Ways	Pcs. pack	Code	Price €
3/4"	2	4	01293290	32,92
3/4"	3	4	01293292	43,78
3/4"	4	4	01293294	57,47
3/4"	5	4	01293296	67,85
3/4"	6	4	01293298	83,02
3/4"	7	4	01293300	95,34
3/4"	8	4	01293302	107,90
3/4"	9	4	01293304	116,70
3/4"	10	4	01293306	133,90
3/4"	11	4	01293308	146,80
3/4"	12	4	01293310	160,10



Topway - 1" distribution manifold nickel-plated, complete with 24x19 takeoffs connection and 3/4" eurocone takeoffs (flow)

Supplied with hole 1/2" Female on upper side for bleed valve

Dimension	Ways	Thread	Pcs. pack	Code	Price €
1"	2	24x19	4	01293830	33,17
1"	3	24x19	4	01293832	48,94
1"	4	24x19	4	01293834	63,42
1"	5	24x19	4	01293836	75,31
1"	6	24x19	4	01293838	87,17
1"	7	24x19	4	01293840	101,80
1"	8	24x19	4	01293842	114,90
1"	9	24x19	4	01293844	130,40
1"	10	24x19	4	01293846	146,90
1"	11	24x19	4	01293848	163,20
1"	12	24x19	4	01293850	174,20
1"	2	3/4" Eurocone	4	01293860	36,55
1"	3	3/4" Eurocone	4	01293862	47,40
1"	4	3/4" Eurocone	4	01293864	63,31
1"	5	3/4" Eurocone	4	01293866	79,02
1"	6	3/4" Eurocone	4	01293868	89,05
1"	7	3/4" Eurocone	4	01293870	106,00
1"	8	3/4" Eurocone	4	01293872	120,60
1"	9	3/4" Eurocone	4	01293874	134,40
1"	10	3/4" Eurocone	4	01293876	156,40
1"	11	3/4" Eurocone	4	01293878	171,40
1"	12	3/4" Eurocone	4	01293880	186,80



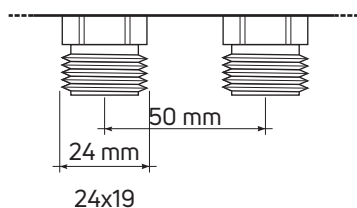
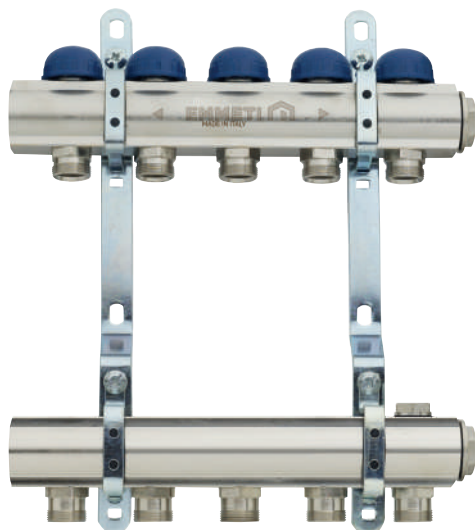
1 1/4" distribution bar manifold nickel-plated, complete with 24x19 takeoffs connections

Supplied with hole 1/2" Female on upper side for bleed valve

Dimension	Ways	Pcs. pack	Code	Price €
1 1/4"	4	2	01294634	78,80
1 1/4"	5	2	01294636	96,68
1 1/4"	6	2	01294638	103,20
1 1/4"	7	2	01294640	117,60
1 1/4"	8	2	01294642	146,60
1 1/4"	9	2	01294644	156,60
1 1/4"	10	2	01294646	168,60
1 1/4"	11	2	01294648	192,60
1 1/4"	12	2	01294650	209,40

Topway R

Nickel-plated brass distribution manifold



Topway R - pre-assembled distribution manifold nickel-plated, 24x19 takeoffs (flow and return), indicated for hydronic distribution of radiators and fan coils

Supplied together with:

Manual adjustment valves set up to take thermo-electric heads.

nr. 2 blind nipples 1" complete with o-ring.

nr. 2 supports dual size 1".

Note:

Nr. 2 Progress ball valves 1" with red and blue butterfly handles, with or without thermometer holder, are supplied optionally.

Dimension	Ways	Thread	Pcs. pack	Code	Price €
1"	2+2	24x19	1	01297850	139,50
1"	3+3	24x19	1	01297852	169,20
1"	4+4	24x19	1	01297854	199,70
1"	5+5	24x19	1	01297856	229,50
1"	6+6	24x19	1	01297858	260,50
1"	7+7	24x19	1	01297860	292,10
1"	8+8	24x19	1	01297862	323,90
1"	9+9	24x19	1	01297864	352,70
1"	10+10	24x19	1	01297866	398,00
1"	11+11	24x19	1	01297868	432,10
1"	12+12	24x19	1	01297870	464,80
1" 1/4	4+4	24x19	1	01285094	230,50
1" 1/4	5+5	24x19	1	01285096	263,90
1" 1/4	6+6	24x19	1	01285098	299,20
1" 1/4	7+7	24x19	1	01285100	334,10
1" 1/4	8+8	24x19	1	01285102	369,40
1" 1/4	9+9	24x19	1	01285104	402,80
1" 1/4	10+10	24x19	1	01285106	447,30
1" 1/4	11+11	24x19	1	01285108	487,10
1" 1/4	12+12	24x19	1	01285110	521,30

Takeoff: 50 mm

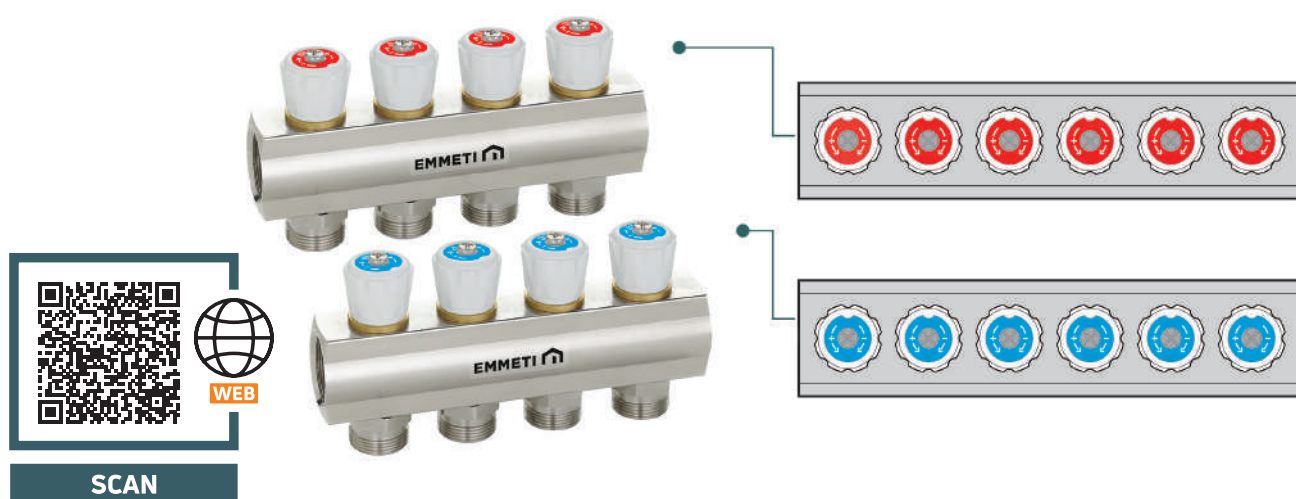
Dimensions: see section Technical Attachments.



SCAN

Topway M

Nickel-plated brass distribution manifold with bibcocks



Applications

The Topway M manifold is used in closed circuit heating systems for the distribution of radiators, convectors, fan coils, adopting the Emmeti sealing systems with 24x19 thread, inserted in the appropriate box for Termobox manifolds.

Construction

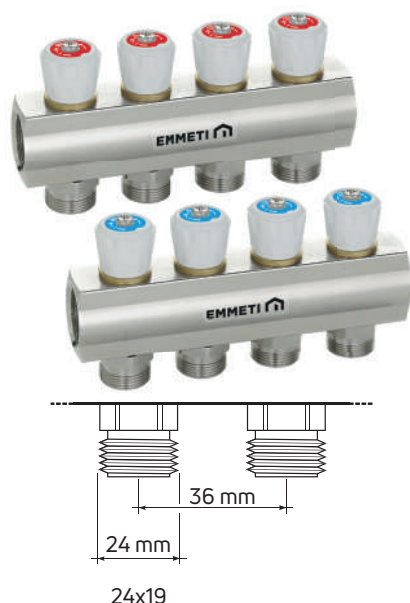
Brass header retrieved through a bar drawing process
TN UNI EN 12168 CW614N
Head threads Female - Female UNI EN ISO 228-1 (G 3/4)
Threads side streets Gas 24x19, of 24 mm diameter and 19 threads per inch
ABS white colour knobs
Gasket in NBR
Plate indicating the support services
Takeoffs 36 mm centers

Technical data

Maximum operating pressure: 10 bar
Maximum operating temperature: 110 °C
Note: seals on head thread ONLY with o-ring
DO NOT USE tapered threads

Note: not suitable for the way regulating, only open or closed

Dimensions: see section Technical Attachments.



Topway M - Nickel-plated brass distribution manifold, with stopcocks

Dimension	Ways	Thread	Pcs. pack	Code	Price €/pc.
3/4"	4	24x19	2	01282114	77,49
3/4"	5	24x19	2	01282116	92,32
3/4"	6	24x19	2	01282118	112,40

Takeoff 36 mm

Accessories for brass manifolds

Ball valves kit for brass manifolds



Technical data

Valve body thread with Female connection: UNI EN 10226-1 (ISO 7-1: 1994)

Male connection valve sleeve thread: UNI EN ISO 228-1

Shank and nut thread: UNI EN ISO 228-1

FULL PASSAGE

Flow direction: in both directions

Minimum and maximum working temperature: -20 °C / + 120 °C **

Maximum pressure (T = 120 °C): 10 bar

Nominal pressure (T = 20 °C): PN 40

** In the absence of steam; use with water and glycol mixtures for temperatures below 0 °C

The valves must be used in the fully open or closed position.

Sealing O-Ring

Upper shaft seal O-Ring: VITON 70 Sh A (ASTM D2240)

Lower shaft seal O-Ring: EPDM Peroxide 70 Sh A (ASTM D2240)

Shank O-Ring: Peroxide EPDM 70 Sh A (ASTM D2240)



Right-angle Progress ball valves with thermometers and pipe unions

Dimension	Pcs. pack	Code	Price €
1"	1	01306264	115,30

Thermometer scale: 0 - 80 °C

It can also be used in combination with steel Topway S manifold replacing black O-rings with the red ones supplied in the package.



Right-angle Progress ball valves with pipe union for thermometer and thermometers

Dimension	Pcs. pack	Code	Price €
1"1/4	1	01306136	195,90

Thermometer scale: 0 - 80 °C.



Right-angle Progress ball valves with pipe union

Dimension	Pcs. pack	Code	Price €
3/4"	1	01306180	67,27
1" (*)	1	01306266	96,58
1"1/4	1	01306184	161,20

(*) It can also be used in combination with steel Topway S manifold replacing black O-rings with the red ones supplied in the package.



Straight Progress ball valve with thermometers and pipe unions

Dimension	Pcs. pack	Code	Price €
1"	1	01306260	105,00

Thermometer scale: 0 - 80 °C

It can also be used in combination with steel Topway S manifold replacing black O-rings with the red ones supplied in the package.

Accessories for brass manifolds



Straight Progress ball valves with pipe union for thermometer and thermometers

Dimension	Pcs. pack	Code	Price €
1"1/4	1	01306132	161,60

Thermometer scale: 0 - 80 °C

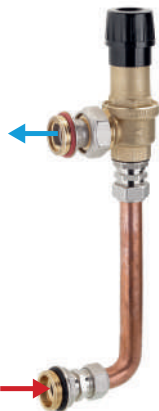


Straight Progress ball valves with pipe union

Dimension	Pcs. pack	Code	Price €
3/4"	1	01306140	61,35
1" (*)	1	01306262	88,41
1"1/4	1	01306144	135,30

(*) It can also be used in combination with steel Topway S manifold replacing black O-rings with the red ones supplied in the package.

Accessories for brass manifolds



Terminal kit with by-pass for steel and brass manifolds

Maximum working temperature: 110 °C.

Maximum working pressure: 6 bar.

Dimension	Pcs. pack	Code	Price €
For manifolds size 1" (*)	1	01307010	247,20
For manifolds size 1"1/4	1	01307012	250,20

Thread UNI EN ISO 228

(*) Code 01307010 is equipped with a red O-ring on the upper union, for coupling with Topway S steel manifolds; to use the item in combination with the Topway brass manifolds, replace the red O-ring with the black one supplied in the package.

Dimensions and technical data: see section Technical Attachments.



Extension kit for Topway manifolds 1"

Dimension	Pcs. pack	Code	Price €
2 ways, 24x19	1	01292316	163,10
3 ways, 24x19	1	01292318	196,60
4 ways, 24x19	1	01292320	232,90

Complete with No. 2 1" M-M swivel nipples.

Dimensions: see section technical attachments



Additional way kit for Topway manifolds

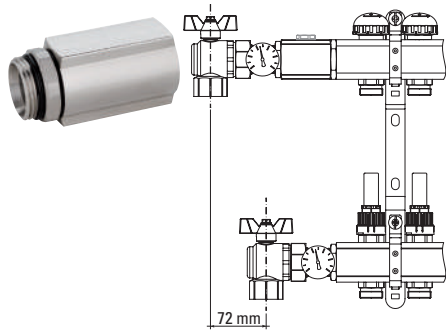
Dimension	Pcs. pack	Code	Price €
For Topway manifolds 1", 24x19	1	01300018	48,89
For Topway manifolds 1"1/4, 24x19	1	01300020	63,91

Use the 2 Tee fittings provided in the kit to install the 2 air release valves and 2 taps supplied with the manifold.

Install the flow meter and valve provided in the kit on the manifold way left free.

Dimensions: see section technical attachments

Accessories for brass manifolds



Extension kit for Topway manifolds

The extension kit for Topway collectors is combined with the Progress angle valve kit in order to create a distance between the delivery and return tubes, to have more space available both during installation as well as when manoeuvring (see diagram).

Dimension	Pcs. pack	Code	Price €
M-F 1"	1	01306254	26,21
M-F 1 1/4"	1	01306256	39,97

Thread UNI EN ISO 228-1



Splitter fitting

Connection Dimension	Pcs. pack	Code	Price €/pc.
24x19	2	01300000	23,97
3/4" Eurocone	2	28130606	23,50

Splitter fitting for manifolds with 24x19 or 3/4" Eurocone outlets, takeoffs 50 mm.

Takeoffs between splitter outlets: 36 mm.

Thread UNI EN ISO 228-1

Dimensions: see section Technical Attachments.



Pack with red bands to lock regulator

Dimension	Pcs. pack	Code	Price €/pack
1" - 1 1/4"	12	01306320	14,58

With labels for identify circuits



Varia air bleed valve 1/2" nickel-plated

Dimension	Pcs. pack	Code	Price €/pc.
1/2"	12	00400662	12,46

Thread UNI EN ISO 228-1



Tecno-Varia air bleed valve 1/2" with plastic casing

Dimension	Pcs. pack	Code	Price €/pc.
1/2"	12	00400004	10,25

Thread UNI EN ISO 228-1



Drain valve nickel-plated

Dimension	Pcs. pack	Code	Price €/pc.
1/2"	1	90011750	8,69

Thread UNI EN ISO 228-1



Charge and drain valve, nickel-plated with Male 3/4" adjustable connection

Dimension	Pcs. pack	Code	Price €/pc.
1/2"	4	01306824	14,81
1"	2	01300002	24,02

Accessories for brass manifolds



Couple of T-terminal with adjustable drain valve and manual vent valve

Dimension	Pcs. pack	Code	Price €/couple
1"	1	01306158	56,04

With O-ring.
Complete with 1/2" manual air vent valve and 1/2" water fill / drain tap with adjustable 3/4" connection.
Thread UNI EN ISO 228-1

Dimensions: see section technical attachments



Kit thermostatic shutter for 24x19

Dimension	Pcs. pack	Code	Price €/pc.
For manifold 1"	4	01306114	8,69
For manifold 1"1/4	4	01306118	10,94



Kit thermostatic shutter for 3/4" Eurocone

Dimension	Pcs. pack	Code	Price €/pc.
For manifold 1"	4	01306290	11,10
For manifold 1"1/4	4	01306292	13,08



Blue cap for valves

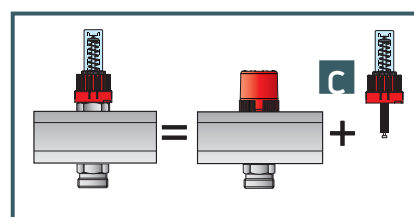
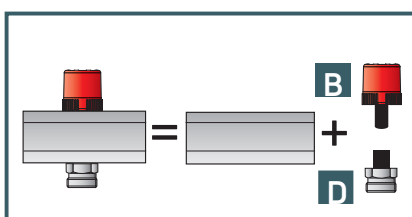
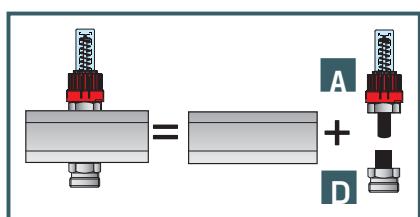
Dimension	Pcs. pack	Code	Price €/pc.
	1	90067510	0,48



Red cap for manifolds

Dimension	Pcs. pack	Code	Price €/pc.
	1	90023360	0,58

Instructions for the selection of lockshields/flow meter with a capacity on the basis of the manifold installed



Kit lockshield with incorporated flow meter 0÷4 L/min

Dimension	Pcs. pack	Code	Price €/pc.
0÷4 L/min	4	01306302	10,23



Kit lockshield

Dimension	Pcs. pack	Code	Price €/pc.
	4	01306300	7,36

Accessories for brass manifolds

C



Kit flow meter

Dimension	Pcs. pack	Code	Price €/pc.
0÷2,5 l/min (*)	4	01306828	6,12
0÷4 l/min (*)	4	01306830	5,17
0÷6 l/min (*)	4	01306832	5,19

(*) For manifolds produced from the 31st week of 2017

D



Lockshield / flow meter seat

Dimension	Pcs. pack	Code	Price €/pc.
For manifold 1" - 24x19	4	01306312	4,45
For manifold 1" - 3/4" eurocone	4	01306314	5,41
For manifold 1 1/4" - 24x19	4	01306316	5,23
For manifold 1 1/4" - 3/4" eurocone	4	01306318	5,65



Nickel-plated blind plug

Dimension	Pcs. pack	Code	Price €/pc.
1/2" M with O-ring	30	90004930	2,15
3/4" M with O-ring	30	90004820	2,97
1" M with O-ring	15	90004830	4,35
1 1/4" M with O-ring	10	90005070	6,93
3/4" F	30	01291536	2,84
1" F	15	01291538	4,35
24 x 19 F blind monoblocco with O-ring	20	01321462	3,38

Thread UNI EN ISO 228-1



Nickel plated reduction

Dimension	Pcs. pack	Code	Price €/pc.
3/4" M x 3/8" F	30	90005050	2,97
3/4" M x 1/2" F	30	90004840	3,14
1" M x 3/8" F	15	90005060	6,93
1" M x 1/2" F	15	90004850	6,93
1" M x 3/4" F	15	90006870	4,25
1 1/4" M x 1/2" F	10	90005080	8,69
1 1/4" M x 1" F	10	90005084	7,01

With o-ring.
Thread UNI EN ISO 228-1



Key for nipples CH 37 - 48

Dimension	Pcs. pack	Code	Price €
	1	01306044	13,36



Nickel-plated nipple, O-Ring seal

Dimension	Pcs. pack	Code	Price €/pc.
1" M x 1" M	2	01306872	8,89
1 1/4" M x 1 1/4" M	2	01306874	15,75

With o-ring.
Thread UNI EN ISO 228-1

Accessories for brass manifolds



Swivel nipple

Dimension	Pcs. pack	Code	Price €/pc.
1" M x 1" M ⁽¹⁾	2	01307426	18,04
1"1/4 M x 1"1/4 M	2	01306430	32,68
1" M x 1" F (*)	6	01306428	17,49
1"1/4 M x 1" M ⁽²⁾	2	01306432	21,98
3/4" M x 3/4" M	2	01306434	19,60

Thread UNI EN ISO 228-1

⁽¹⁾ For coupling to Topway brass manifolds use the two black O-Rings preassembled as standard. For coupling to Topway S steel manifolds replace the two black O-Rings with the two red O-Rings supplied as standard.

⁽²⁾ Reduction

(*) Item to be out of stock



Thermometer Ø 40

Dimension	Pcs. pack	Code	Price €
0-80 °C	1	90006866	8,69



Tee union with pipe union for thermometer

Dimension	Pcs. pack	Code	Price €
24x19	1	90011760	13,08

24 mm gas thread and 19 screw threads for inch.



Hand wheel for manual control

Dimension	Pcs. pack	Code	Price €/pc.
	6	01306112	2,24



Pair of single metal holder

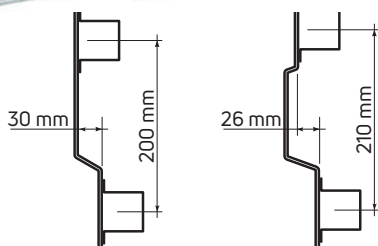
Dimension	Pcs. pack	Code	Price €/pair
3/4"	1	90011500	8,69
1"	1	90011510	9,60
1"1/4	1	90011520	11,08



Pair of double metal holder

Dimension	Take off	Pcs. pack	Code	Price €/pair
3/4"	200 mm	1	90011530	16,08
1"	200 mm	1	90011540	16,08
1"1/4	200 mm	1	90011550	16,08
3/4" (*)	210 mm	1	90011560	16,00
1" (*)	210 mm	1	90011570	16,00
1"1/4 (*)	210 mm	1	90011580	16,08

(*) For wall fixing



Accessories for brass manifolds



Insulating shells with metal adjustable holders for Topway manifolds

Dimension	Pcs. pack	Code	Price €
1"	1	90062280	37,66

In extruded polyethylene. No. of branch holes: 13, interval 50 mm.

To be cut to size according to the number of ways of the collector to be insulated.



Insulating shells for Topway manifolds with metal brackets

Dimension	Pcs. pack	Code	Price €
1 1/4"	1	01306502	43,52

In extruded polyethylene. No. of branch holes: 12, interval 50 mm.

To be cut to size according to the number of ways of the collector to be insulated.



Kit expansion vessel for connection to the distribution manifold Topway in boxes Metalbox

Dimension	Pcs. pack	Code	Price €
8 liters	1	07245370	119,60
10 liters	1	07245380	123,80

Complete with:

Expansion vessel 8 or 10 liters; mounting plate with screws for installation in box Metalbox; copper pipe Ø 18x1 prepared for connection tap loading / unloading 1/2" diameter copper pipe 10x1 derivation with nut 3/8" connection for expansion vessel; sealing block for copper pipe Ø 18x1; shank 1/2" - 24x19 with o-ring for connection manifold Topway 1" or 1 1/4"; gasket 3/8".

Note: Kit expansion vessel 10 liter can only be installed in boxes for partition of 120 mm. Width 260 mm x height 490 mm

Dimensions: see section Technical Attachments.

Control T

Electro-thermic head



Construction

- 1 Polycarbonate case
- 2 Stainless steel spring
- 3 Indicator PPA (35% FV)
- 4 Steel radial stop ring
- 5 Shutter support in polycarbonate
- 6 Polycarbonate base
- 7 Ring nut M30x1.5 in PA 66 (50% FV) or in nickel-plated UNI EN 12164 CW614N brass
- 8 PVC cable
- 9 Microswitch 1A 250 V
- 10 Wax expansion electrothermal actuator

Dimensions: see section Technical Attachments.



Control T - Electro-thermic head normally closed

The valve opens upon receiving the command from the thermostat or any similar control device - Absorption 3,45 VA (230 V) 3 VA (24 V) - Protection: IP 40 (IP 44 vertical position) - Cable length: 1 m - Breakaway current: 0,35 A (model 24 V) - 0,25 A (model 230 V) - Closing/opening time: 5-6 min

Dimension	Ring nut	Pcs. pack	Code	Price €
230 V (AC/DC)	Plastic ring nut	1	01213242	25,04
24 V (AC/DC)	Plastic ring nut	1	01213202	25,34
230 V (AC/DC)	Metal ring nut	1	01213245	25,71

Note: The electro-thermic heads can be used in conjunction with: Topway and Topway S bar manifolds with valves, Thermostatic Tris 3 valves, Full and Poker thermostatic and thermostatzables valves. For the use with differents type of Emmeti manifold, it can be necessary the adaptor code 90039364.



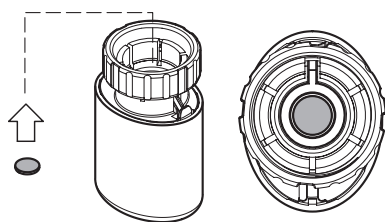
Control T - Electro-thermic head normally closed with end switch (1 A 250 V)

The valve opens upon receiving the command from the thermostat or any similar control device - Absorption 3,45 VA (230 V) 3 VA (24 V) - Protection IP 40 (IP 44 vertical position) - Cable length: 1 m - End switch: 1 A 250 V - Breakaway current: 0,35 A (model 24 V) - 0,25 A (model 230 V) - Closing/opening time: 5-6 min

Dimension	Ring nut	Pcs. pack	Code	Price €
230 V (AC/DC) with micro	Plastic ring nut	1	01213252	30,32
24 V (AC/DC) with micro	Plastic ring nut	1	01213212	30,64
230 V (AC/DC) with micro	Metal ring nut	1	01213255	31,01

Note: The electro-thermic heads can be used in conjunction with: Topway and Topway S bar manifolds with valves, Thermostatic Tris 3 valves, Full and Poker thermostatic and thermostatzables valves. For the use with differents type of Emmeti manifold, it can be necessary the adaptor code 90039364.

Electro-thermic head



Adapter for Control T - electro-thermic heads

Dimension	Pcs. pack	Code	Price €/pc.
	12	90039364	3,14

Apply in the case of incomplete closure on manifolds not produced by Emmeti.



Control T - Electro-thermic head normally open

The valve closes upon receiving the command from the thermostat or any similar control device - Absorption - protection 3,45 VA (230 V) 3 VA (24 V) - Protection: IP 40 (IP 44 vertical position) - Cable length: 1 m - Breakaway current: 0,35 A (model 24 V) - 0,25 A (model 230 V) - Closing/opening time: 5-6 min

Dimension	Pcs. pack	Code	Price €
230 V (AC/DC)	1	01213280	24,38
24 V (AC/DC)	1	01213260	24,69

Note: The electro-thermic heads can be used in conjunction with: Topway and Topway S bar manifolds with valves, Thermostatic Tris 3 valves, Full and Poker thermostatic and thermostatisable valves.

Electronic system for electro-thermic actuators



Basic wiring box 6T

Electronic system for electrothermal heads, comprised of a basic junction box and additional extension;

Power supply 230 V or 24 V;

Direct power supply to the normally closed electrothermal heads (at the same power supply voltage as the junction box);

Direct connection to the environment thermostats (at the same power supply voltage as the junction box);

Connection of up to six electrothermal heads (configured at high or low temperature);

Connection of up to six environment thermostats;

Connection for low temperature circulating pump;

Connection for heat source activation;

Adjustable safety thermostat (30÷60 °C);

Safety thermostat contact;

Circulating pump anti-blocage function.

Dimension	Pcs. pack	Code	Price €
Basic wiring box 6T	1	28130616	281,90

Electric boxes



Electric box with safety thermostat for pump cable low temperature

Bulb length: 65 mm - Bulb diameter: 7 mm - Setting: 0÷60 °C ± 3 - Contacts: 400 V 16(4) A - Differential: 4 °C

Dimension	Pcs. pack	Code	Price €
	1	28130632	87,93

Industrial manifolds

Modular distribution manifold



Example of 8-way modular combination

Modular brass manifold, for the construction of systems up to a maximum of 24 circuits (24 ways). Comes complete with:

- ball valves on the individual ways of the delivery manifold;
- lockshields for regulation on the individual ways of the return manifold;
- fittings to be tightened for PEX pipe 25x2.3 on each single way of the manifolds;
- pair of head gaskets for joining the different modules;
- pair of 1/2" M caps for connecting the fill / drain cocks.

The valves and lockshields are already installed on the manifold and sealed with an O-ring and locknut.

The manifold is designed for connection on the left side to the main pipes of the system; to reverse the arrangement, allowing the connection on the right side, it is necessary to unscrew the valves and lockshields from the respective locknuts, replace the O-rings with the spare set supplied, and screw them back on.

Application

Thermal installations (not suitable for sanitary installations)

Materials

- Manifold: CW508L brass
- Fittings to tighten: CW614N
- Head gaskets: AFM 34
- O-Ring: EPDM

Technical data

- Maximum operating temperature: 90 °C
- Maximum working pressure: 6 bar
- Head threads: male side: G 2" (UNI EN ISO 228-1); side with swivel nut: G 2" (UNI EN ISO 228-1).
- Center line between ports: 80 mm



Industrial Floor modular distribution manifold

Dimension	Way	Pcs. pack	Code	Price €
1"1/2	3+3	1	07401100	869,00
1"1/2	4+4	1	07401102	1.143,00
1"1/2	5+5	1	07401104	1.359,00
1"1/2	6+6	1	07401106	1.436,00

Dimensions and technical data: see section Technical Attachments.



Pair of fixing brackets for Industrial Floor manifold

Model	Pcs. pack	Code	Price €
Pair of fixing brackets	1	07401120	241,70

Material: Galvanized Steel
Screws/dowels and isophonic collars supplied.



Pair of taps and end caps for Industrial Floor manifold

Dimension	Pcs. pack	Code	Price €
Set of 2" plugs and 1/2" fill / drain cocks	1	07401122	124,90



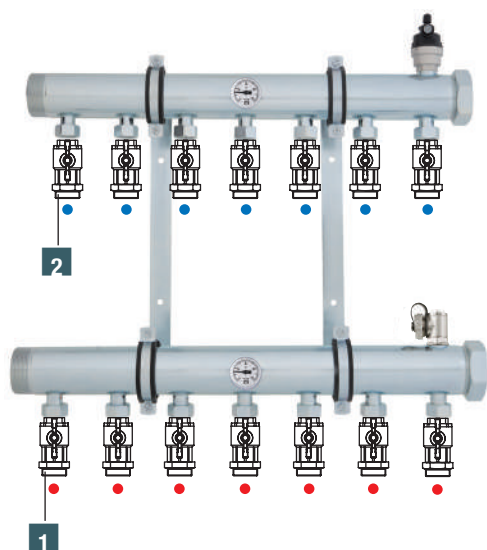
2" M-F Export ball valve with red plasticized steel lever for Industrial Floor manifold

Dimension	Pcs. pack	Code	Price €
2"	1	09811350	71,00

Dimensions: see section Technical Attachments.

Industrial manifolds

Steel industrial distribution manifold



Steel industrial manifold prepared for ball valves

Manifolds and branches in drawn steel Fe 306B UNI EN 10305
 Braze welding in continuous oven at 1080 °C with copper welding material 99.9%
 Surface treatment: white zinc plating

Technical Data

Maximum operating temperature 110 °C
 Maximum operating pressure 10 bar
 Head thread Male in confirm to UNI EN ISO 228-1 (G 2)
 Derivation takeoff thread 80 mm with swivel nut in confirm to UNI EN ISO 228-1 (G 3/4)
 Distance between connections: 80 mm

Supplied together with:

- Nr. 2 blins nipples G 2" F
- Nr. 1 water drain/discharge valve G 1/2" M
- Nr. 1 automatic + manual air vent valve G 1/2" M
- Nr. 2 thermometers Ø 40 (80 °C)
- Nr. 2 dual metal holders

Application of steel industrial manifold for ball valves

- 1 Kit valve 3/4" red butterfly + fitting
- 2 Kit valve 3/4" blue butterfly + fitting

Dimension	Ways	Pcs. pack	Code	Price €
2"	5 + 5	1	07400460	620,20
2"	6 + 6	1	07400462	672,80
2"	7 + 7	1	07400464	719,80
2"	8 + 8	1	07400466	745,70
2"	9 + 9	1	07400468	807,50
2"	10 + 10	1	07400470	859,10
2"	11 + 11	1	07400472	908,80
2"	12 + 12	1	07400474	950,00
2"	13 + 13	1	07400476	1.008,00
2"	14 + 14	1	07400478	1.070,00
2"	15 + 15	1	07400480	1.140,00

Note: manifold supplied NOT assembled

Dimensions: see section Technical Attachments.

Accessories for Industrial manifolds



Kit valve 3/4" red butterfly + fitting

Dimension	Pcs. pack	Code	Price €
24x19	1	01306196	20,74
M32x1,5	1	01306192	21,76

The valves must be used fully open or closed



Kit valve 3/4" blue butterfly + fitting

Dimension	Pcs. pack	Code	Price €
24x19	1	01306198	20,74
M32x1,5	1	01306194	21,76

The valves must be used fully open or closed



Vertical male union joint, nickel plated

Dimension	Thread	Pcs. pack	Code	Price €
3/4"	24x19	14	28103050	3,87
3/4"	M32x1,5	10	28103060	4,46

Metalbox Plus

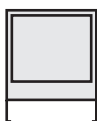
Manifold cabinet for manifolds and distribution groups



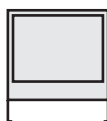
TELESCOPIC FRAME
min. 95 ÷ max 155



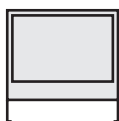
L 500



L 600



L 700



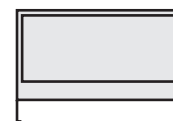
L 850



L 1000



L 1200



Construction

- 1 Telescopic frame
- 2 Telescopic feet
- 3 Door to fit flush
- 4 Feet adjustable



Casing in galvanized sheet and plastic door frame, white color RAL 9010.

Suitable for flush installation with adjustable depth for the partition 80 and 120 mm.
Suitable for:

- Collectors Topway from 1" to 1 1/4"
- Mixing groups: Floor Control Unit S, TM3-R and Firstbox
- Metering modules of thermal energy consumption, with a key lock purchased separately

Dimension	Pcs. pack	Code	Price €
L 500	1	01301450	139,50
L 600	1	01301452	157,20
L 700	1	01301454	174,30
L 850	1	01301456	216,20
L 1000	1	01301458	251,30
L 1200	1	01301460	282,80

It is supplied complete with closure of screwdriver cut, adjustable feet in height from 0 to 100 mm and in sheet construction site protection. Wire frame plaster 3 mm.

Dimensions: see section Technical Attachments

Key lock

Dimension	Pcs. pack	Code	Price €
	1	90067980	50,90



Metalbox

Manifold cabinet for manifolds and distribution groups



Dimensions: see section Technical Attachments .



Cabinet in galvanized steel with plastified door, white colour RAL 9010, for 120 mm brick thickness. Suitable for Modular Firstbox

Box for Modular Firstbox, flush fitting with adjustable depth. Supplied complete with keylocking catch, feet adjustable for height from 0 to 100 mm and cover for protection during site work.

Dimension	Pcs. pack	Code	Price €
L 500	1	01301470	177,70
L 700	1	01301472	227,50
L 850	1	01301474	285,30
L 1000	1	01301476	310,80
L 1200	1	01301478	360,00

Frame and door to fit flush with wall 3 mm



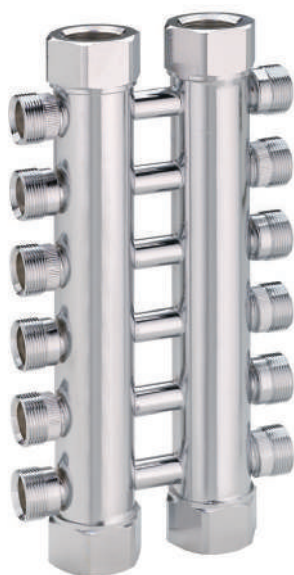
External cabinet in galvanized steel with plastified door, white colour RAL 9010. Suitable for 1"1/4 Topway manifolds.

External box for manifolds, supplied complete with locking catch.

Dimension	Pcs. pack	Code	Price €
L 500	1	01301480	184,70
L 700	1	01301482	227,10
L 850	1	01301484	275,70
L 1000	1	01301486	296,90
L 1200	1	01301488	393,60

Mixer

Coplanar steel manifold



Uses

The Mixer manifold is used in closed-circuit heating systems for distribution to radiators, thermo-convectors, fan coils, using Emmeti sealing systems with 24x19 thread, inserted in the special Termobox manifold box.

Construction

Head threads: 3/4" Female ISO 228, steel AVP
Columns in 35x2 steel tube Fe 360 B UNI EN 10204
Threaded connections 24x19 Male in AVP steel with indication flow/return
Stems in 14x1,5 tube in steel Fe 360 B UNI EN 10204
Brazing in a continuous furnace at 1080 °C with copper 99.9% added
Surface treatment of nickel-plating and subsequent chrome-plating.

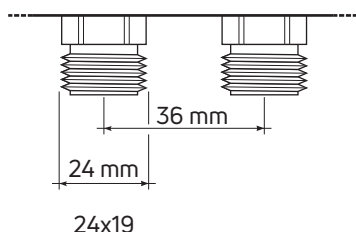
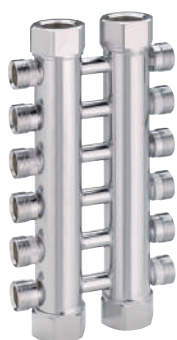
Technical data

Maximum operating pressure 10 bar
Maximum operating temperature 110 °C
100% tested

Note:

Lime ruins the coating and compromises the durability of the product.

Dimensions: see section Technical Attachments.



Mixer coplanar steel manifold

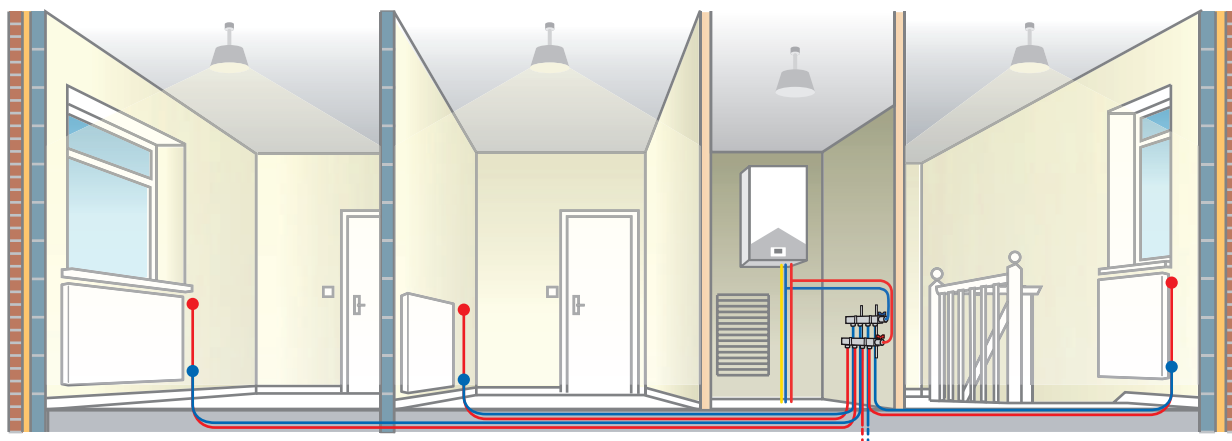
Size	Ways	Pcs. pack	Code	Price €
3/4" (*)	4x4	1	01300810	139,10
3/4" (*)	6x6	1	01300820	173,50
3/4" (*)	8x8	1	01300830	216,10

Emmeti seals 24x19: see section 8

(*) Items to be out of stock

Modular

Brass manifold



Construction

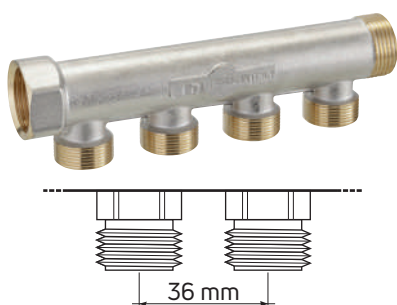
Body made of brass UNI EN 12165 CW617N with nickel finish
24x9 threaded outlets with Ø 14 mm passage

Technical data

Head thread: Male - Female UNI EN ISO 228-1
Maximum operating pressure: 10 bar
Maximum operating temperature range: 110 °C

Compliant with 4MS Common Composition List requirements

Dimensions: see section Technical Attachments.



Modular nickel-plated manifold for copper pipe, multilayer, Pex, PP, PB takeoffs centers 36 mm

Dimension	Ways	Pcs. pack	Code	Price €/pc.
3/4"	2	10	01303150	11,77
3/4"	3	6	01303152	16,71
3/4"	4	10	01303154	23,80
1"	2	8	01303160	15,37
1"	3	10	01303162	23,05
1"	4	8	01303164	28,23

Emmeti seals 24x19: see section 8



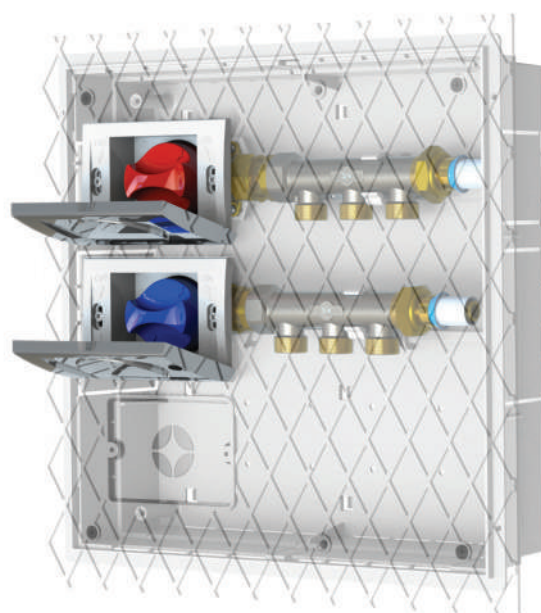
Metallic support takeoffs 50 mm

Dimension	Pcs. pack	Code	Price €
Couple single x 3/4"	1	01306370	8,69
Couple double x 3/4"	1	01306374	16,00
Couple single x 1"	1	01306372	8,69
Couple double x 1"	1	01306376	16,08

NOT suitable for distribution manifolds takeoffs 36 mm

Hydrobox Basic

Built-in box for water
with ball valves and retractable knobs



Uses

Box for sanitary distribution manifolds, equipped with a ball shut-off valve, suitable for built-in wall-mounting.

Features

- Box designed for Modular manifolds 3/4" up to 4 ways in the model 310x310 mm, up to 8 ways in the model 460x310 mm;
- Shut-off handles located behind elegant chrome plated or white doors (included) or anthracite (optional);
- Shut-off valves replaceable without demolition;
- Reversibility of the input lines (Right or Left);
- Compact size (110 mm) for drilling thickness 80 mm and plaster with a minimum thickness of 15 + 15 mm

Box materials

Box in ABS
Cover in ABS
Doors in ABS
Supports for valves and manifolds in PA 6

Compliant with 4MS Common Composition List requirements

Dimensions: see section Technical Attachments.

Technical data

DN15 valves with threaded connections UNI EN 10226-1 (R 3/4)
Opening and closing with 90 ° knob rotation
Flow direction: in both directions
Minimum and maximum working temperature: - 20 ° C / + 90 ° C **
Maximum pressure (T = 90 ° C): 10 bar
Nominal pressure (T = 20 ° C): 10 bar
** In the absence of steam for temperatures below 0 ° C, use water and glycol solutions.

The valves must be used in the fully open or closed position.

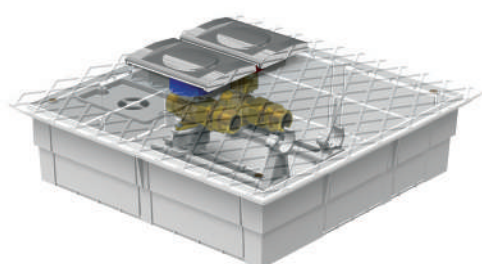
O-Ring shaft seal in EPDM Peroxide 70 Sh A (ASTM D2240)

These valves must be used at the pressures indicated in the catalog and are suitable for domestic hot and cold water distribution systems (Ref. Directive 2014/68 / EU Art. 13).

For particular uses (in compliance with the pressures established for these valves and the compatibility of the different fluids with the materials making up the valve) see the chemical compatibility table in the technical annexes of the current catalog.

The CW617N-DW brass, Teflon (P.T.F.E.), and the O-Rings in EPDM Peroxide in contact with the fluid, comply with the Italian Ministerial Decree 174 (of 06/04/2004)

Note: the Modular manifolds are supplied separately



Built-in box for water
with ball valves and retractable knobs

Dimension	Ways	Pcs. pack	Code	Price €
310 x 310	up to 4 ways	1	01308100	141,30
460 x 310	up to 8 ways	1	01308120	148,80

To be combined with Modular brass manifolds.
Modular manifolds are supplied separately

Accessories for Hydrobox Basic



White door

Model	Pcs. pack	Code	Price €
White door	1	90033762	3,37



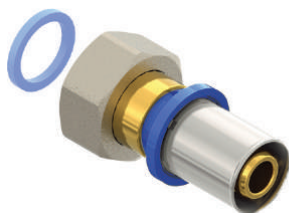
Chromed door

Model	Pcs. pack	Code	Price €
Chromed door	1	90033764	5,18



Anthracite

Model	Pcs. pack	Code	Price €
Anthracite door	1	90033766	5,33



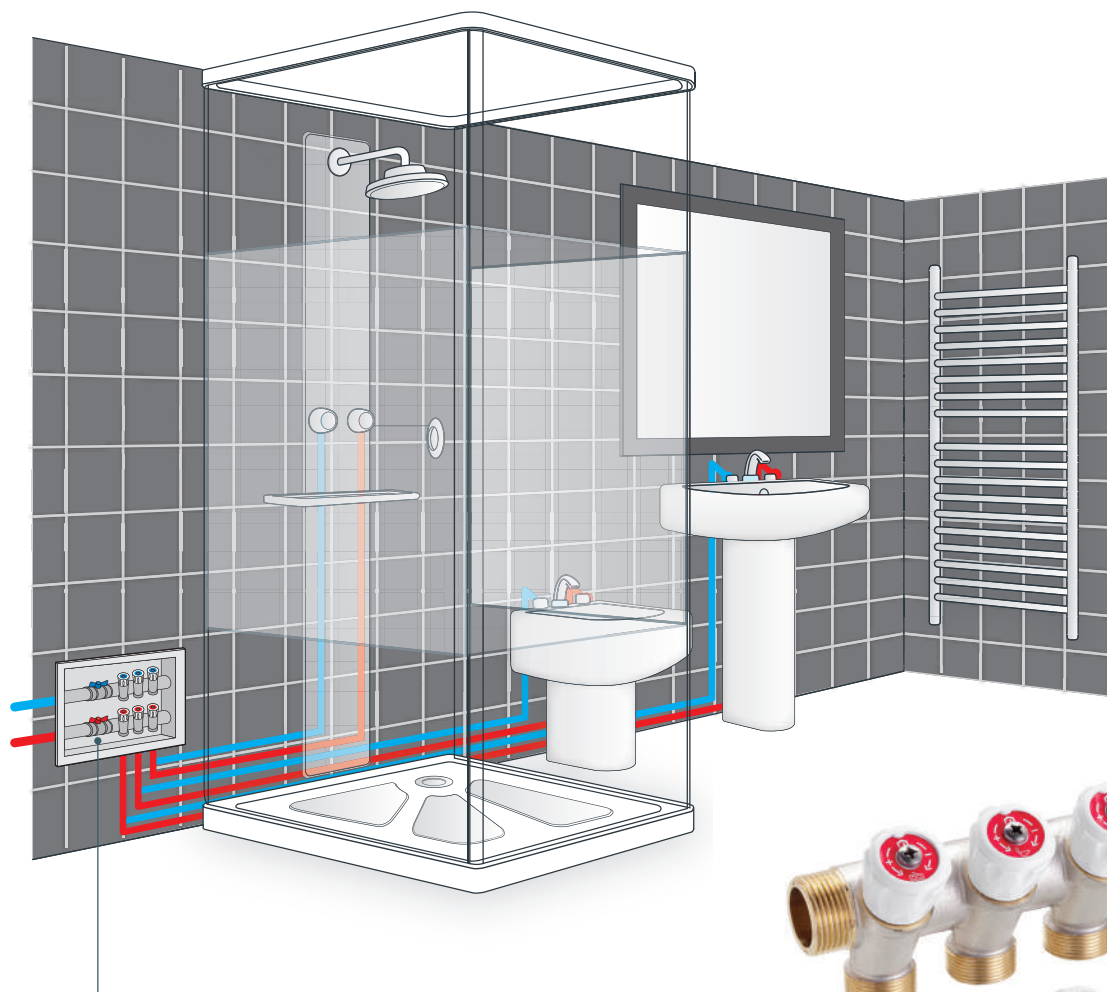
Straight with swivel nut, flat seal, LBP

Dimension	Profile	Pcs. pack	Code	Price €
16 x 3/4"	B / TH / U / H / F	1	28180050	8,32
20 x 3/4"	B / TH / U / H / F	1	28180054	8,33
26 x 3/4"	B / TH / U / H / F	1	28180056	8,60

Threads: G (UNI EN ISO 228-1)

Multiplex

Brass manifold with bibcocks



Construction

Body made of brass UNI EN 12165 CW617N-DW with nickel finish
Thread 24x19
ABS white knobs
Copuling in EPDM
Plate indicating the supporting services
Distance between connections: 36 mm

Technical data

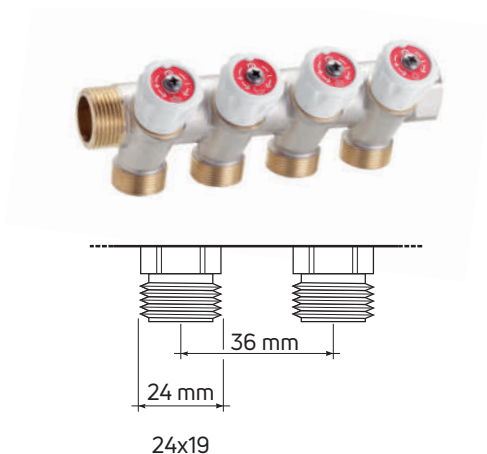
Head thread: Male-Female UNI EN ISO 228-1
24x19 gas thread outlets, 24 mm in diameter and 19 threads per inch
Maximum operating pressure: 10 bar
Maximum operating temperature: 110 °C

Compliant with 4MS Common Composition List requirements

Note: not suitable for the way regulating, only open or closed

Dimensions: see section Technical Attachments.

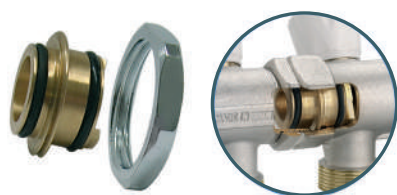
Brass manifold with bibcocks



Multiplex brass manifold with isolating taps , sectional with union nipple

Dimension	Ways	Pcs. pack	Code	Price €
3/4"	2	12	01307260	30,27
3/4"	3	8	01307265	42,77
3/4"	4	6	01307270	55,53
1"	2	8	01307280	31,42
1"	3	6	01307285	45,10
1"	4	4	01307290	59,81

Emmeti seals 24x19: see section 8



Multiplex manifold bridging piece

Dimension	Pcs. pack	Code	Price €
3/4"	10	01307200	7,02
1"	10	01307210	6,93

Thread UNI EN ISO 228-1

Accessories for Modular and Multiplex manifolds



Nickel-plated plug

Dimension	Pcs. pack	Code	Price €
3/4" M	30	90004820	2,97
1" M	15	90004830	4,35
3/4" F	30	01291536	2,84
1" F	15	01291538	4,35

Thread UNI EN ISO 228-1



Nickel-plated adapter

Dimension	Pcs. pack	Code	Price €
3/4" M x 3/8" F	30	90005050	2,97
1" M x 3/8" F	15	90005060	6,93

With o-ring
Thread UNI EN ISO 228-1



Right-angle Progress ball valves with pipe union

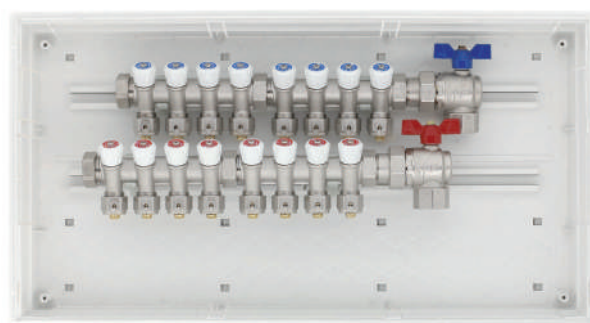
Dimension	Pcs. pack	Code	Price €
3/4"	1	01306180	67,27
1"	1	01306266	96,58

Thread of body valve UNI EN 10226-1;
thread of pipe union UNI EN ISO 228-1.

Technical data: refer to the section "Accessories for Topway manifolds"

Termobox

Plastic manifold box



L 310



L 460



L 610

Uses

Plastic box for manifolds, flush fitting with adjustable depth.
Supplied complete with plastic netting and cover for protection during site work.

Construction

Made of plastic material for toughness and durability
Box in ABS
Cover in PS shock-resistant polystyrene supports in PA6



TermoBox universal white plastic box for manifolds

Dimension	Pcs. pack	Code	Price €/pc.
310 x 310 x 90	5	01302092	29,63
460 x 310 x 90	3	01302102	38,08
610 x 310 x 90	2	01302112	45,42



Kit supports for Topway bar manifolds without mechanics and Topway M

Type	Dimension	Pcs. pack	Code	Price €/kit
Kit 10 couple supports Topway - Topway M	3/4"	1	01302120	16,00
Kit 10 couple supports Topway - Topway M	1"	1	01302130	16,00



Kit supports for Modular and Multiplex manifolds

Type	Dimension	Pcs. pack	Code	Price €/kit
10 couples supports kit for Modular - Multiplex	3/4"	1	01302140	13,91
10 couples supports kit for Modular - Multiplex	1"	1	01302150	13,91



Kit supports for Mixer manifolds

Type	Dimension	Pcs. pack	Code	Price €/kit
10 couples supports kit for Mixer manifolds	3/4" - 1"	1	01302160	13,91

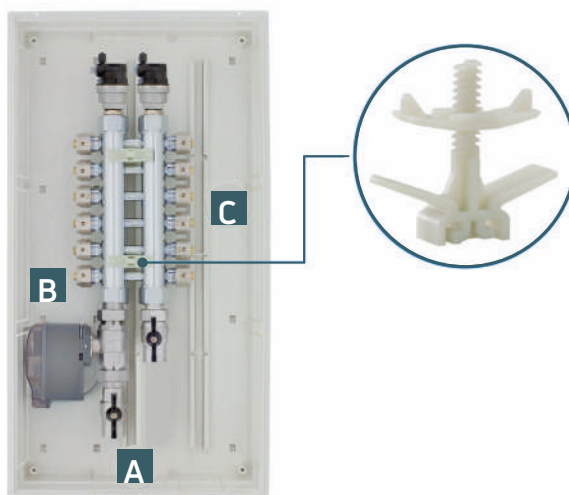
Plastic manifold box



Aluminium profilers for supports manifold

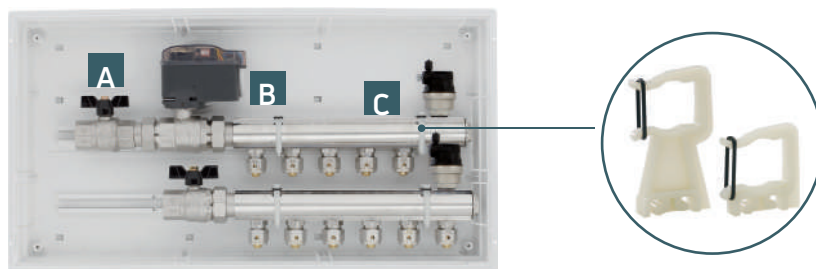
Dimension	Pcs. pack	Code	Price €
400 mm	1	01306400	20,06
200 mm	1	01306398	14,58

Termobox with Mixer: manifolds: maximum number of ways



Termobox	3/4" A+C	3/4" B+C	3/4" A+B+C
310 x 310	-	-	-
460 x 310	4 ways	4 ways	2 ways
610 x 310	8 ways	8 ways	6 ways

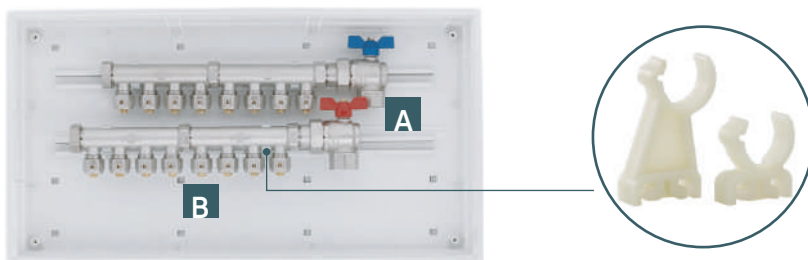
Termobox with Topway manifolds: maximum number of ways



Termobox	1" A+C	3/4" A+C takeoff 50 mm	3/4" A+C takeoff 36 mm	1" B+C	3/4" B+C takeoff 50 mm	3/4" B+C takeoff 36 mm	1" A+B+C	3/4" A+B+C takeoff 50 mm	3/4" A+B+C takeoff 36 mm
310 x 310	2 ways	3 ways	4 ways	-	2 ways	2 ways	-	-	-
460 x 310	5 ways	6 ways	8 ways	4 ways	5 ways	6 ways	3 ways	4 ways	5 ways
610 x 310	8 ways	9 ways	12 ways	7 ways	8 ways	11 ways	6 ways	7 ways	9 ways

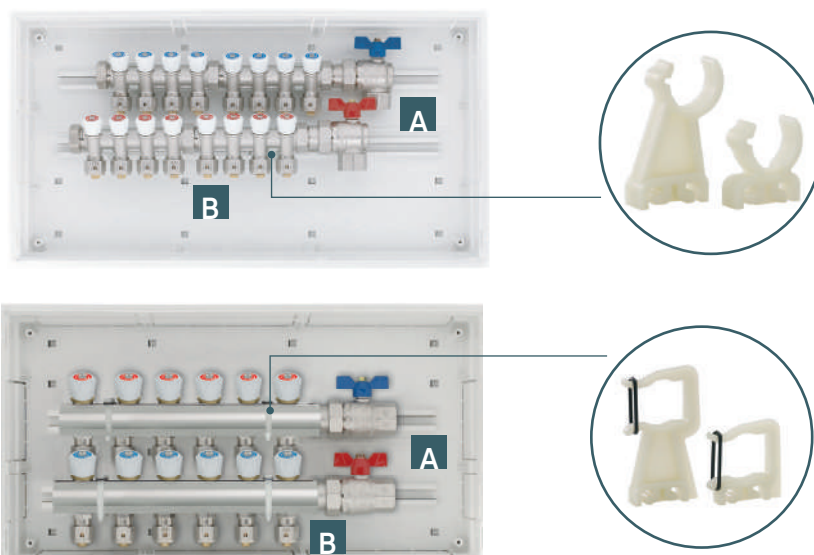
Plastic manifold box

Termobox with Modular manifold: maximum number of ways



Termobox	1" A+B	3/4" A+B
310 x 310	3 ways	4 ways
460 x 310	7 ways	8 ways
610 x 310	12 ways	12 ways

Termobox with Multiplex or Topway M manifold: maximum number of ways



Termobox	1" A+B takeoffs 36 mm	3/4" A+B takeoffs 36 mm
310 x 310	3 ways	4 ways
460 x 310	7 ways	8 ways
610 x 310	12 ways	12 ways

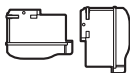
Modulo Compact

Motor driven ball-valve

IP 43



IP 40



SCAN



Valve technical data

Valve body made brass UNI EN 12165 CW617N with nickel finish
Ball made brass UNI EN 12165 CW617N chromium plated
Operating temperature range from -40 to 100 °C (circulating fluid)
Operating pressure PN 40
Maximum differential pressure 6 bar
Seals PTFE
Fittings for operating rod HNBR
Threads UNI EN ISO 228-1

Note: in the 3-way type is granted the flow port during the running operations.

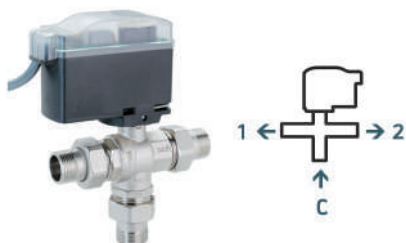
Servomotor technical data

Power supply 230 V / 50 Hz or 24 Vac in function of model
Absorption 4 VA
Rotation angle 90° (2 ways) - 180° (3 ways) - 90/270° (4 ways)
Rotation time 60" (2 ways) - 120" (3 ways) - 60/180" (4 ways)
Torque: 8 Nm
Auxiliary contact 1-free 3 A / 230 V (on-off)
Protection class IP 43 IP 40
Insulating class: II
Indicator open valve (2 ways) diverted flux c-sx c-dx (3 ways)



Modulo Compact 230 Vac 2 ways with pipe union connection with thread

Dimension	Ways	Pcs. pack	Code	Price €
1/2"	2	1	01425800	170,10
3/4"	2	1	01425802	227,60
1"	2	1	01425804	234,70



Modulo Compact 230 Vac three ways diverter with pipe union connection with thread

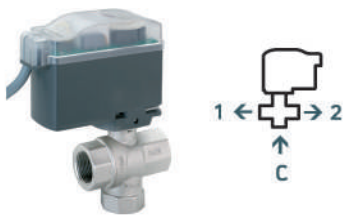
Dimension	Ways	Pcs. pack	Code	Price €
1/2"	3	1	01425806	227,60
3/4"	3	1	01425808	234,70
1"	3	1	01425810	278,50



Modulo Compact 230 Vac 2 ways, Female Female thread

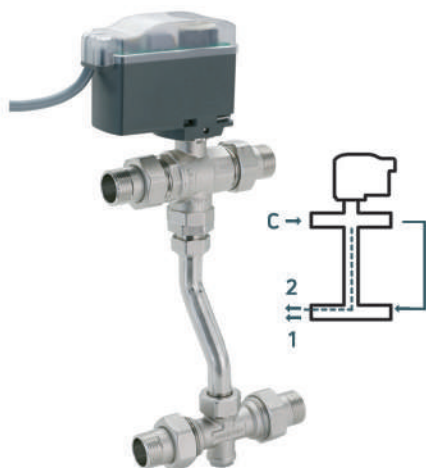
Dimension	Ways	Pcs. pack	Code	Price €
1/2"	2	1	01425820	157,70
3/4"	2	1	01425822	167,00
1"	2	1	01425824	227,60

Motor driven ball-valve



Modulo Compact 230 Vac 3 ways diverter, Female Female thread

Dimension	Ways	Pcs. pack	Code	Price €
1/2"	3	1	01425826	190,90
3/4"	3	1	01425828	227,60
1"	3	1	01425830	241,60



Body for Modulo Compact 4 ways take-off 190÷210 mm for by-pass

For Topway manifolds

Dimension		Pcs. pack	Code	Price €
3/4"	for Topway manifold	1	01425848	319,70
1"	for Topway manifold	1	01425850	370,00



Differential valve for by-pass

Dimension	Pz. conf.	Code	Price €
	1	01306360	13,32

Overpressure valve from 0,2 to 0,5 bar for the T fitting of 4 ways Modulo Compact



Servomotor for motorised ball valve Modulo Compact

Dimension	Pcs. pack	Code	Price €
2 ways - 230 Vac	1	01425860	150,20
3 ways - 230 Vac	1	01425862	150,20
4 ways - 230 Vac	1	01425864	150,00
4 ways - 24 Vac (*)	1	01425870	148,40

(*) Items to be out of range

Modulo Plus

Motor driven ball-valve

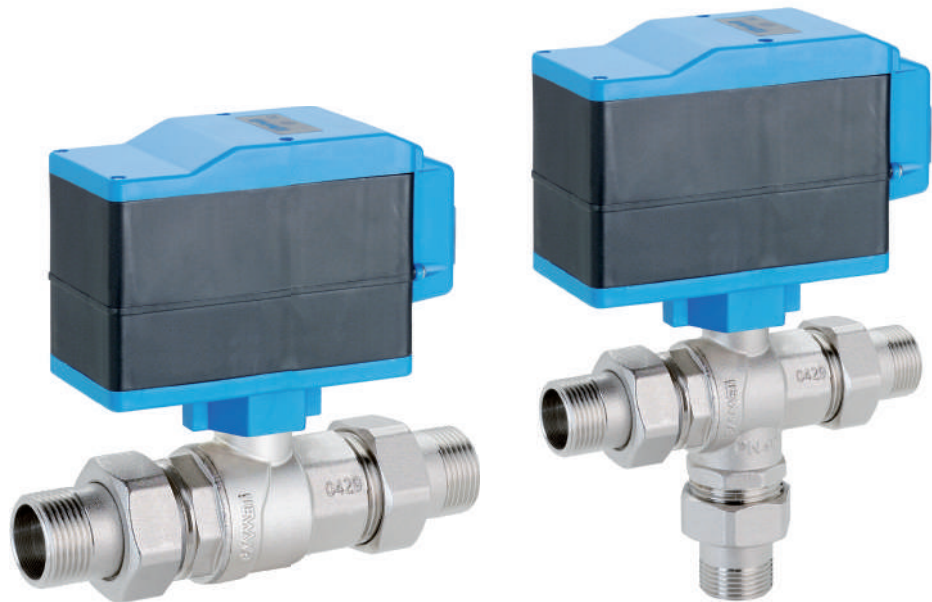
IP 43



IP 40



SCAN



Valve technical data

Valve body made brass UNI EN 12165 CW617N with nickel finish
Ball made brass UNI EN 12165 CW617N chromium plated
Operating temperature range from -40 to 100 °C (circulating fluid)
Operating pressure PN 40
Maximum differential pressure 6 bar
Seals PTFE
Fittings for operating rod HNBR
Threads UNI EN ISO 228-1

Note: in the 3-way type is granted the flow port during the running operations.

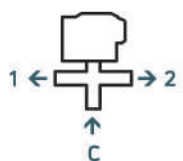
Servomotor technical data

Power supply 230 V / 50 Hz
Absorption 4 VA
Rotation angle 90° (2 ways) - 180° (3 ways)
Rotation time 60" (2 ways) - 120" (3 ways)
Maximum torque 28 Nm (230 V)
Auxiliary contact 1-free 3 A / 230 V (on-off)
Protection class IP 43 IP 40
Insulating class: II
Indicator open valve (2 ways) diverted flux c-sx c-dx (3 ways)



Modulo Plus 230 Vac 2 ways with pipe union connection with thread

Dimension	Ways	Pcs. pack	Code	Price €
1"1/4	2	1	01425700	419,10
1"1/2	2	1	01425702	507,50
2"	2	1	01425704	604,50



Modulo Plus 230 Vac three ways diverter with pipe union connection with thread

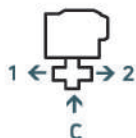
Dimension	Ways	Pcs. pack	Code	Price €
1"1/4	3	1	01425710	507,50
1"1/2	3	1	01425712	604,50
2"	3	1	01425714	779,40

Motor driven ball-valve



Modulo Plus 230 Vac 2 ways, Female Female thread

Dimension	Ways	Pcs. pack	Code	Price €
1"1/4	2	1	01425730	378,40
1"1/2	2	1	01425732	419,10
2"	2	1	01425734	507,40



Modulo Plus 230 Vac 3 ways diverter, Female Female thread

Dimension	Ways	Pcs. pack	Code	Price €
1"1/4	3	1	01425740	419,10
1"1/2	3	1	01425742	507,40
2"	3	1	01425744	604,40



Servomotor for motorised ball valve Modulo Plus

Dimension	Pcs. pack	Code	Price €
2 ways - 230 Vac	1	01420170	292,60
3 ways - 230 Vac	1	01420172	280,50

Bodies for motorized ball valves

Bodies for Modulo Compact and Modulo Plus motorized valves



SCAN



Body for Modulo 2 ways with pipe union connection with thread

Dimension	Ways	Pcs. pack	Code	Price €
1/2" (*)	2	1	90021400	56,61
3/4" (*)	2	1	90021410	75,64
1" (*)	2	1	90021420	113,50
1 1/4" (**)	2	1	90021430	149,10
1 1/2" (**)	2	1	90021440	256,20
2" (**)	2	1	90021450	397,30

(*) Recommended for Modulo Compact

(**) Recommended for Modulo Plus
Thread UNI EN ISO 228-1



Body for Modulo 3 ways with pipe union connection with thread

Dimension	Ways	Pcs. pack	Code	Price €
1/2" (*)	3	1	90021320	75,64
3/4" (*)	3	1	90021460	107,60
1" (*)	3	1	90021470	158,00
1 1/4" (**)	3	1	90021480	217,00
1 1/2" (**)	3	1	90021490	362,40
2" (**)	3	1	90021500	586,60

(*) Recommended for Modulo Compact

(**) Recommended for Modulo Plus
Thread UNI EN ISO 228-1



Body for Modulo 2 ways Female Female thread

Dimension	Ways	Pcs. pack	Code	Price €
1/2" (*)	2	1	90021200	47,32
3/4" (*)	2	1	90021210	56,61
1" (*)	2	1	90021220	86,71
1 1/4" (**)	2	1	90021230	105,00
1 1/2" (**)	2	1	90021240	171,90
2" (**)	2	1	90021250	231,60

(*) Recommended for Modulo Compact

(**) Recommended for Modulo Plus
Thread UNI EN ISO 228-1



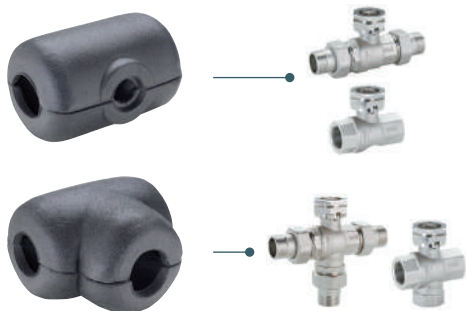
Body for Modulo 3 ways Female Female thread

Dimension	Ways	Pcs. pack	Code	Price €
1/2" (*)	3	1	90021310	56,61
3/4" (*)	3	1	90021260	78,58
1" (*)	3	1	90021270	113,50
1 1/4" (**)	3	1	90021280	141,70
1 1/2" (**)	3	1	90021290	240,20
2" (**)	3	1	90021300	362,40

(*) Recommended for Modulo Compact

(**) Recommended for Modulo Plus
Thread UNI EN ISO 228-1

Modulo ball valves bodies



Insulating shells for Modulo ball valves

Dimension	Pcs. pack	Code	Price €
Insulating shell for ball valve 2 ways 1/2"	1	90045150	8,69
Insulating shell for ball valve 2 ways 3/4"	1	90045160	13,08
Insulating shell for ball valve 2 ways 1"	1	90045170	16,08
Insulating shell for ball valve 2 ways 1" 1/4	1	90045180	20,06
Insulating shell for ball valve 2 ways 1" 1/2	1	90045190	20,06
Insulating shell for ball valve 2 ways 2"	1	90045200	22,90
Insulating shell for ball valve 3 ways 1/2"	1	90045210	13,08
Insulating shell for ball valve 3 ways 3/4"	1	90045220	14,87
Insulating shell for ball valve 3 ways 1"	1	90045230	20,06
Insulating shell for ball valve 3 ways 1" 1/4	1	90045240	20,06
Insulating shell for ball valve 3 ways 1" 1/2	1	90045250	26,21
Insulating shell for ball valve 3 ways 2"	1	90045260	43,28

In close-cell expanded polyethylene



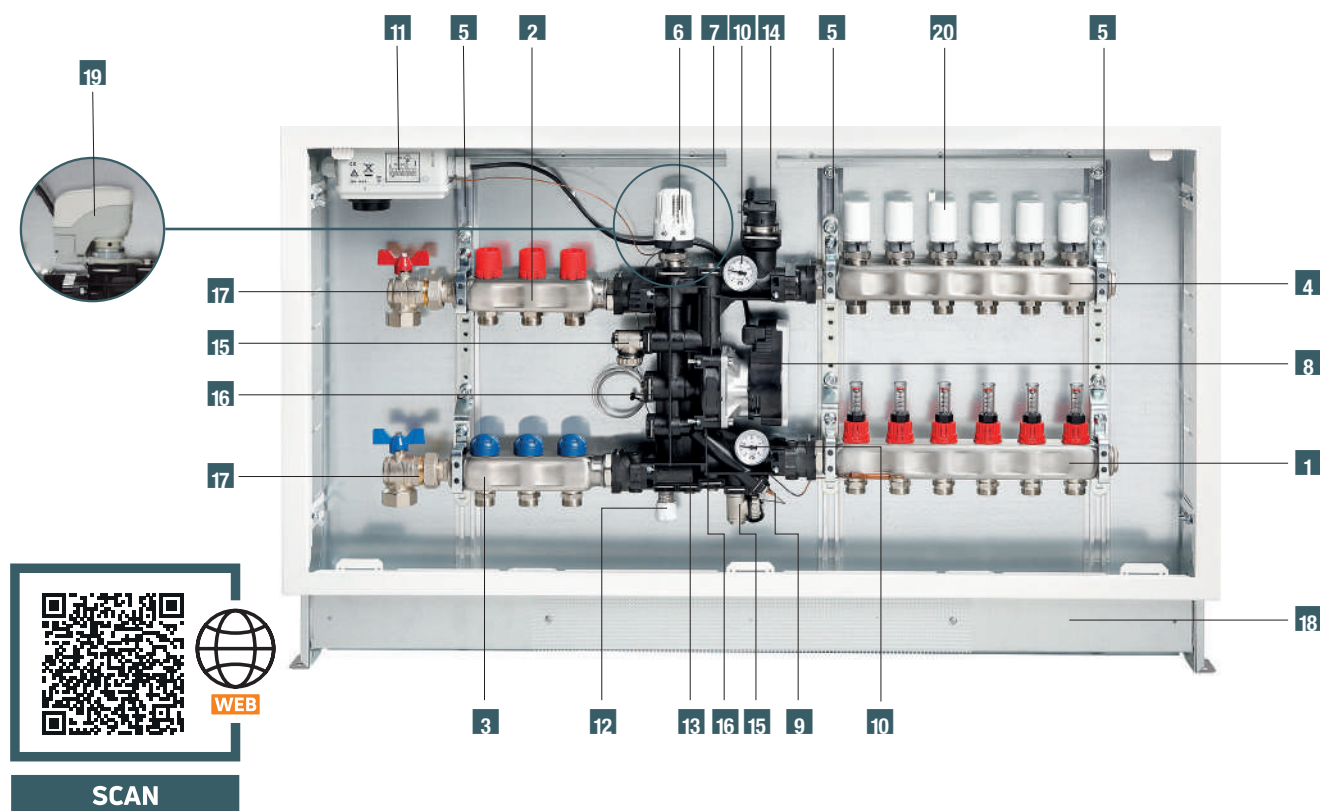
Insulating shells for servomotor for Modulo Compact

Dimension	Pcs. pack	Code	Price €
Insulating shell for servomotor for 4-ways Modulo Compact	1	90045270	20,06

In close-cell expanded polyethylene

Floor Control Unit S

Pre-assembled regulation group (fixed point or electronic climate) and distribution, for low temperature heating systems and mixed systems with two temperature levels (high + low), with stainless steel manifolds



Construction

- 1** nr. 1 flow bar for floor system with flow meters
- 2** nr. 1 flow bar for radiator system with regulation lockshields
- 3** nr. 1 return bar for radiator system prepared for mounting electrothermal heads
- 4** nr. 1 return bar for underfloor system prepared for mounting electrothermal heads
- 5** nr. 3 bar fixing brackets
- 6** nr. 1 mixing valve with thermostatic head and immersion probe from 20 to 65 °C (fixed-point versions, to be purchased separately)
- 7** nr. 1 calibration and by-pass valve
- 8** nr. 1 wired circulator pump Wilo Para HU 15/7 (three-core cable L = 1000 mm)
- 9** nr. 1 flow probe
- 10** nr. 2 control thermometers from 0 to 80 °C
- 11** nr. 1 box with safety thermostat for low-temperature circulator wiring (optional) or no. 1 basic control unit 6T for electrothermal heads (optional)
- 12** nr. 1 overpressure valve (0.1 to 0.6 bar) for high temperature zone
- 13** nr. 1 intercepting and balancing lockshield
- 14** nr. 1 automatic air vent valve 1/2"

- 15** nr. 2 filling taps with swivel connection and safety cap
- 16** nr. 2 circulator shut-off lockshields
- 17** nr. 1 valve kit (optional)
- 18** nr. 1 Metalbox Plus metal box (to be purchased separately)
- 19** nr. 1 mixing valve with 3-point electric servomotor or 0-10 V DC (climate versions, to be purchased separately)
- 20** Electrothermal head (optional)

Mixing kit materials

PPA resin (35% PV)
Brass UNI EN 12164 CW 614N
O-rings EPDM 70 Sh
AISI 304 stainless steel elements

Manifold materials

AISI 304 stainless steel manifolds
EPDM peroxide O-ring seals

Floor Control Unit S - Regulation group

The range

Floor Control Unit S B
Low-temperature control and distribution unit (3 to 13-way) and ErP-compliant circulator

Floor Control Unit S 2A + B
Control and distribution unit with 2-way high temperature + low temperature (3 to 13-way) and ErP-compliant circulator

Floor Control Unit S 3A + B
Control and distribution unit with 3-way high temperature + low temperature (3 to 12-way) and ErP-compliant circulator

Mixing Unit M3V: regulating unit with ErP-compliant circulator

Topway S manifolds

Size 1"
Head threads UNI EN ISO 228-1 G 1
24 x 19 Male, centre distance 50 mm

Regulation group

Maximum primary circuit temperature: 90°C
Maximum pressure: 6 bar
Maximum Δp primary circuit: 1 bar
Secondary control range (fixed point control): 20÷65 °C
Exchangable heat output with $\Delta T = 7^\circ\text{C}$ and Δp usable = 0.25 bar
- fixed point adjustment: 11 kW with by-pass pos. 0
- fixed point adjustment: 14 kW with by-pass pos. 5
Pressure loss with mixing valve: Kv 2.5
Pressure loss with open by-pass valve: Kv max 6
Manifold head threads (where applicable): 1" F
Manifold branch threads: 24x19, centre distance 50 mm
Thermometer scale: 0 ÷ 80 °C

Wilco Para HU 15/7 circulator pump

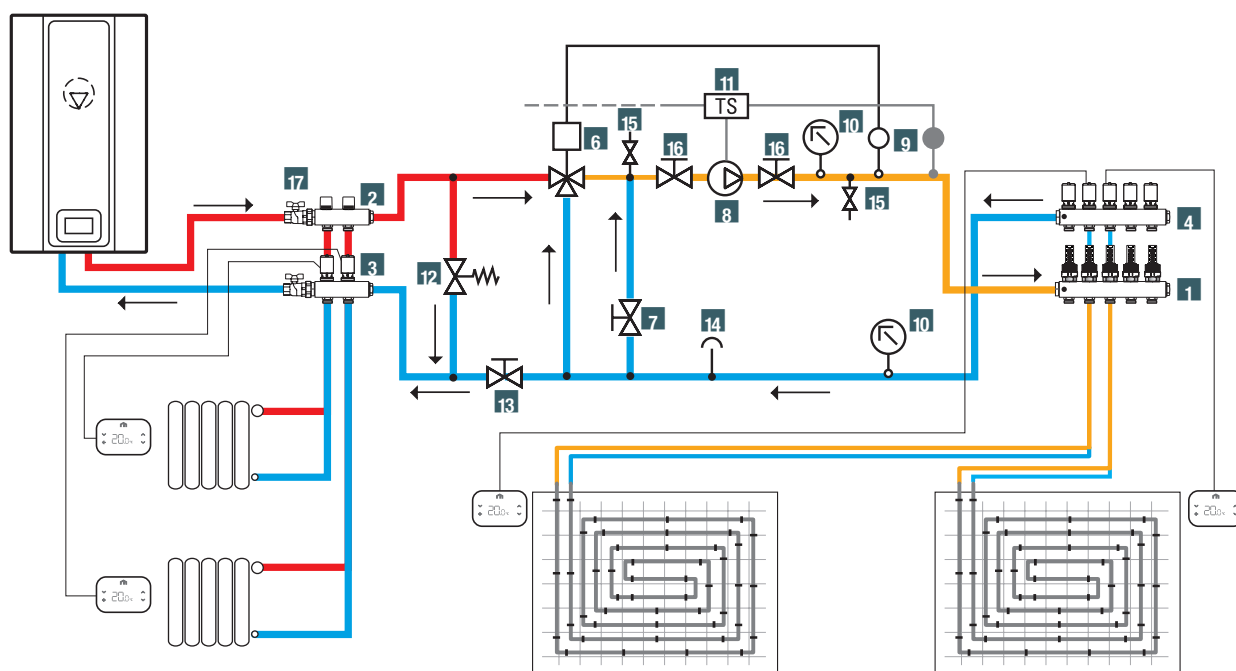
Rotational speed: 2580 to 4700 rpm.
Maximum head: 7 m
Maximum flow rate: 2.0 m³/h
Electrical connection: 1-230V + 10% / - 15%, 50/60 Hz
Protection class: IPX 4D
Insulation class: F
Power consumption from 1-230 V: 8.2÷50 W
Absorbed current from 1-230 V: 0.07÷0.44 A
EEI ≤ 0.20
Usable fluids
- cooling and heating water
- water and glycol: max 1:1

Compliance

ErP Directive
EN 61800-3
EN 61000-6-1
EN 61000-6-2
EN 61000-6-3
EN 61000-6-4
2014/35/UE (low voltage)
2014/30/UE (electromagnetic compatibility)

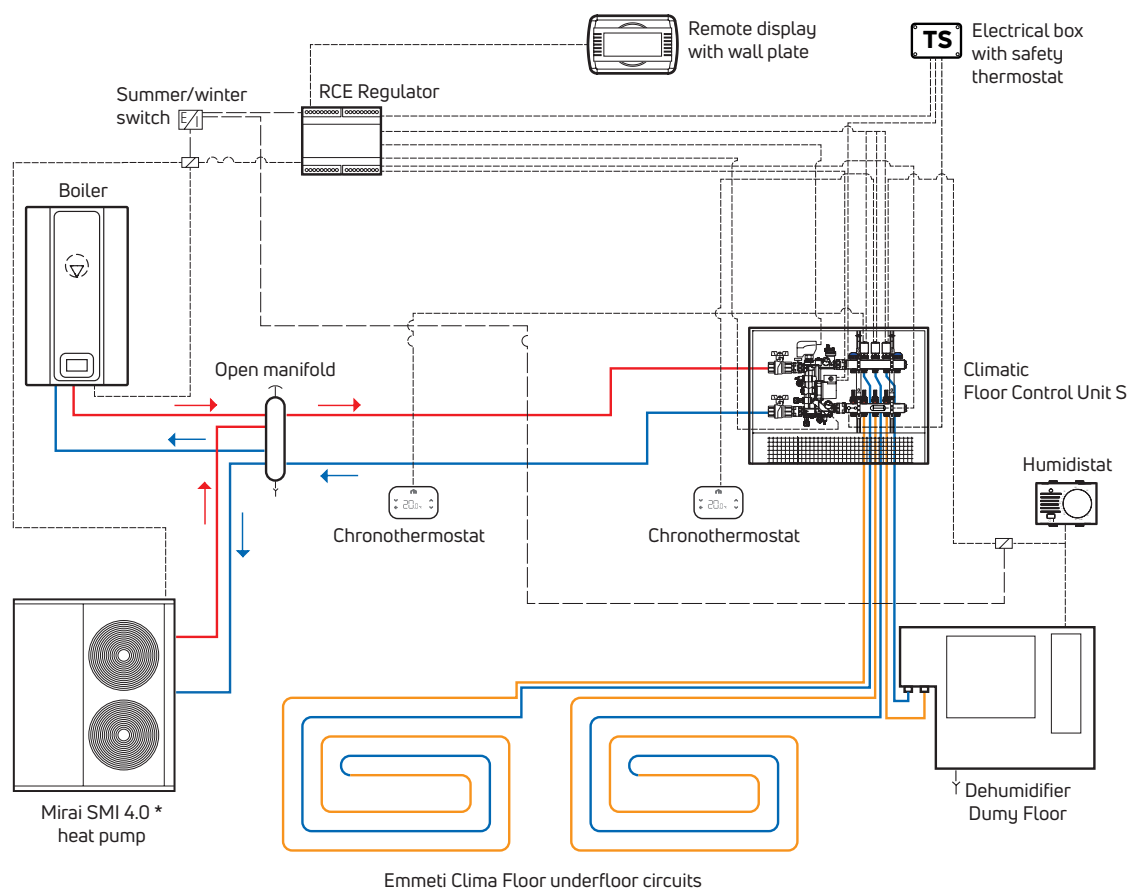
Dimensions and diagrams: see section technical attachments

Hydraulic diagram fixed point unit



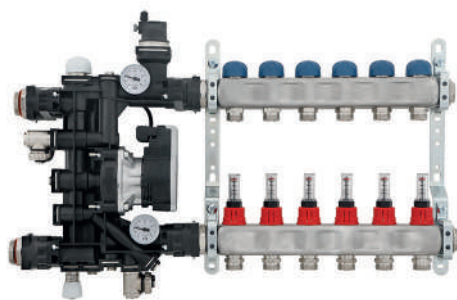
Floor Control Unit S - Regulation group

Hydraulic diagram with climate control - heating and cooling



* In this installation example, the Mirai SMI 4.0 heat pump operates in cooling mode only.

Note: the volume of the open collector/storage tank must be defined according to the power of the heat pump.



Floor Control Unit S only Low Temperature

Dimension	Box	Pcs. pack	Code	Price €
3B	L 600	1	28158504	1.232,00
4B	L 700 (*)	1	28158506	1.228,00
5B	L 850	1	28158508	1.281,00
6B	L 850	1	28158510	1.325,00
7B	L 850	1	28158512	1.368,00
8B	L 1000	1	28158514	1.414,00
9B	L 1000	1	28158516	1.455,00
10B	L 1000 (*)	1	28158518	1.522,00
11B	L 1200	1	28158520	1.565,00
12B	L 1200	1	28158522	1.615,00
13B	L 1200	1	28158524	1.657,00

Complete with:

- thermostatic head with immersion probe code 90046750

or

- 3 point electric servomotor code 28157212

or

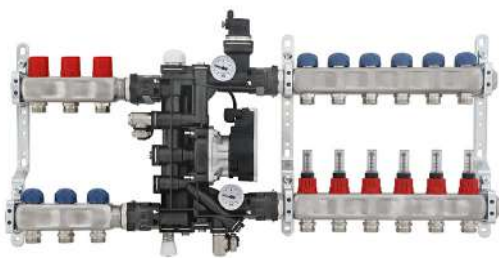
- 0-10 V DC electric servomotor code 28157222

If an electric servomotor is installed, combine RCE electronic climate control kit for heating and/or cooling.

Note: On the high temperature side, it is also possible to connect brass manifolds by replacing the 2 red O-rings with the 2 black O-rings included in the package.

(*) Only compatible with Progress 1" angle valve kit

Floor Control Unit S - Regulation group



Floor Control Unit S High and Low Temperature

Dimension	Box	Pcs. pack	Code	Price €
2A + 3B	L 850	1	28158526	1.349,00
2A + 4B	L 850	1	28158528	1.392,00
2A + 5B	L 850	1	28158530	1.438,00
2A + 6B	L 1000	1	28158532	1.487,00
2A + 7B	L 1000 (*)	1	28158534	1.530,00
2A + 8B	L 1200	1	28158536	1.577,00
2A + 9B	L 1200	1	28158538	1.618,00
2A + 10B	L 1200	1	28158540	1.684,00
2A + 11B	L 1200	1	28158542	1.728,00
2A + 12B	L 1200	1	28158544	1.773,00
2A + 13B	L 1200 (*)	1	28158546	1.817,00
3A + 3B	L 850	1	28158548	1.386,00
3A + 4B	L 850	1	28158550	1.431,00
3A + 5B	L 1000	1	28158552	1.481,00
3A + 6B	L 1000 (*)	1	28158554	1.525,00
3A + 7B	L 1200	1	28158556	1.574,00
3A + 8B	L 1200	1	28158558	1.616,00
3A + 9B	L 1200	1	28158560	1.664,00
3A + 10B	L 1200	1	28158562	1.726,00
3A + 11B	L 1200	1	28158564	1.771,00
3A + 12B	L 1200 (*)	1	28158566	1.815,00

Complete with:

- thermostatic head with immersion probe code 90046750 or
- 3 point electric servomotor code 28157212 or
- 0-10 V DC electric servomotor code 28157222

If an electric servomotor is installed, combine RCE electronic climate control kit for heating and/or cooling.

(*) Only compatible with Progress 1" angle valve kit



Mixing Unit M3V

Dimension	Pcs. pack	Code	Price €
1" (*)	1	28158340	739,20
1 1/4 (**)	1	28158330	753,10

(*) Size of threaded connections: G 1" Male.

Also compatible with Topway brass manifolds, by replacing the 4 red O-Rings fitted as standard with the 4 black O-Rings supplied in the pack.

(**) Threaded connections size: G 1 1/4 Male.

Complete with:

- thermostatic head with immersion probe code 90046750 or
- 3 point electric servomotor code 28157212 or
- 0-10 V DC electric servomotor code 28157222

If an electric servomotor is installed, combine RCE electronic climate control kit for heating and/or cooling.

Accessories for Floor Control Unit S



Galvanised sheet metal box for concealed installation, with plastic-coated frame and door, colour white RAL 9010.

Dimension	Pcs. pack	Code	Price €
L 500	1	01301450	139,50
L 600	1	01301452	157,20
L 700	1	01301454	174,30
L 850	1	01301456	216,20
L 1000	1	01301458	251,30
L 1200	1	01301460	282,80

Comes complete with screwdriver cut-out, feet adjustable in height from 0 to 100 mm and sheet metal site protection.

Frame flush with plaster 3 mm.

Dimensions: see section technical attachments

Floor Control Unit S - Regulation group

Guide to choosing the metal box to match Floor Control Units S

Floor Control Unit S		Metalbox Plus	
Size	Code	Size	Code
3L	28158504	L600	01301452
4L	28158506	L700 (*)	01301454
5L	28158508	L850	01301456
6L	28158510	L850	01301456
7L	28158512	L850	01301456
8L	28158514	L1000	01301458
9L	28158516	L1000	01301458
10L	28158518	L1000 (*)	01301458
11L	28158520	L1200	01301460
12L	28158522	L1200	01301460
13L	28158524	L1200	01301460
2H+3L	28158526	L850	01301456
2H+4L	28158528	L850	01301456
2H+5L	28158530	L850	01301456
2H+6L	28158532	L1000	01301458
2H+7L	28158534	L1000 (*)	01301458
2H+8L	28158536	L1200	01301460
2H+9L	28158538	L1200	01301460
2H+10L	28158540	L1200	01301460
2H+11L	28158542	L1200	01301460
2H+12L	28158544	L1200	01301460
2H+13L	28158546	L1200 (*)	01301460
3H+3L	28158548	L850	01301456
3H+4L	28158550	L850	01301456
3H+5L	28158552	L1000	01301458
3H+6L	20158554	L1000 (*)	01301458
3H+7L	28158556	L1200	01301460
3H+8L	28158558	L1200	01301460
3H+9L	28158560	L1200	01301460
3H+10L	28158562	L1200	01301460
3H+11L	28158564	L1200	01301460
3H+12L	28158566	L1200 (*)	01301460

(*) Only compatible with Progress 1" angle valve kit

Floor Control Unit S - Regulation group



Progress angle valve kit 1" with union for Floor Control Unit S

Dimension	Pcs. pack	Code	Price €
F 1" - F 1" dado girevole	1	01306270	99,00

Kit suitable for installation on Floor Control Unit S low temperature mixing units only, if high temperature manifolds are not present.
Complete with 2 gaskets.

Technical data: refer to section "Accessories for Topway Manifolds".



Straight Progress 1" valve kit with spout for Floor Control Unit S

Dimension	Pcs. pack	Code	Price €
F 1" - F 1" dado girevole	1	01306272	86,86

Kit suitable for installation on Floor Control Unit S low temperature mixing units only, if high temperature manifolds are not present.
Complete with 2 gaskets.

Valve body threading UNI EN 10226-1
Pipe union threading UNI EN ISO 228-1

Technical data: refer to section "Accessories for Topway Manifolds".



Progress angle valve kit with pipe union

Dimension	Pcs. pack	Code	Price €
1"	1	01306856	67,01

Kit suitable for installation in Floor Control Unit S mixing units equipped with high temperature manifolds.

Technical data: refer to section "Accessories for Topway Manifolds".



Straight Progress Valve Kit with pipe union

Dimension	Pcs. pack	Code	Price €
1"	1	01306708	53,68

Kit suitable for installation in Floor Control Unit S mixing units equipped with high temperature manifolds.

Technical data: refer to section "Accessories for Topway Manifolds".



High-temperature accessory kit

Dimension	Pcs. pack	Code	Price €
(2+2)H	1	01285502	150,10
(3+3)H	1	01285503	181,00
(4+4)H	1	01285504	214,40

Complete with bracket for fixing the manifolds in the metal box.

Dimensions: section Technical attachments

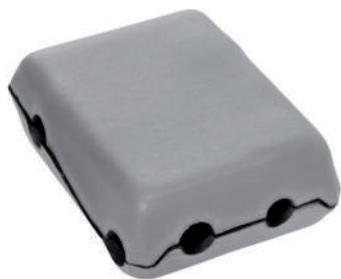


Steel manifold bracket kit for Mixing Unit M3V

Dimension	Pcs. pack	Code	Price €
1"	1	01307176	10,12

To be provided **ONLY** when combining Topway S steel manifolds with Mixing Unit M3V 1" code 28158340

Floor Control Unit S - Regulation group



Insulating shell for Floor Control Unit S, Mixing Unit M3V

Dimension	Pcs. pack	Code	Price €
	1	01306510	98,48

In closed-cell crosslinked expanded polyethylene.

For installation of the insulating shell, it's necessary to first remove the hydraulic assembly from the box (thus do not make the hydraulic and electrical connections before having installed the insulating shell). If the shell is being installed on an assembly inside a Metal-box metal box, it's recommended that the assembly be installed maintaining a distance of 135 mm between the back of the box and the wall.



Thermostatic head with immersion probe for thermostatic regulation group

Setting: 20 ÷ 65 °C

Size thread connection: M30x1,5

Dimension	Pcs. pack	Code	Price €
M30 x 1,5	1	90046750	39,11



Electric servomotor

3-Point Servomotor technical data

Type of operation: 3-position control - Nominal voltage: 230 Vac (± 15%)

Nominal frequency: 50/60 Hz - Maximum consumption: 6 VA

Permissible room temperature: 0÷55 °C

Maximum permissible fluid temperature: 110 °C

Nominal stroke: 2.5 mm (maximum 5.5 mm)

Stroke time (at 50/60 Hz, regarding a stroke of 2.5 mm): 150 s

Nominal force: 100 N - Degree of protection: IP40 according to EN 60529

Insulation class: II according to EN 60730 - Threaded fitting size: M30x1.5

0-10 V Servomotor technical data

Type of operation: 0-10 V DC control

Nominal voltage: AC/DC 24 V (±20% / ±25%)

Nominal frequency: 50/60 Hz - Maximum consumption: 2 VA

Permissible room temperature: 1÷50 °C

Maximum permissible fluid temperature: 110 °C

Nominal stroke: 2.5 mm (maximum 5.5 mm)

Stroke time (at 50/60 Hz, regarding a stroke of 2.5 mm): 150 s

Nominal force: 100 N - Degree of protection: IP40 according to EN 60529

Insulation class: III according to EN 60730 - Threaded fitting size: M30x1.5

Dimension	Pcs. pack	Code	Price €
3 points	1	28157212	301,00
0-10 V DC	1	28157222	380,70

Complete with adapter for installation of the flow probe (for climatic temperature control) inside the regulation group.

To be combined with RCE climatic regulators for heating and cooling.

Floor Control Unit S - Regulation group

Electronic system for electro-thermic actuators



Basic wiring box 6T

Electronic system for electrothermic heads, comprised of a basic junction box and additional extension;

Power supply 230 V or 24 V;

Direct power supply to the normally closed electrothermal heads (at the same power supply voltage as the junction box);

Direct connection to the environment thermostats (at the same power supply voltage as the junction box);

Connection of up to six electrothermal heads (configured at high or low temperature);

Connection of up to six environment thermostats;

Connection for low temperature circulating pump;

Connection for heat source activation;

Adjustable safety thermostat (30÷60 °C);

Safety thermostat contact;

Circulating pump anti-blocage function.

Model	Pcs. pack	Code	Price €
Basic wiring 6T	1	28130616	281,90

Electric boxes



Electric box with safety thermostat for pump cable low temperature

Bulb length: 65 mm

Bulb diameter: 7 mm

Setting: 0÷60 °C ± 3

Contacts: 400 V 16(4) A

Differential: 4 °C

Dimension	Pcs. pack	Code	Price €
	1	28130632	87,93

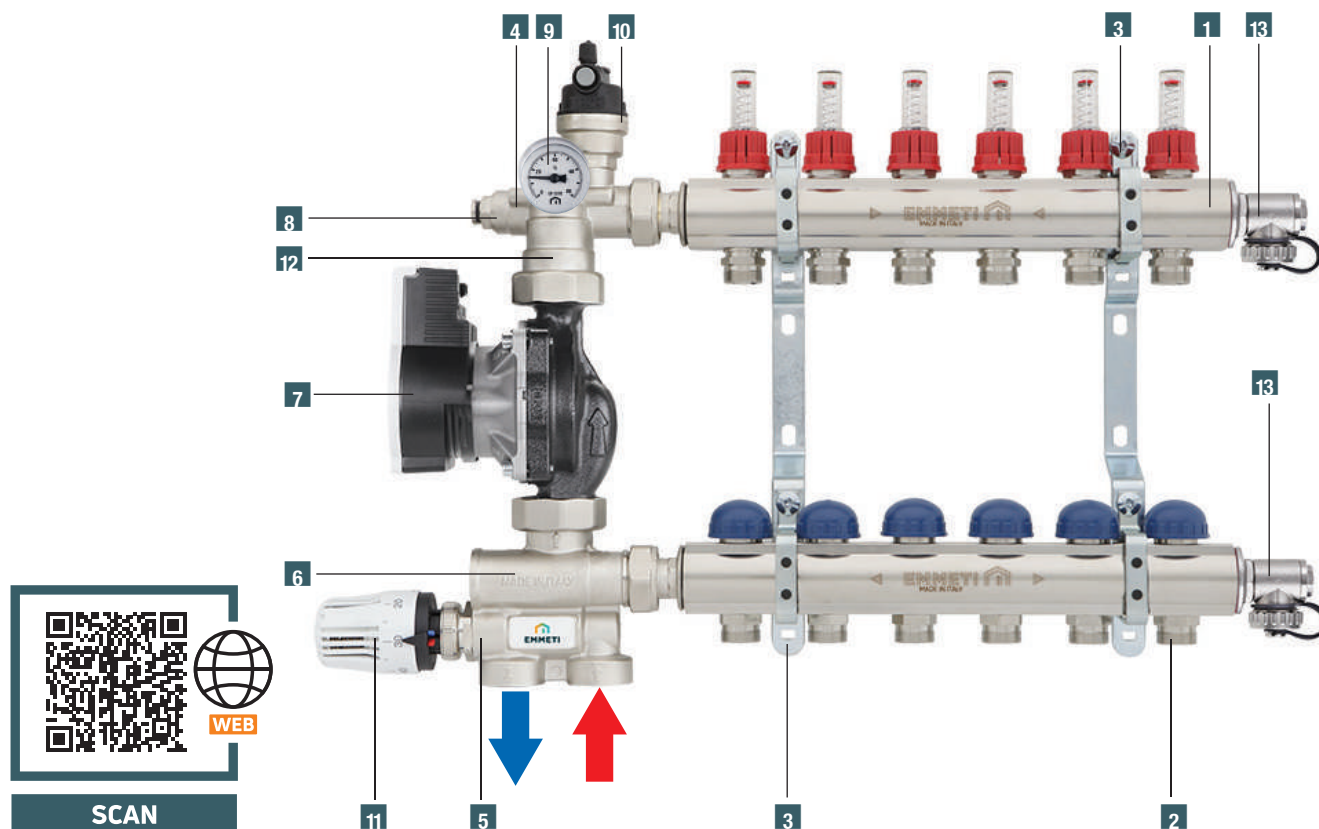
Floor Control Unit S - Regulation group

Component selection guide for pre-assembled Floor Control Units S.

Components	Type of application			
	Heating / Cooling with 3-points servomotor		Heating / Cooling with 0-10 Vdc servomotor	
 28139070 - Section 5	1		1	
 28157212 Section 4	1	1		
 28157222 Section 4			1	1
 28130632 - Section 4	1	1	1	1

TM3-R Mixing Unit

Pre-assembled regulation group (thermostatic or climatic electronic), for low temperature heating systems complete with brackets for installation on wall or in Metalbox (for 120 mm brick thickness)



Construction

- 1 Nr. 1 flow bar for floor heating system with flow meter;
- 2 Nr. 1 return bar for floor heating system set up to take thermoelectric heads (where required);
- 3 Nr. 2 brackets for fixing manifolds;
- 4 Housing for thermostat safety probe;
- 5 Nr. 1 mixing valve thread M30x1,5 set up to thermoelectric head with immersion probe from 20 to 65 °C (where required) electric servomotor (not supplied);
- 6 Nr. 1 adjusting valve and by-pass (fixed-point adjustment)
- 7 Nr. 1 Wilo Para 25/7 circulator pump with cable (tripolar cable L = 1000 mm)
- 8 Nr. 1 housing for temperature flow probe;
- 9 Nr. 1 control thermometer from 0 to 80 °C;
- 10 Nr. 1 automatic bleed valve 1/2"
- 11 Nr. 1 thermostatic head with immersion probe from 20 to 65 °C (fixed-point adjustment)
- 12 Nr. 1 check valve (not shown in the figure)
- 13 Nr. 2 fill and discharge adjustable bibcocks with safety plug

Circulator compliance

ErP Directive
EN 61800-3
EN 61000-6-3 / EN 61000-6-4
EN 61000-6-2 / EN 61000-6-1
2014/35/UE (low voltage)
2014/30/UE (electromagnetic compatibility)

Dimensions: see section Technical Attachments

Technical data

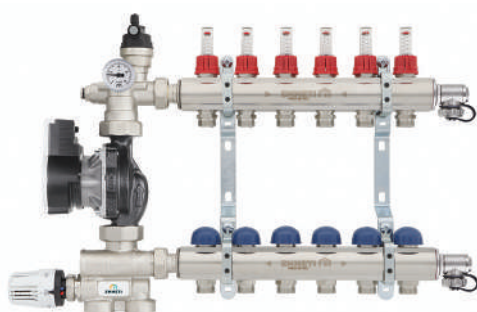
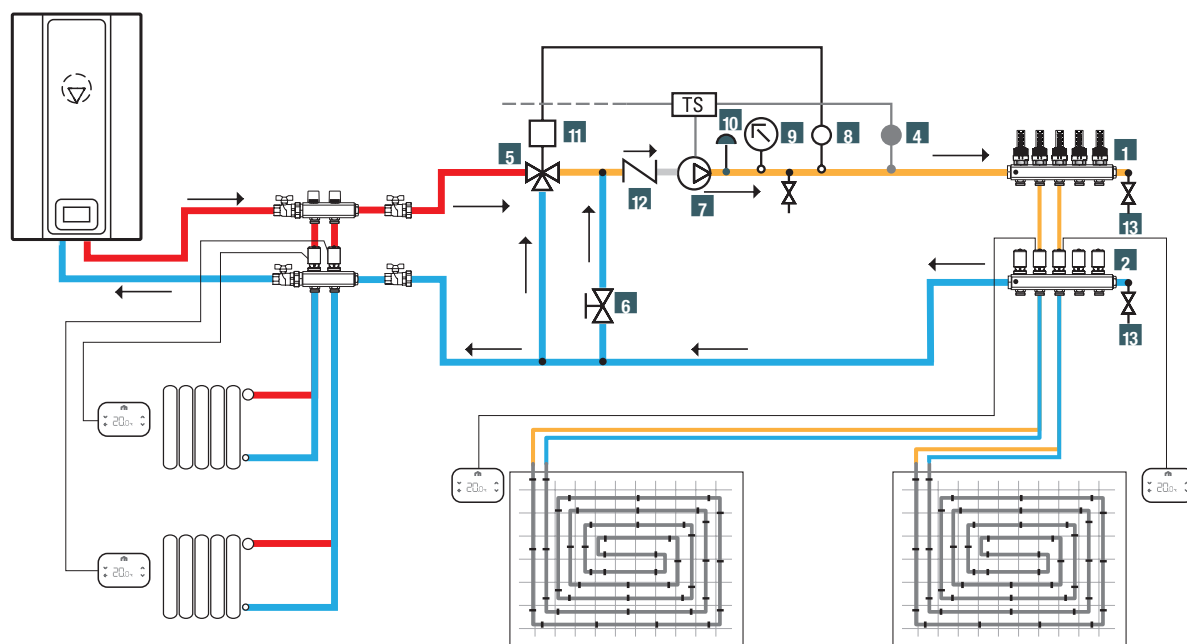
Max temperature for primary circuit: 90 °C
Max operating pressure: 6 bar
 Δp max for primary circuit: 1 bar
Secondary range: 20÷65 °C (fixed-point regulation)
Thermal power exchangeable ΔT 7°C, Δp useful 0,25 bar
- Fixed-point regulation: 10 kW by-pass position 0
- Fixed-point regulation: 12.5 kW by-pass position 5
Pressure drop with by-pass valve position 5: $K_{vmax}=4,8$
Thermometer scale: 0÷80 °C
Head threads of Mixing group: 1" Female
Head threads of Topway manifolds: G 1" Female
Topway manifolds takeoffs threads: 24x19 male, takeoffs 50 mm

Circulator Pump Wilo Para 25/7

Thread UNI EN ISO 228-1 (G 1 1/2)
Takeoff: 130 mm
Variable rotation speed: 2580÷4700 rpm
Maximum pressure head: 7 m
Maximum flow rate: 3,5 m³/h
Fluids can be used:
- water cooling and heating
- water and glycol: max 1:1
Power absorbed: 1-230 V +10% / -15%, 50/60 Hz
Protection class: IPX 4D
Insulation class: F
Power absorbed from 1-230 V: 8.2÷50 W
Electrical consumption from 1-230V: 0.07 ÷ 0,44 A
EEI ≤ 0,2

TM3-R Mixing Unit - Regulation group

Hydraulic scheme of fixing regulation group and circulator pump



TM3-R thermostatic with manifolds with flow meters (4 l/min), low temperature

Dimension	Ways	Thread	Pcs. pack	Code	Price €
1"	2L	24x19	1	28132500	803,80
1"	3L	24x19	1	28132502	837,90
1"	4L	24x19	1	28132504	872,00
1"	5L	24x19	1	28132506	910,40
1"	6L	24x19	1	28132508	942,10
1"	7L	24x19	1	28132510	975,40
1"	8L	24x19	1	28132512	1.012,00
1"	9L	24x19	1	28132514	1.046,00
1"	10L	24x19	1	28132516	1.095,00
1"	11L	24x19	1	28132518	1.129,00
1"	12L	24x19	1	28132520	1.164,00

Complete with thermostatic head with immersion probe - **Wilo Para RS 25/7**
Connections - takeoffs: G1 1/2 - 130 mm



TM3-R thermostatic without circulator pump

Dimension	Pcs. pack	Code	Price €
1"	1	28132200	266,40

Complete with thermostatic head with immersion probe



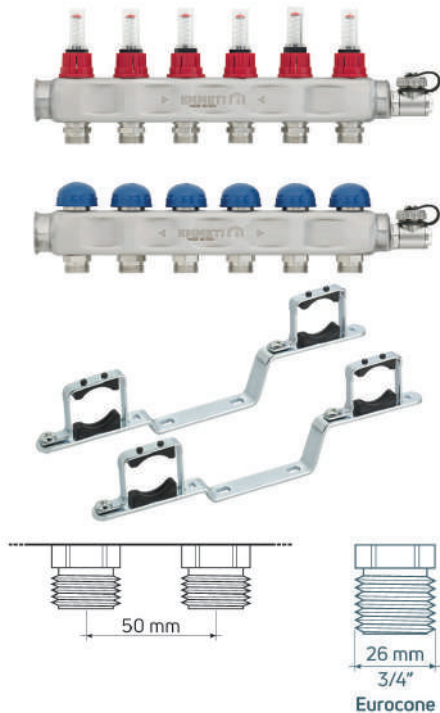
TM3-R thermostatic with Wilo Para RS 25/7 electronic circulator pump

Dimension	Pcs. pack	Code	Price €
1"	1	28132206	628,00

Complete with thermostatic head with immersion probe

Wilo Para RS 25/7
Connections - takeoffs: G1 1/2 - 130 mm

TM3-R Mixing Unit - Regulation group



Topway S Compact - stainless steel distribution manifold 1"

Complete with:

Built-in flowmeters (0÷4 l/min)

Valves with manual adjustment predisposed for electrothermal heads

Nr. 2 water drain valve 1/2" with plug

Nr. 2 metal brackets for installation in metal box or wall

Dimension	Ways	Thread	Pcs. pack	Code	Price €
1"	2+2	3/4" Eurocone	1	01282320	164,00
1"	3+3	3/4" Eurocone	1	01282322	189,40
1"	4+4	3/4" Eurocone	1	01282324	221,20
1"	5+5	3/4" Eurocone	1	01282326	252,90
1"	6+6	3/4" Eurocone	1	01282328	284,70
1"	7+7	3/4" Eurocone	1	01282330	316,90
1"	8+8	3/4" Eurocone	1	01282332	349,00
1"	9+9	3/4" Eurocone	1	01282334	380,60
1"	10+10	3/4" Eurocone	1	01282336	412,40
1"	11+11	3/4" Eurocone	1	01282338	444,30
1"	12+12	3/4" Eurocone	1	01282340	476,40

Use the red o-rings supplied with the TM3-R group to assemble the manifold.



Progress straight ball valves kit female-revolving nut with butterfly handle

Dimension	Pcs. pack	Code	Price €
1" x 1"	1	01306708	53,68



Mixing valve TM3-R

Dimension	Pcs. pack	Code	Price €
	1	90055552	33,37



Safety thermostat kit for mixing units

Dimension	Pcs. pack	Code	Price €
	1	90055734	113,90



Insulating shells for TM3-R

Dimension	Pcs. pack	Code	Price €
1"	1	01306860	45,12

In closed-cell crosslinked expanded polyethylene.

TM3-R Mixing Unit - Regulation group

Electronic system for electro-thermic actuators



Basic wiring box 6T

Electronic system for electrothermal heads, comprised of a basic junction box and additional extension;

Power supply 230 V or 24 V;

Direct power supply to the normally closed electrothermal heads (at the same power supply voltage as the junction box);

Direct connection to the environment thermostats (at the same power supply voltage as the junction box);

Connection of up to six electrothermal heads (configured at high or low temperature);

Connection of up to six environment thermostats;

Connection for low temperature circulating pump;

Connection for heat source activation;

Adjustable safety thermostat (30÷60 °C);

Safety thermostat contact;

Circulating pump anti-blocage function.

Dimension	Pcs. pack	Code	Price €
Basic wiring box 6T	1	28130616	281,90

Electric boxes



Electric box with safety thermostat for pump cable low temperature

Bulb length: 65 mm

Bulb diameter: 7 mm

Setting: 0÷60 °C ± 3

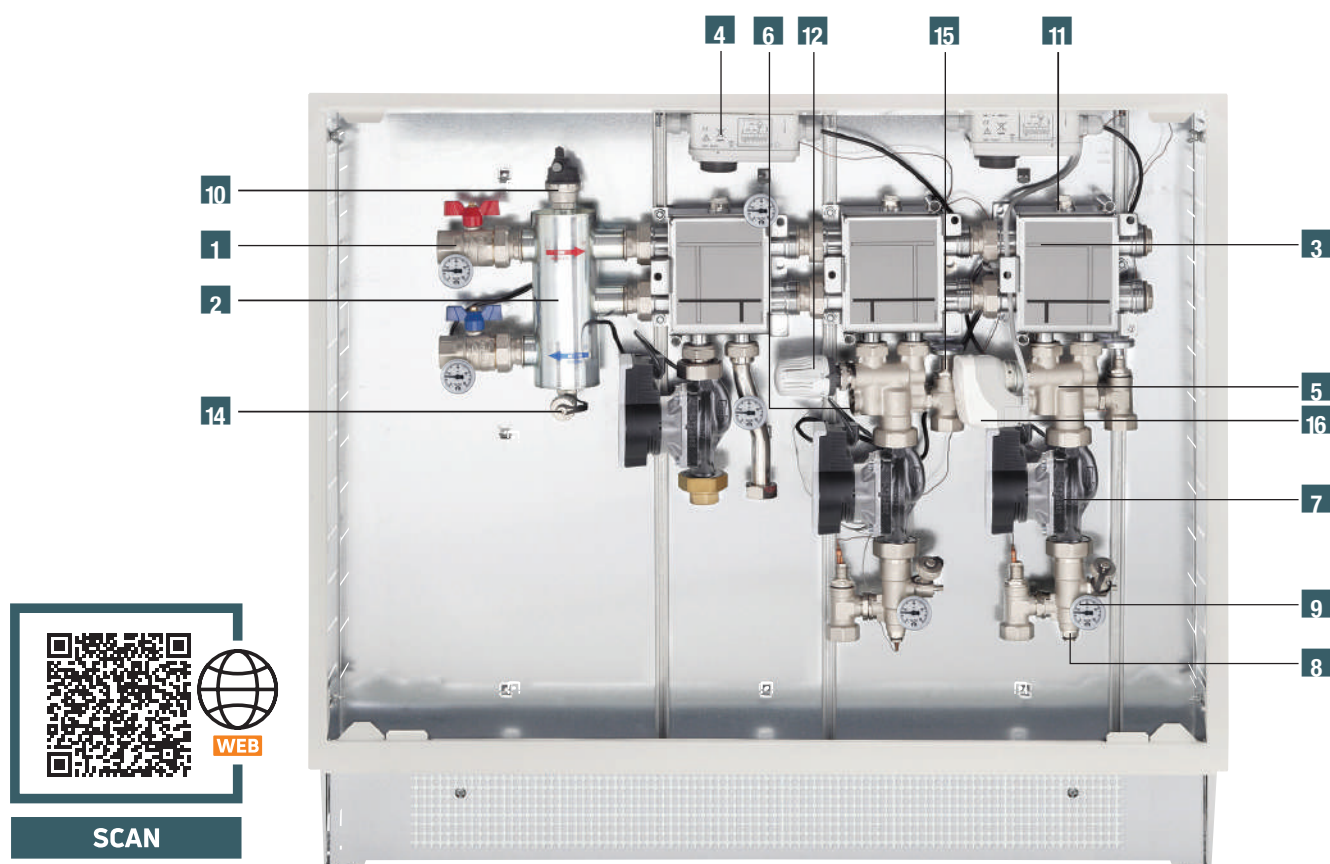
Contacts: 400 V 16(4) A

Differential: 4 °C

Dimension	Pcs. pack	Code	Price €
	1	28130632	87,93

Modular Firstbox high-low temperature systems

Distribution groups for high-low temperature systems, with electronic circulation pumps



Allows the creation of systems with high temperature zones (radiators, fan coils) and low temperature zones (floor systems) assembling one or more modules together as needed.

Besides the standard offer of preassembled boxed modules, individual modules are also available which can be used to build the distribution system that is most suited to your needs. The distribution manifold can be fed from both left and right and the branches can be directed either upwards or downwards.

The open manifold installed upstream from the zone distribution modules hydraulically separates the primary circuit from the secondary circuits. The nonreturn valves on the individual modules prevent recirculation and eddy currents that keep the terminals hot and the supply circuits to the pump floor systems nonfunctioning.

To exclude the individual circuits with stopped pumps, there must be electrothermal heads or zone valves directly connected to the distribution manifolds. In modules with electronic climate regulation, the automatic management of the individual low temperature zone is done by the climate regulator that is controlled by the thermostat and acts directly on the mixing valve servomotor and excludes the zone circuit with the circulator not running.

Through the use of electrical boxes for wiring the high and low temperature circulators (not included) controlled by zone thermostats, system operation can be automated.

Construction

- 1 Ball valve kit (not included)
- 2 Open manifold (if applicable)
- 3 Distribution manifold
- 4 Electrical Box with safety thermostat for wiring low temperature circulator (optional)
- 5 Threaded mixing valve M30x1.5 for installation of a thermostatic head with immersion probe from 20 to 65° C (where application) or an electric servomotor (not included);
- 6 Bypass and setting valve.
- 7 Wilo Para 25/7 electronic circulator wired with threepole cable L=1000 mm
- 8 Housing for output temperature probe;
- 9 Control thermometer from 0 to 80° C;
- 10 Automatic air vent valve, 1/2";
- 11 Manual air vent valve, 1/2";
- 12 Thermostatic head with immersion probe from 20 to 65° C (fixed point reg.)
- 13 Non return valve (not shown)
- 14 Load/unloading tap with adjustable attachment and safety cap (where applicable);
- 15 Shutoff lockshield with housing for thermometer or return probe (climate reg.)
- 16 3 point electric servomotor or 010 V DC (not shown)

Dimensions and diagrams: see section Technical Attachments

Modular Firstbox - underboiler kit

Technical data

Threads UNI EN ISO 228-1
Head threads of distribution manifold: 1"1/4 M - 1" F
Distribution manifold derivation threading: nut 1" F
Individual zone derivation threading: 1" F
Distribution manifold maximum temperature: 110 °C
Maximum pressure: 10 bars
Circulator connectors: pipe union 1" 1/2 spacing 130 mm

Low temperature mixing unit

Primary circuit maximum temperature: 90 °C
Maximum pressure: 10 bars
 ΔP max, primary circuit: 1 bar
Mixing unit regulation field: 20÷65° C (fixed point reg.)
Exchangeable thermal power with ΔT 7°C and Δp useful = 0.25 bar
- fixed point regulation: 10 kW by-pass pos. 0
- fixed point regulation: 12.5 kW by-pass pos. 5
Mixing valve load loss (fixed point reg.) Kv 3
Load loss with bypass valve open (fixed point regulation)
Kv max 4.8

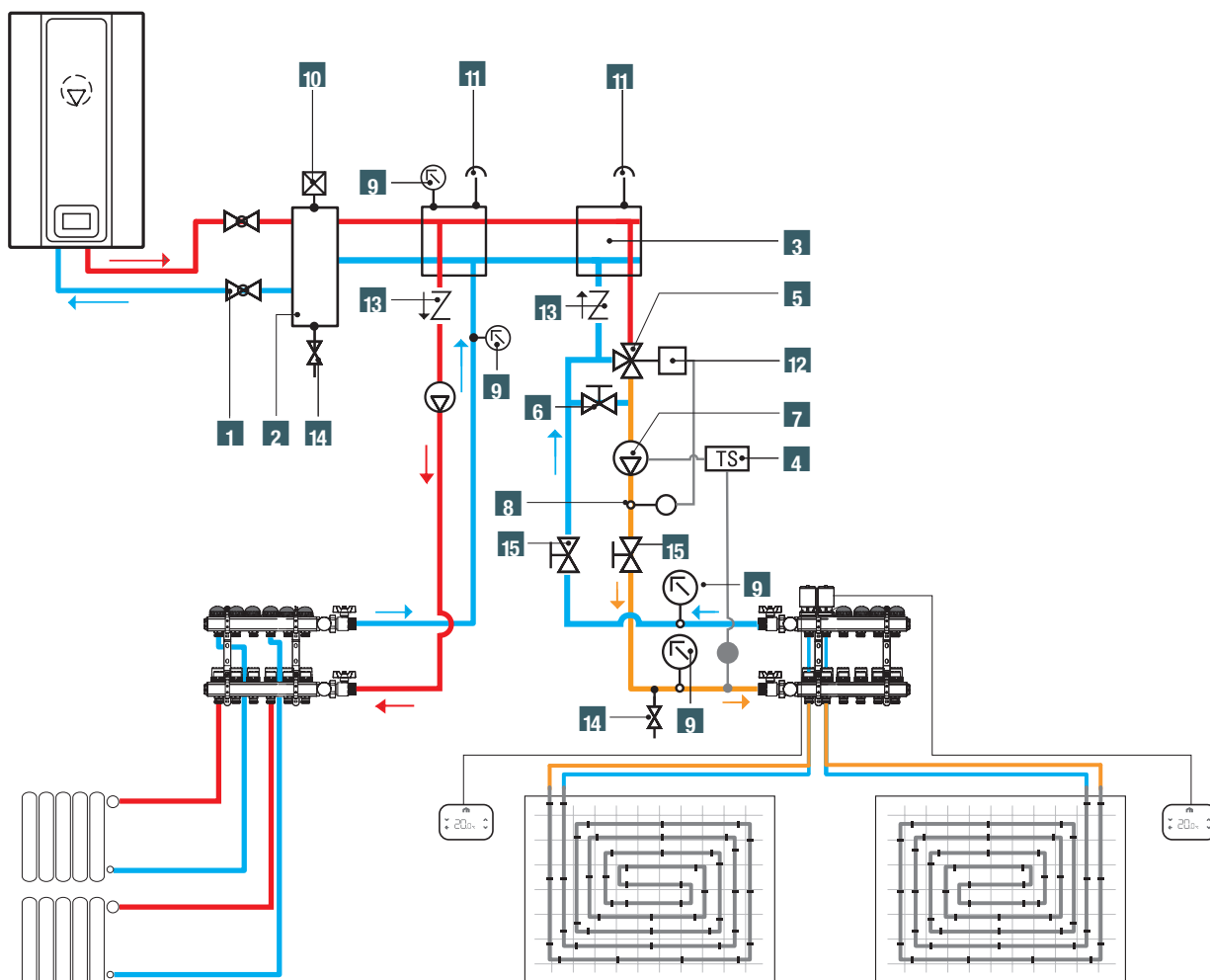
Wilo Para 25/7 circulator pump

Threads UNI EN ISO 228-1 (G 1/2)
Takeoff 130 mm.
Rotation speed: 2580÷4700 rpm
Maximum head: 7 m
Maximum flow: 3.5 m³/h
Usable fluids:
- cooling and heating water
- water and glycol: max 1:1
Electrical connection: 1-230 V +10% / -15%, 50/60 Hz
Protection class: IPX 4D
Insulation class: F
Energy consumption: from 1-230 V: 8.2÷50 W
Current absorbed at 1-230 V: 0.07 ÷ 0.44 A
EEI ≤ 0,2

Circulatore compliance

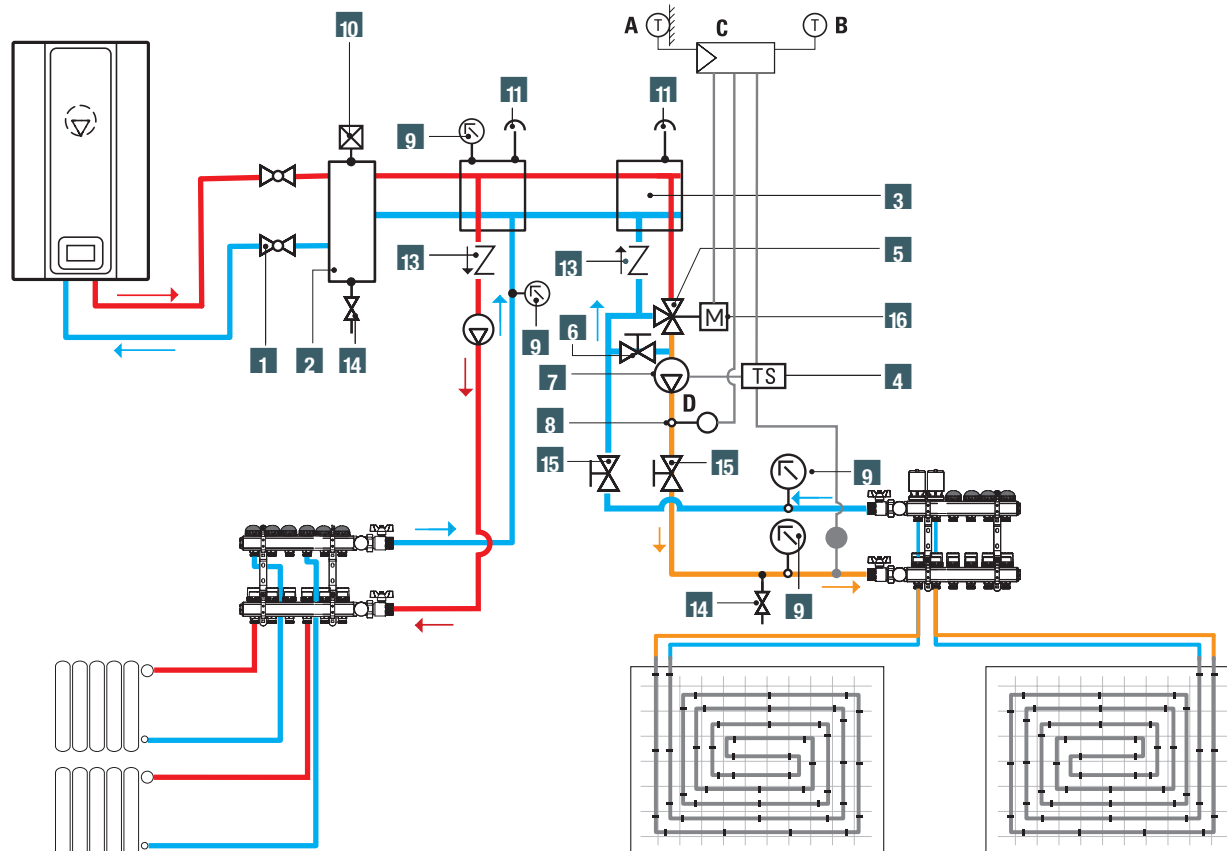
ErP Directive
EN 61800-3
EN 61000-6-3 / EN 61000-6-4
EN 61000-6-2 / EN 61000-6-1
2014/35/UE (low voltage)
2014/30/UE (electromagnetic compatibility)

Hydraulic scheme - Modules with open manifold -fixed-point regulation

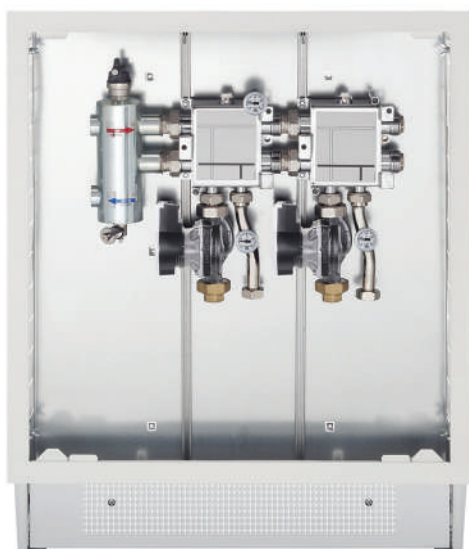


Modular Firstbox - underboiler kit

Hydraulic scheme - Modules with open manifold - Climatic regulation



- A** external probe
- B** room sensor
- C** climatic regulator
- D** flow probe

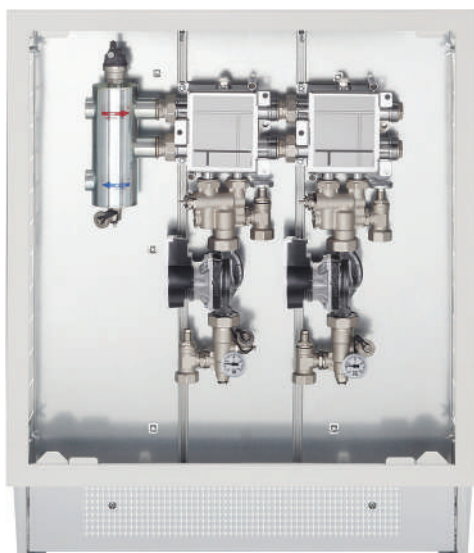


Distribution modules for High-temperature with electronic circulation pumps and open manifold

Dimension	Box	Pcs. pack	Code	Price €
1H	L 500	1	28151736	1.127,00
2H	L 700	1	28151738	1.862,00
3H	L 1000	1	28151740	2.721,00

Note: for correct built-in installation, it's recommended that the module be installed maintaining a distance of 135 mm between the back of the cassette and the wall.

Modular Firstbox - underboiler kit



Distribution modules low temperature with mixing valve, pumps and electronic circulator pumps and open manifold.

Dimension	Box	Pcs. pack	Code	Price €
1L	L 500	1	28151742	1.281,00
2L	L 700	1	28151744	2.178,00
3L	L 1000	1	28151746	3.168,00

To be completed with:

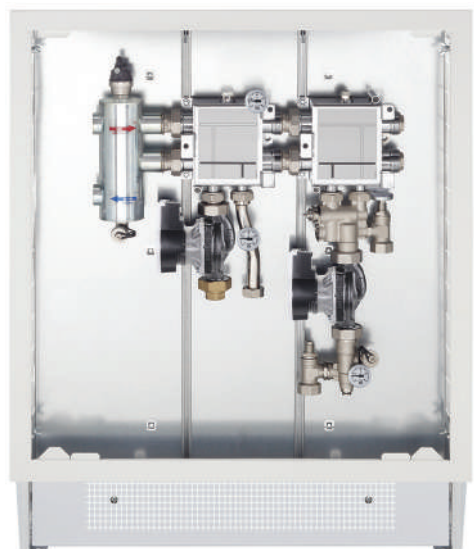
- thermostatic head code 90046750
- 3-points electric servomotor code 28157222

or

- 0-10 V DC electric servomotor code 28157220

Combine with climatic regulator RCE for heating and cooling.

Note: for correct built-in installation, it's recommended that the module be installed maintaining a distance of 135 mm between the back of the cassette and the wall.



Distribution modules high + low temperature with mixing valve, electronic circulation pumps and open manifold.

Dimension	Box	Pcs. pack	Code	Price €
1H + 1L	L 700	1	28151748	2.049,00
1H + 2L	L 1000	1	28151750	2.944,00
2H + 1L	L 1000	1	28151752	2.821,00

To be completed with:

- thermostatic head code 90046750
- 3-points electric servomotor code 28157212

or

- 0-10 V DC electric servomotor code 28157222

Combine with climatic regulator RCE for heating and cooling.

Note: for correct built-in installation, it's recommended that the module be installed maintaining a distance of 135 mm between the back of the cassette and the wall.



Single distribution groups with electronic circulator pumps. High temperature

Dimension	Pcs. pack	Code	Price €
1H	1	28151730	678,60

Pivoting upwards or downwards. Delivered pre-assembled to bottom.

Dimensions: see section Technical Attachments

Modular Firstbox - underboiler kit



Single distribution modules with electronic circulation pump. Low temperature.

Dimension	Pcs. pack	Code	Price €
1L	1	28151732	842,50

To be completed with:

- thermostatic head code 90046750
 - 3-points electric servomotor code 28157212
 - or
 - 0-10 V DC electric servomotor code 28157222
- Combine with climatic regulator RCE for heating and cooling.

Pivoting upwards or downwards. Delivered pre-assembled to bottom.

Dimensions: see section **Technical Attachments**



Single distribution groups with predisposition for circulator pump. High temperature.

Dimension	Pcs. pack	Code	Price €
1H	1	28151800	334,60

Supplied with pipe union to install below the circulator pump.

Connections for circulator pumps: 1"1/2 flat seal

Pivoting upwards or downwards.



Single distribution group with predisposition for circulator pump. Low temperature.

Dimension	Pcs. pack	Code	Price €
1L	1	28151804	466,60

To be completed with:

- thermostatic head code 90046750
- 3-points electric servomotor code 28157212
- or
- 0-10 V DC electric servomotor code 28157222

Complete with pipe union to be installed downstream of the circulation pump.

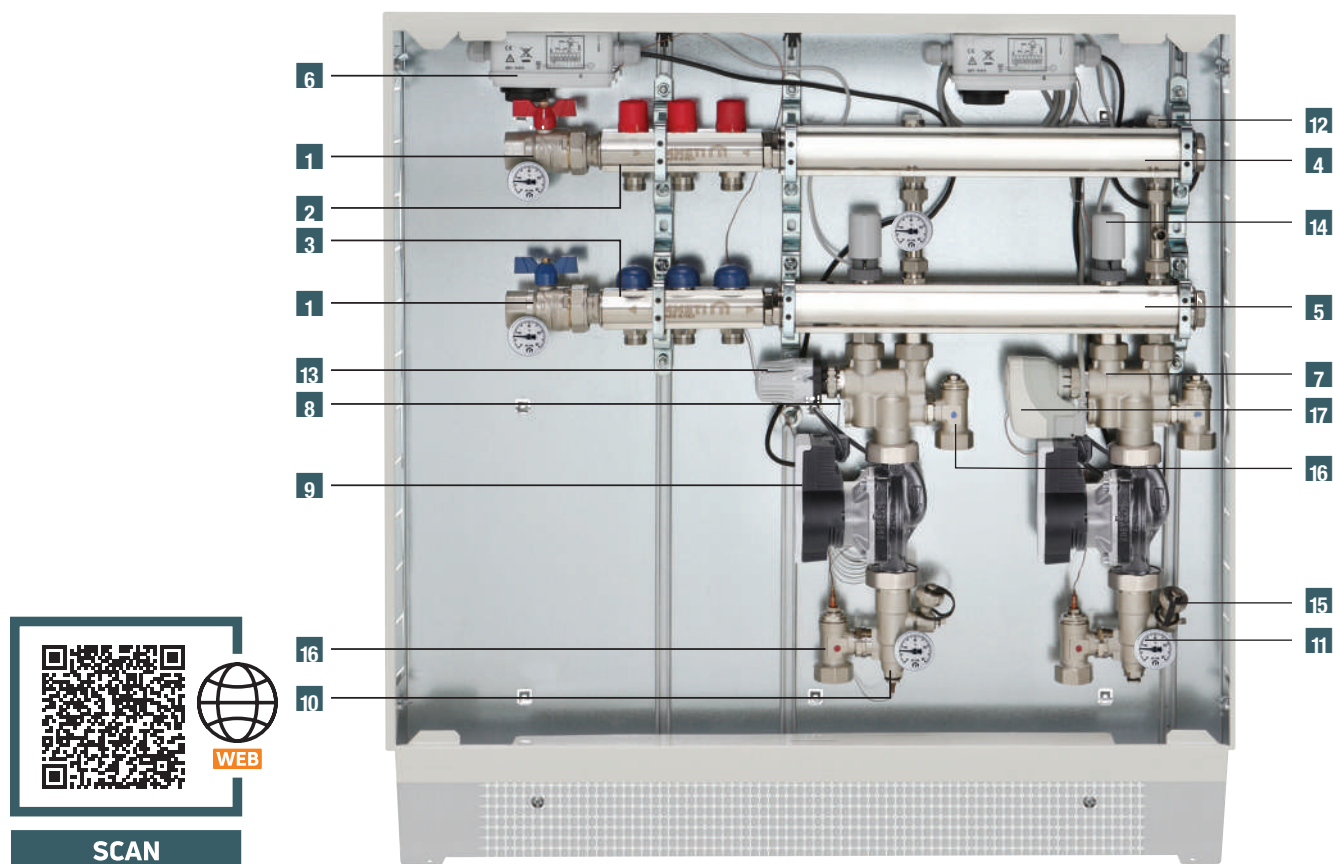
Connections for circulation pump: 1"1/2 F flat edge.

Combine with climatic regulator RCE for heating and cooling.

Pivoting upwards or downwards. Delivered pre-assembled to bottom.

Modular Firstbox low temperature systems

Distribution groups for low temperature systems with auxiliary connections for high temperature terminals



The distribution system allows for the construction of systems with high temperature zones (radiators, fan coils) and low temperature zones (underfloor systems).

The distribution manifolds can be powered both from the right and from the left and the derivations can face upwards or downwards by reversing the power supply.

The non-return valves present on the individual modules prevent recirculation and eddy currents that keep the terminals hot and the supply circuits of the underfloor pump systems not all working.

To exclude the individual circuits with the pumps not running, there must be electrothermic heads or zone valves directly connected to the distribution manifolds.

In the models with electronic climate control, an individual low temperature zone is automatically managed by the climate regulator which, controlled by the ambient thermostat, acts directly on the mixing valve servomotor and excludes the zone circuit with the pump not running.

By using electrical boxes for the wiring of the high and low temperature circulators (not supplied as standard) controlled by the ambient thermostats of the zone, it is possible to make the operation of the system automatic.

Construction

- 1 Ball valve kit (not included)
- 2 Flow bar for radiators systems
- 3 Return bar for radiators systems
- 4 Flow bar for floor heating systems
- 5 Return bar for floor heating systems
- 6 Electrical box with safety thermostat for wiring low temperature circulator pump
- 7 Threaded mixing valve M30x1,5 for installation of a thermostatic head with immersion probe from 20 to 65 °C or an electric servomotor (not included)
- 8 By-pass and setting valve
- 9 Wilo Para 25/7 electronic circulator pump wired with threepole cable L=1000 mm
- 10 Housing for output temperature probe
- 11 Control thermometer from 0 to 80 °C
- 12 Manual air vent valve 1/2"
- 13 Nr. 1 thermostatic head with immersion probe from 20 to 65 °C (fixed point adjustment, not included)
- 14 Thermo-electric actuator with auxiliary switch (optional) that isolates the area with circulator pump off
- 15 Fill and discharge bibcocks with adjustable connection and safety plug
- 16 Shutoff lockshield with housing for thermometer (or return probe with climatic regulation)
- 17 Electric servomotor 3 points or 0-10 V DC
- 18 Terminal kit with by-pass (not shown in the picture and not supplied standard)

Dimensions: see section Technical Attachments

Modular Firstbox - Underboiler kit

Technical data

Threads UNI EN ISO 228-1
 Low temperature distribution manifold head threading: G 1 1/4 F
 High temperature distribution manifold head threading: G 1" F
 Individual zone derivation threading low temperature: G 1" F
 Individual zone derivation threading high temperature: 24x19
 Distribution manifold maximum temperature: 110 °C
 Maximum pressure: 10 bar
 Circulator pump connections: pipe union 1 1/2" - take off 130 mm.

Low temperature mixing unit

Maximum temperature of primary circuit: 90 °C
 Maximum pressure: 10 bar
 Δp maximum primary circuit: 1 bar
 Mixing unit regulation field: 20÷65 °C (fixed point regulation)
 Exchangeable thermal power (ΔT 7°C, Δp useful 0,25 bar)
 Fixed point regulation: 10 kW by-pass pos. 0
 Fixed point regulation: 12.5 kW by-pass pos. 5
 Mixing valve load loss (fixed point regulation) Kv 3
 Load loss with bypass open valve (fixed point regulation) Kvmax 4,8
 Mixing unit head threading: G 1" M

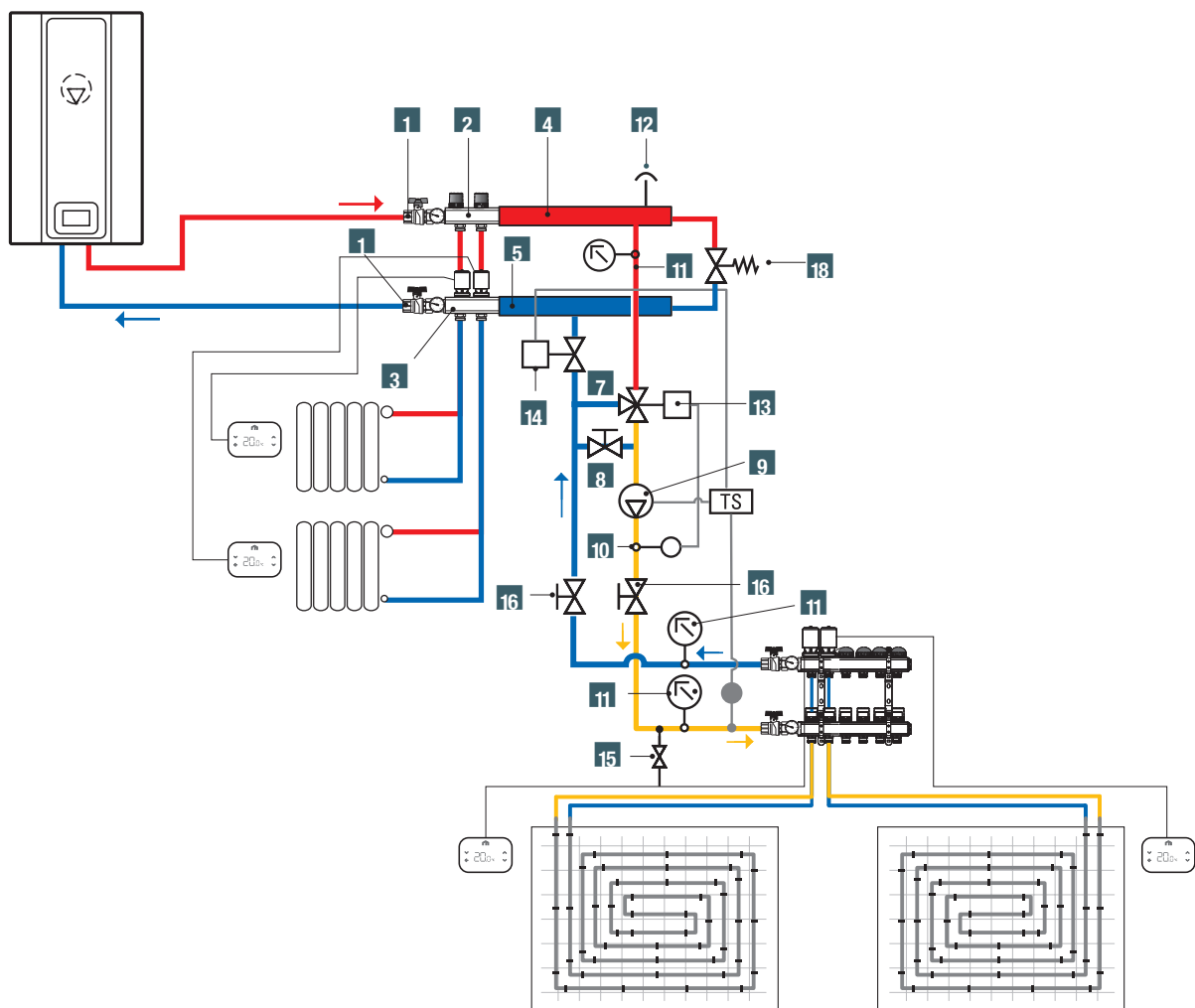
Wilo Para 25/7 circulator pump

Threads UNI EN ISO 228-1 (G 1/2)
 Takeoff 130 mm.
 Rotation speed: 2580÷4700 rpm
 Maximum head: 7 m
 Maximum flow: 3.5 m³/h
 Usable fluids:
 Cooling and heating water
 Water and glycol: max 1:1
 Electrical connection: 1-230 V +10% / -15%, 50/60 Hz
 Protection class: IPX 4D
 Insulation class: F
 Energy consumption: from 1-230 V: 8.2÷50 W
 Current absorbed at 1-230 V: 0.07 ÷ 0.44 A
 EEL ≤ 0,2

Circulatore compliance

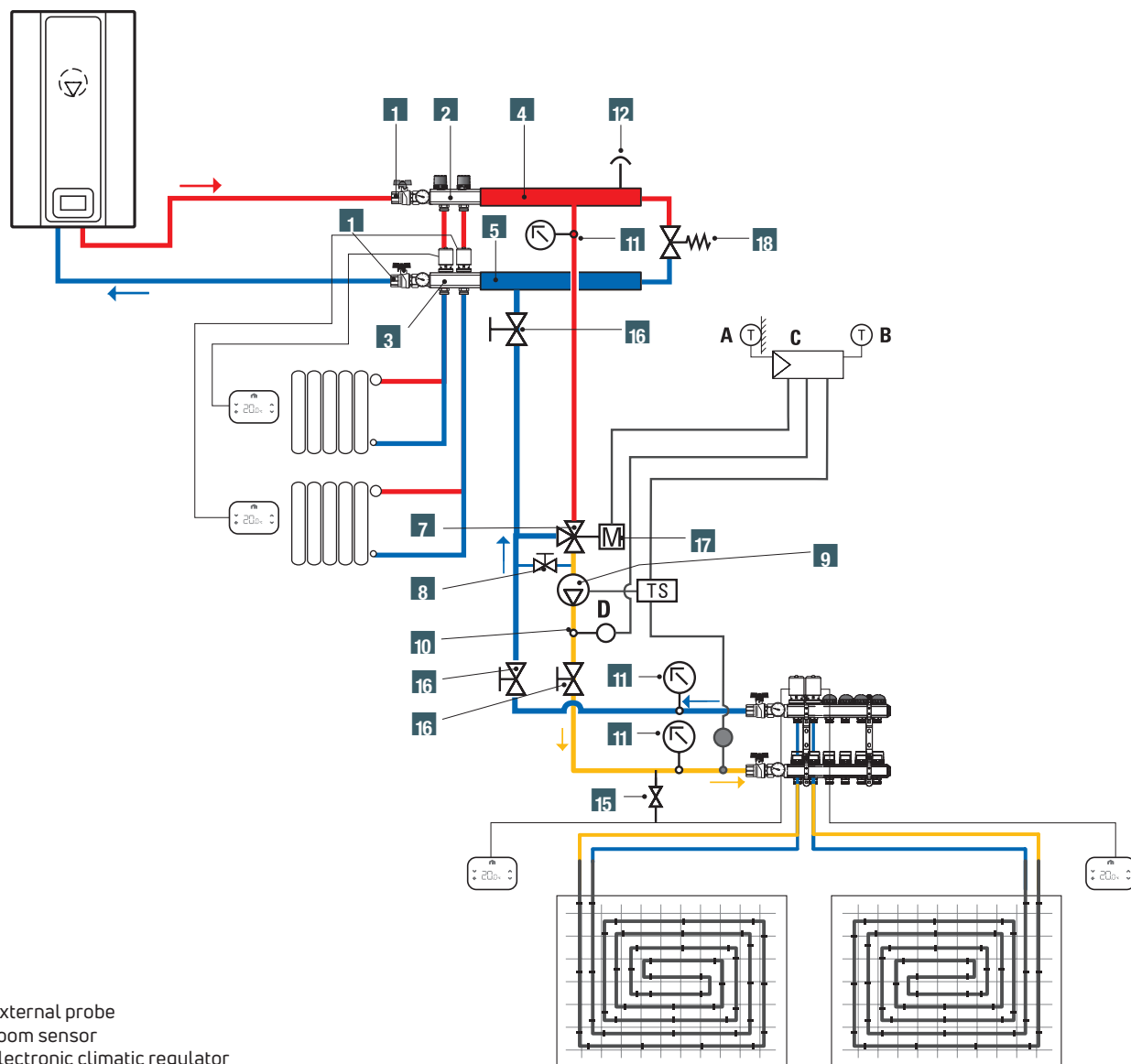
ErP Directive
 EN 61800-3
 EN 61000-6-3 / EN 61000-6-4
 EN 61000-6-2 / EN 61000-6-1
 2014/35/UE (low voltage)
 2014/30/UE (electromagnetic compatibility)

Hydraulic scheme - distribution system for low-temperature heating systems with auxiliary connections for high-temperature terminal. Fixed point adjustment.



Modular Firstbox - Underboiler kit

Hydraulic scheme - distribution system for low-temperature heating systems with auxiliary connections for high-temperature terminal. Climatic regulation.



- A** external probe
B room sensor
C electronic climatic regulator
D flow pipe probe



Distribution modules for low-temperature heating systems with mixing valve, auxiliary connections 2 or 3 high temperature radiators, electronic circulation pumps.

Dimension	Box	Pcs. pack	Code	Price €
(2+2)H + 1L	L 500	1	28151754	1.198,00
(3+3)H + 1L	L 700	1	28151756	1.344,00
(2+2)H + 2L	L 850	1	28151758	2.120,00
(3+3)H + 2L	L 850	1	28151760	2.169,00

To be completed with:

- thermostatic head with immersion probe code 90046750

or

- electric servomotor/s 3 points code 28157212

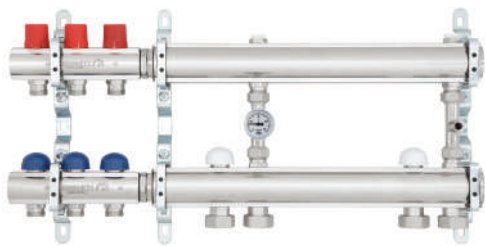
of

- electric servomotor/s 0-10 V DC code 28157222

Combine with RCE climatic regulator for heating and cooling.

Note: for correct built-in installation, it's recommended that the module be installed maintaining a distance of 135 mm between the back of the cassette and the wall.

Modular Firstbox - Underboiler kit



Distribution module with auxiliary connections for high temperature radiators.

Dimension	Pcs. pack	Code	Price €
(2+2)H + 1L	1	28151860	374,60
(3+3)H + 1L	1	28151862	410,40
(2+2)H + 2L	1	28151864	568,70
(3+3)H + 2L	1	28151866	604,60

To complete with couple of blind plug code 90005070



Regulation group low temperature with electronic circulator pump

Dimension	Pcs. pack	Code	Price €
1L	1	28151734	534,60

To be completed with:

- thermostatic head with immersion probe code 90046750

or

- electric servomotor/s 3 points code 28157212

or

- electric servomotor/s 0-10 V DC code 28157222

Combine with RCE climatic regulator for heating and cooling.

Accessories for Modular Firstbox



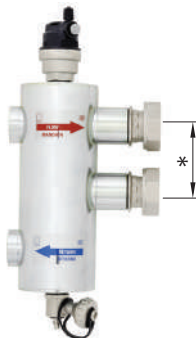
Right-angle valves kit

Dimension	Pcs. pack	Code	Price €
1"	1	01306190	112,70

Thread of body valve UNI EN 10226-1
Thread of pipe union UNI EN ISO 228-1

Technical data: see section "Accessories for Topway manifolds"

Dimensions: see section Technical Attachments



Open manifold 2+2

Dimension	Pcs. pack	Code	Price €
2"1/2	1	28151048	214,90

Complete with nr. 2 connection nipples 1" M - 1"1/4 F
(*) Takeoff for Modular Firstbox

Threads UNI EN ISO 228-1

Dimensions: see section Technical Attachments



Open manifold 4+2 for Modular Firstbox

Size	Pcs. pack	Code	Price €
2"1/2 - 4+2 for Modular Firstbox	1	28151140	328,30

Complete with nr. 2 connection nipples 1" M - 1"1/4 F.
UNI EN ISO 228-1 threads.
(*) Modular Firstbox centre distance.

Item available subject to availability of code 28151130 in the catalogue Termoidraulica ed Ecoenergia 2023

Dimensions: see section Technical Attachments



Pair of connection pipe union for Modular Firstbox

Dimension	Pcs. pack	Code	Price €/pair
M 1" - F 1"1/4	2	01301240	24,40

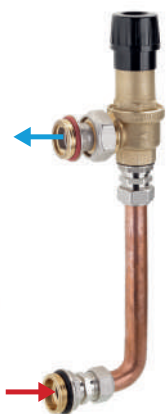
Threads UNI EN ISO 228-1



Nickel-plated blind plug

Dimension	Pcs. pack	Code	Price €/pc.
1" M	10	90004830	4,35

Threads UNI EN ISO 228-1



Terminal kit with bypass for Modular Firstbox with auxiliary connections for high-temperature terminals

Maximum working temperature: 110 °C.
Maximum working pressure: 6 bar.

Dimension	Pcs. pack	Code	Price €
For manifolds size 1"1/4	1	01307012	250,20

Thread UNI EN ISO 228-1

Dimensions and technical data: see section Technical Attachments

Accessories for Modular Firstbox, underboiler kit



Insulating shell for Modular Firstbox distribution groups 1 zone of High

Dimension	Pcs. pack	Code	Price €
1H	1	01306566	38,42

In closed-cell crosslinked expanded polyethylene.

For installation of the insulating shell, it's necessary to first remove the hydraulic assembly from the box (thus do not make the hydraulic and electrical connections before having installed the insulating shell). If the shell is being installed on an assembly inside a Metalbox metal box, it's recommended that the assembly be installed maintaining a distance of 135 mm between the back of the box and the wall.

Not combinable with distribution groups with auxiliary connections for radiators high temperature



Insulating shell for Modular Firstbox distribution groups 1 zone of Low

Dimension	Pcs. pack	Code	Price €
1L	1	01306568	56,02

In closed-cell crosslinked expanded polyethylene.

For installation of the insulating shell, it's necessary to first remove the hydraulic assembly from the box (thus do not make the hydraulic and electrical connections before having installed the insulating shell). If the shell is being installed on an assembly inside a Metalbox metal box, it's recommended that the assembly be installed maintaining a distance of 135 mm between the back of the box and the wall.

Not combinable with distribution groups with auxiliary connections for radiators high temperature



Insulating shell for Modular Firstbox open manifold

Dimension	Pcs. pack	Code	Price €
	1	01306564	29,08

In closed-cell crosslinked expanded polyethylene.

For installation of the insulating shell, it's necessary to first remove the hydraulic assembly from the box (thus do not make the hydraulic and electrical connections before having installed the insulating shell). If the shell is being installed on an assembly inside a Metalbox metal box, it's recommended that the assembly be installed maintaining a distance of 135 mm between the back of the box and the wall.

Suitable for open manifolds code 28151048 and 28151046.

Accessories for regulation groups



Thermostatic head with immersion probe for thermostatic regulation group

Setting: 20 ÷ 65 °C - Size thread connection: M30x1,5

Dimension	Pcs. pack	Code	Price €
	1	90046750	39,11

Accessories for Modular Firstbox, underboiler kit



Electric servomotor

3-Point Servomotor technical data

Type of operation: 3-position control - Nominal voltage: 230 Vac ($\pm 15\%$) - Nominal frequency: 50/60 Hz - Maximum consumption: 6 VA - Permissible room temperature: $0 \div 55^\circ\text{C}$ - Maximum permissible fluid temperature: 110°C - Nominal stroke: 2.5 mm (maximum 5.5 mm) - Stroke time (at 50/60 Hz, regarding a stroke of 2.5 mm): 150 s - Nominal force: 100 N - Degree of protection: IP40 according to EN 60529 - Insulation class: II according to EN 60730 - Threaded fitting size: M30x1.5

0-10 V Servomotor technical data

Type of operation: 0-10 V DC control - Nominal voltage: AC/DC 24 V ($\pm 20\%$ / $\pm 25\%$) - Nominal frequency: 50/60 Hz - Maximum consumption: 2 VA - Permissible room temperature: $1 \div 50^\circ\text{C}$ - Maximum permissible fluid temperature: 110°C - Nominal stroke: 2.5 mm (maximum 5.5 mm) - Stroke time (at 50/60 Hz, regarding a stroke of 2.5 mm): 150 s - Nominal force: 100 N - Degree of protection: IP40 according to EN 60529 - Insulation class: III according to EN 60730 - Threaded fitting size: M30x1.5

Dimension	Pcs. pack	Code	Price €
3 points	1	28157212	301,00
0-10 V DC	1	28157222	380,70

Complete with adapter for installation of the flow probe (for climatic temperature control) inside the regulation group.

To be combined with RCE climatic regulators for heating and cooling.

Electronic system for electro-thermic actuators



Basic wiring box 6T

Electronic system for electrothermic heads, comprised of a basic junction box and additional extension; Power supply 230 V or 24 V; Direct power supply to the normally closed electrothermal heads (at the same power supply voltage as the junction box); Direct connection to the environment thermostats (at the same power supply voltage as the junction box); Connection of up to six electrothermal heads (configured at high or low temperature); Connection of up to six environment thermostats; Connection for low temperature circulating pump; Connection for heat source activation; Adjustable safety thermostat ($30 \div 60^\circ\text{C}$); Safety thermostat contact; Circulating pump anti-blocage function.

Dimension	Pcs. pack	Code	Price €
Basic wiring box 6T	1	28130616	281,90

Electric boxes



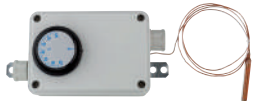
Electric box with safety thermostat for pump cable low temperature

Bulb length: 65 mm - Bulb diameter: 7 mm - Setting: $0 \div 60^\circ\text{C} \pm 3$
Contacts: 400 V 16(4) A - Differential: 4°C

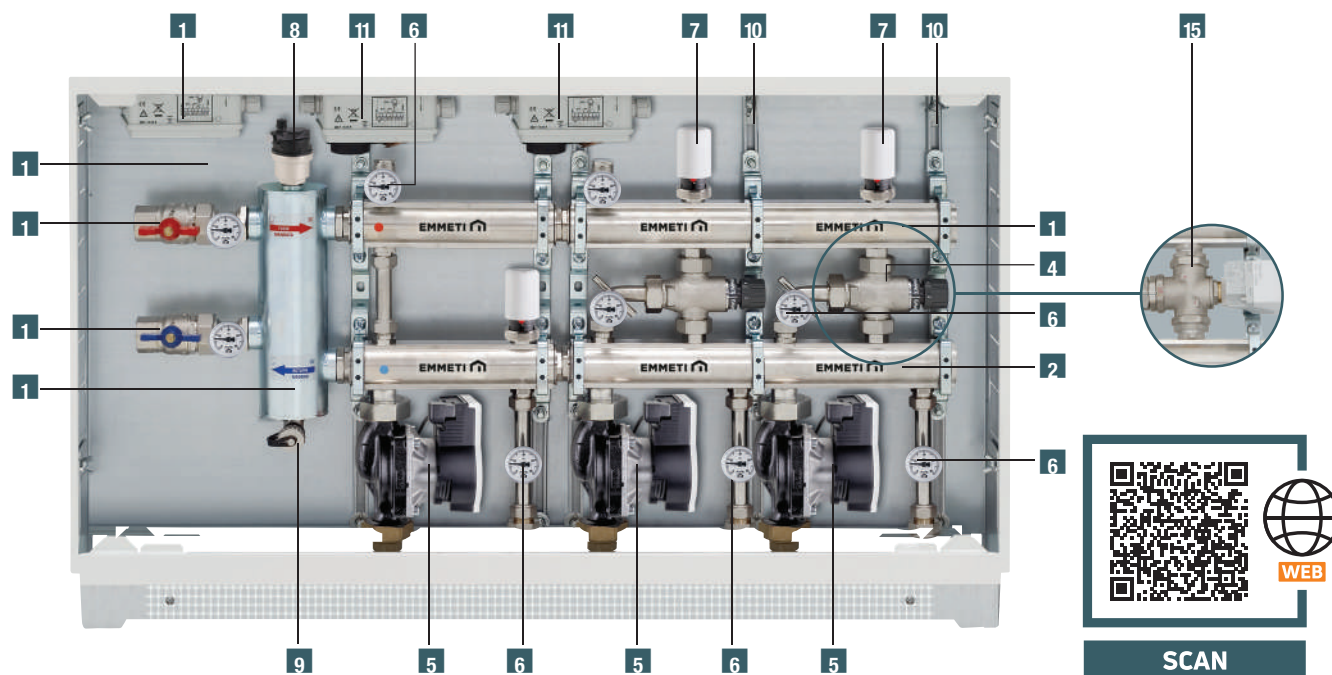
Dimension	Pcs. pack	Code	Price €
	1	28130632	87,93

Accessories for Modular Firstbox, underboiler kit

Guidelines for choosing the climatic regulation components to be combined with the pre-assembled groups **Modular Firstbox**.

Components	Type of application			
	Heating / Cooling with 3-points servomotor		Heating / Cooling with 0-10 Vdc servomotor	
 28139070 - Section 5	1		1	
 28157212 Section 4	1	1		
 28157222 Section 4			1	1
 28130632 - Section 4	1	1	1	1

Distribution groups for high-low temperature systems, with electronic circulation pumps



Construction

- 1 nr. 1 flow bar
- 2 nr. 1 return bar
- 3 Open manifold
- 4 3-ways thermostatic mixing valve (fixing point versions)
- 5 Electronic circulator pump Wilo Para RS 25/7
- 6 Control thermometers 0-80 °C
- 7 Regulation valves for electric heads (optional)
- 8 Automatic air vent valve 1/2"
- 9 Drain bibcocks with adjustable connection and safety plug
- 10 Fixing bar brackets
- 11 Electric box with capillary safety thermostat for regulation low temperature pump (optional)
- 12 Electric box for regulation height temperature pump (optional)
- 13 Progress kit valve (optional)
- 14 Metal cabinet Metalbox Plus (optional)
- 15 Mixing valve with electric servomotor (climatic versions, 3 points or 0-10 V DC electric servomotor to buy separately)

Function conditions

Max operating temperature 90 °C (110 °C*)
 Max operating pressure 6 bar (10 bar*)
 (*) con circolatori idonei a tali prestazioni

Technical data of thermostatic mixer valve

Range of regulation: 25 °C - 55 °C*

* Nominal conditions: TH = 65 °C; TC = 15 °C;

$$\Delta p_{H-MIX} = \Delta p_{C-MIX}$$

$$Kv = 1,8 \div 3,3$$

H; C; Mix: see hydraulic scheme

Technical data for mixer valve activated by 3-point electric servomotor

Kv = 3

Range of adjustment: 15 ÷ 60 °C (*)

(*) with the following conditions:

TH = 65 °C

TC = 15 °C

$$\Delta p_{H-MIX} = \Delta p_{C-MIX}$$

H; C; Mix: see hydraulic scheme

Connections

Thread (built-in modules/Open manifold side): 1"

Thread (auxiliary connections for 2 or 3 high-temperature heating bodies): 1" F

Thread (single modules): 1 1/4" F

Zone connections thread: 3/4" F

Branch connections thread for high-temperature heating bodies: M 24x19

Material of distribution modules

Brass from drawn bar TN UNI EN 12168 CW614N

Brass UNI EN 12165 CW 617 N

Annealed copper

Gasket o-rings EPDM 70 Sh

Flow and return manifolds

Size: 1 1/4"

Thread: G 1 1/4"

Open manifold

Zinc-plated sandblasted steel UNI EN 13134

Lateral connections 1" F

Auxiliary connections 1/2" F

Firstbox - Under boiler kit

Wilo Para 25/7 circulator pump

Threads UNI EN ISO 228-1 (G 1/2)

Takeoff 130 mm.

Rotation speed: 2580÷4700 rpm

Maximum head: 7 m

Maximum flow: 3.5 m³/h

Usable fluids:

Cooling and heating water

Water and glycol: max 1:1

Electrical connection: 1~230 V +10% / -15%, 50/60 Hz

Protection class: IPX 4D

Insulation class: F

Energy consumption: from 1~230 V: 8.2÷50 W

Current absorbed at 1~230 V: 0.07 ÷ 0.44 A

The range

- Firstbox H - distribution modules for high temperature zones
- Firstbox L - distribution modules for low temperature zones
- Firstbox H+L - distribution modules for high and low temperature zones
- Recessed distribution modules for high/low temperature systems, provided pre-assembled in recessed metallic box complete with enamelled door and frame
- Single distribution modules, provided with fastening brackets, to be assembled using joint nipples M-M 1"1/4

In confirm to:

ErP Directive

EN 61800-3

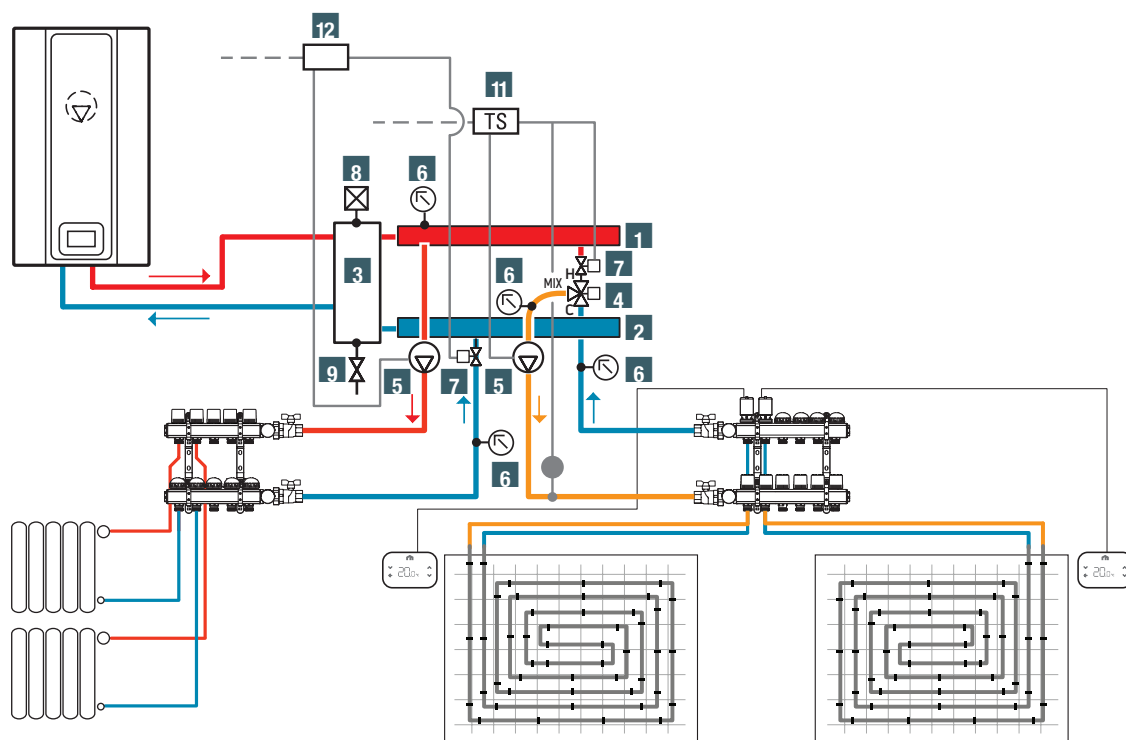
EN 61000-6-3 / EN 61000-6-4

EN 61000-6-2 / EN 61000-6-1

2014/35/UE (low voltage)

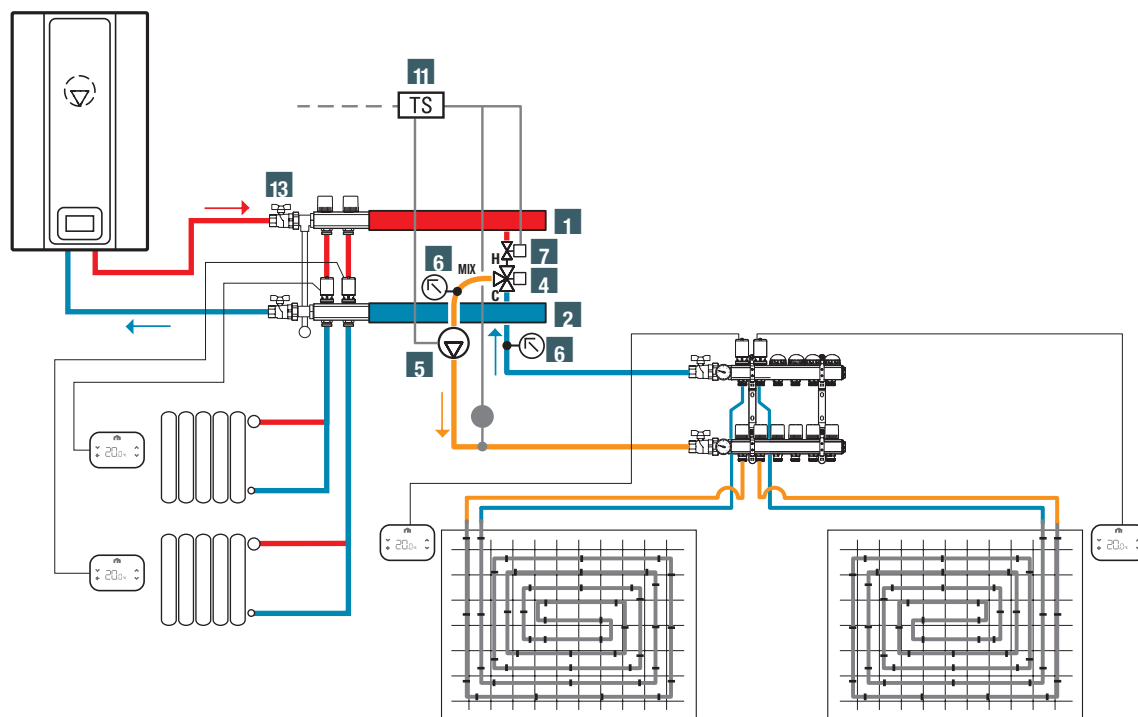
2014/30/UE (electromagnetic compatibility)

Hydraulic scheme - Modules with open manifold - Thermostatic regulation

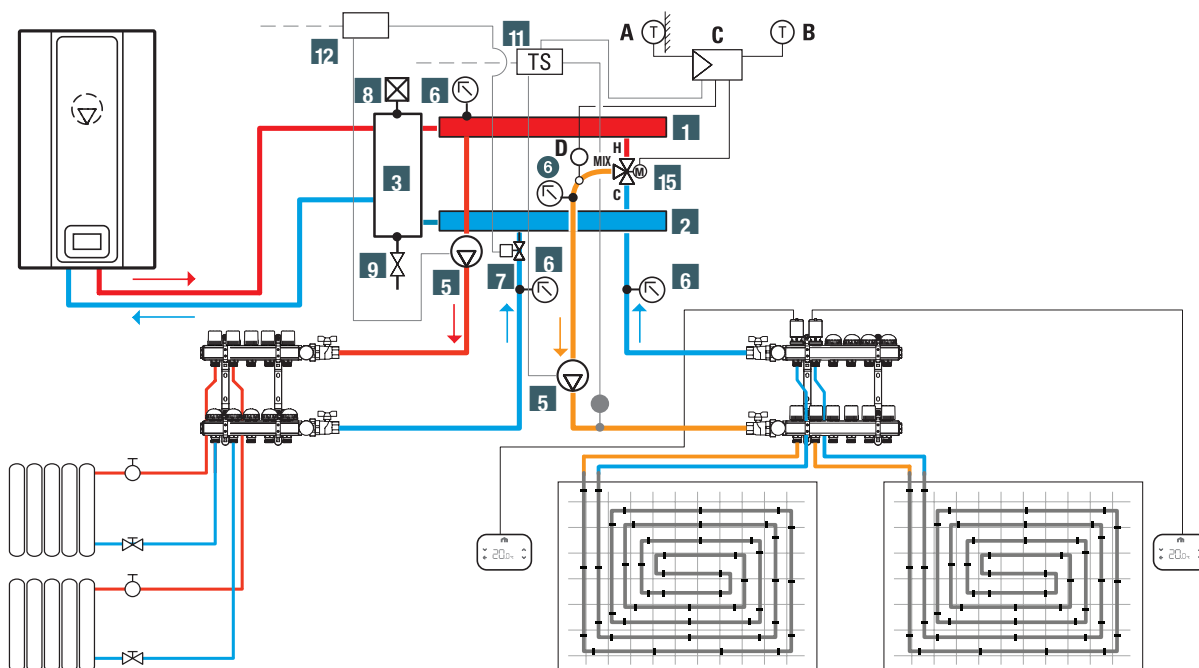


Firstbox - Under boiler kit

Hydraulic scheme - Modules for low temperature heating systems with auxiliary connections for high temperature terminals. Thermostatic regulation

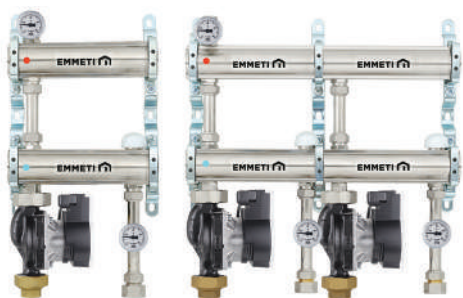


Hydraulic scheme - Modules with open manifold - Climatic regulation



- A** external probe
- B** room sensor
- C** electronic climatic regulator
- D** flow pipe probe

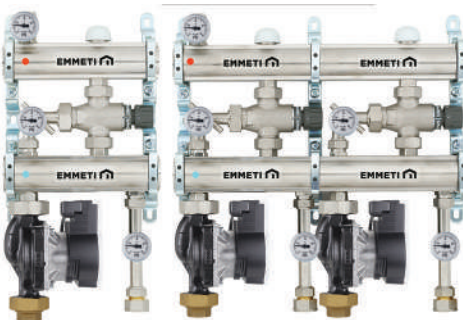
Firstbox - Under boiler kit



Single distribution groups with below electronic circulator pumps. High temperature

Dimension	Pcs. pack	Code	Price €
1H	1	28151710	717,80
2H	1	28151712	1.324,00

Keep the high temperature modules near the open manifold or boiler.



Single distribution groups with below electronic circulator pumps. Low temperature. Thermostatic regulation

Dimension	Pcs. pack	Code	Price €
1L	1	28151714	932,00
2L	1	28151716	1.715,00

Keep the high temperature modules near the open manifold or boiler.



Single distribution modules with lower electronic circulation pump. Low temperature. Mixer valve set up for operation by means of electric servomotor.

Dimension	Pcs. pack	Code	Price €
1L	1	28151718	919,00

Keep the high-temperature modules near the open collector or boiler.

To be completed with:

- 3-point electric servomotor(s) code 28157210

or

- 0-10 V DC electric servomotor(s) code 28157220

Combine with RCE Climatic Regulator for heating and cooling.



Single distribution groups with predisposition for below circulator pump. High temperature.

Dimension	Pcs. pack	Code	Price €
1H	1	28151300	347,10
2H	1	28151304	580,10

Keep the high temperature modules near the open manifold or boiler.

Supplied with pipe union to install below the circulator pump/s.

Connections for circulator pumps: 1"1/2 flat seal



Single distribution groups with predisposition for below circulator pump. Low temperature. Thermostatic regulation

Dimension	Pcs. pack	Code	Price €
1L	1	28151302	563,50
2L	1	28151306	975,20

Keep the high temperature modules near the open manifold or boiler.

Supplied with pipe union to install below the circulator pump/s.

Connections for circulator pumps: 1"1/2 flat seal

Accessories for Firstbox



Right-angle valves kit

Dimension	Pcs. pack	Code	Price €
1"	1	01306190	112,70

Thread of body valve UNI EN 10226-1
Thread of pipe union UNI EN ISO 228-1

Technical data: see section "Accessories for Topway manifolds"



Open manifold 2+2 for Firstbox

Dimension	Pcs. pack	Code	Price €
2"1/2	1	28151040	203,10

Supplied with nr. 2 connection nipples reduced 1"1/4 - 1", air vent valve and drain valve.
Volume: 1 lt

Thread UNI EN ISO 228-1

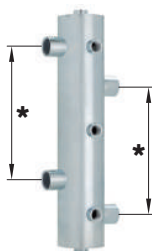


Open manifold 4+2 for Firstbox

Dimension	Pcs. pack	Code	Price €
2"1/2 - 4+2	1	28151042	318,50

Complete with: nr. 2 reduced nipple joint 1"1/4 - 1", air vent valve and adjustable drain bibcocks.

Thread UNI EN ISO 228-1



Open manifold 2+2 S, takeoff Firstbox

Dimension	Ways	Pcs. pack	Code	Price €
3"	2+2+5 S	1	07400284	420,20

Made in zinc-plated steel welding UNI EN13134. Lateral connections Female 1"1/4 - Auxiliary connection Female 1/2". Max operating pressure: 8 bar.

* Takeoff Firstbox 159 mm.

Thread UNI EN ISO 228-1



Connection nipple

Dimension	Pcs. pack	Code	Price €/pc.
M - M 1"1/4	6	01306430	32,68
Reduced 1"1/4 - 1"	4	01306432	21,98

Thread UNI EN ISO 228-1



Nickel-plated blind plug

Dimension	Pcs. pack	Code	Price €/pc.
1" 1/4 M with O-Ring	10	90005070	6,93

Thread UNI EN ISO 228-1

Accessories for Firstbox, underboiler kit



Insulating shell for Firstbox distribution groups

Dimension	Pcs. pack	Code	Price €
1H pump below	1	01306514	72,59
1L pump below	1	01306516	72,59

In closed-cell crosslinked expanded polyethylene.

For installation of the insulating shell, it's necessary to first remove the hydraulic assembly from the box (thus do not make the hydraulic and electrical connections before having installed the insulating shell). If the shell is being installed on an assembly inside a Metal-box metal box, it's recommended that the assembly be installed maintaining a distance of 135 mm between the back of the box and the wall.

To be combined with the "RCFH electronic climatic regulation Kit" code 28139060 for heating only.

DO NOT USE for Modular Firstbox.



Insulating shell for Firstbox open manifold

Size	Pcs. pack	Code	Price €
	1	01306512	65,36

In mesh expanded closed cell polyethylene.

For the installation of the insulating shell, you must first remove the plumbing assembly from the box. Therefore, do not make plumbing and electrical connections before installing the insulating shell). Also position the frame of the box at a distance of at least 135 mm from the bottom of the box itself.



Electric servomotor

3-Point Servomotor technical data

Type of operation: 3-position control - Nominal voltage: 230 Vac ($\pm 15\%$) - Nominal frequency: 50/60 Hz - Maximum consumption: 6 VA - Permissible room temperature: 0÷55 °C - Maximum permissible fluid temperature: 110 °C - Nominal stroke: 2.5 mm (maximum 5.5 mm) - Stroke time (at 50/60 Hz, regarding a stroke of 2.5 mm): 150 s - Nominal force: 100 N - Degree of protection: IP40 according to EN 60529 - Insulation class: II according to EN 60730 - Threaded fitting size: M30x1.5

0-10 V Servomotor technical data

Type of operation: 0-10 V DC control - Nominal voltage: AC/DC 24 V ($\pm 20\%$ / $\pm 25\%$) - Nominal frequency: 50/60 Hz - Maximum consumption: 2 VA - Permissible room temperature: 1÷50 °C - Maximum permissible fluid temperature: 110 °C - Nominal stroke: 2.5 mm (maximum 5.5 mm) - Stroke time (at 50/60 Hz, regarding a stroke of 2.5 mm): 150 s - Nominal force: 100 N - Degree of protection: IP40 according to EN 60529 - Insulation class: III according to EN 60730 - Threaded fitting size: M30x1.5

Dimension	Pcs. pack	Code	Price €
3 points	1	28157212	301,00
0-10 V DC	1	28157222	380,70

Complete with adapter for installation of the flow probe (for climatic temperature control) inside the regulation group.

To be combined with RCE climatic regulators for heating and cooling.

Electronic system for electro-thermic actuators



Basic wiring box 6T

Electronic system for electrothermic heads, comprised of a basic junction box and additional extension;

Power supply 230 V or 24 V;

Direct power supply to the normally closed electrothermal heads (at the same power supply voltage as the junction box);

Direct connection to the environment thermostats (at the same power supply voltage as the junction box);

Connection of up to six electrothermal heads (configured at high or low temperature);

Connection of up to six environment thermostats;

Connection for low temperature circulating pump;

Connection for heat source activation;

Adjustable safety thermostat (30÷60 °C);

Safety thermostat contact - Circulating pump anti-blocage function.

Dimension	Pcs. pack	Code	Price €
Basic wiring box 6T	1	28130616	281,90

Accessories for Firstbox, underboiler kit

Electric boxes



Electric box with safety thermostat for pump cable low temperature

Bulb lenght: 65 mm - Bulb diameter: 7 mm - Setting: 0÷60 °C ± 3 - Contacts: 400 V 16(4) A - Differential: 4 °C

Dimension	Pcs. pack	Code	Price €
	1	28130632	87,93

Guidelines for choosing the climatic regulation components to be combined with the pre-assembled groups :
Floor Control Unit S, M3V and Modular Firstbox.

Components	Type of application			
	Heating / Cooling with 3-points servomotor		Heating / Cooling with 0-10 Vdc servomotor	
 28139070 - Section 5	1		1	
 28157212 Section 4	1	1		
 28157222 Section 4			1	1
 28130632 - Section 4	1	1	1	1



Regulation and control



- > Thempra
Chronothermostat
e Chronohygrostat
..... **221**



- > Unisenza Plus
Wireless System
..... **225**



- > Unisenza
Wall Wi-Fi
Chronothermostat
..... **236**



- > Sintesi
Wall Wi-Fi
Chronothermostat
..... **240**



- > Sintesi
Mini Wi-Fi
Chronothermostat
..... **242**



- > Sintesi
Wall Wi-Fi RF
Chronothermostat
..... **243**



- > Sintesi
Touch screen
Chronothermats
and Thermostats
..... **245**



- > Smarty
Touch screen
Thermostats
..... **247**



- > Wall-mounted
touch screen
Chronothermats
and Thermostats
..... **249**



- > Termec EVO
room
thermostat
..... **251**



- > Electronic
room thermostat
..... **252**



- > Wall
chronothermostat
with humidistat
..... **253**



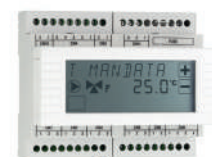
- > Wall-mounted
electronic
humidistat
..... **254**



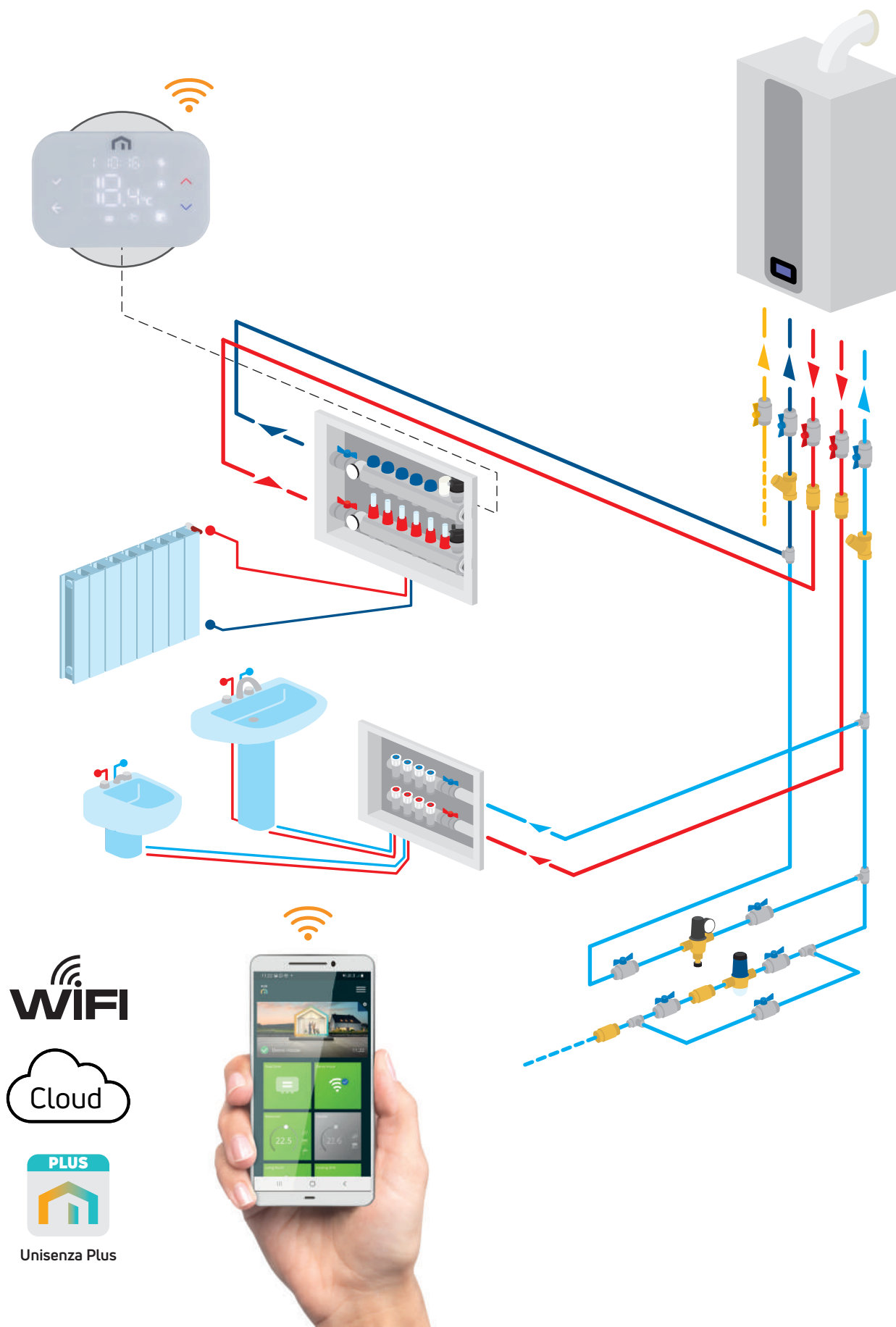
- > Radiofrequency
thermoregulation
..... **255**



- > RCE
Emmeti
Climatic Regulator
..... **262**



Example of installation



Themptra

Stand-alone weekly chronothermostat and chronohygrostat, designed for remote control via smartphone and app

NEW



Weekly chronothermostat and chronohygrostat, operating both in stand-alone mode and with an internet connection, for wall installation, for temperature control in both heating and cooling modes, and for room humidity control.

It can be managed remotely using mobile devices (e.g., smartphones or tablets) with the free Unisenza Plus app. This application requires one gateway for each system and one Wi-Fi modem/router (for example, if there are four Themptra thermostats in the home, only one gateway is required).

Communication between Themptra and Gateway takes place via the ZigBee 3.0 wireless communication protocol.

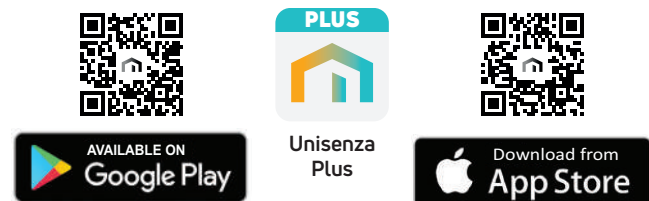
The internet connection is also used for automatic updates of the thermostat and Gateway (OTA updates, over the air).

The Unisenza Plus app is available in the following languages: Italian, English, German, French, Romanian, Polish, Dutch, Norwegian, Finnish, Swedish, and Danish.

Specifically, the Unisenza Plus app allows you to:

- turn the air conditioning system on and off;
- view the detected room temperature and humidity, and change the relevant setpoint values;
- create and modify weekly programs in a simple and intuitive way;
- set a vacation program;
- view any alarms.

Download Unisenza Plus APP:



Features and functionality

Partial flush mounting (230 V model) or surface mounting (battery model) on standard 503 type box.

Keypad: 4 touch keys located on either side of the display

Communication interfaces: ZigBee 3.0

Operating modes: heating/cooling/off/anti-freeze

Type of adjustment: On/Off or proportional (default On/Off)

Time programming up to a maximum of 6 daily time slots (start time and relative set temperature and humidity), with 3 different options:

- different for each day of the week;
 - the same from Monday to Friday, and different for Saturday and Sunday (5+2 mode);
 - the same for all days of the week;
- Option to disable the dehumidification contact in winter (default setting).

Automatic changeover between standard time and daylight saving time (for both stand-alone and connected installations) and automatic synchronisation of the date and time when connected to the internet.

Keypad lock to prevent unauthorised changes (two levels: complete or partial).

Temperature self-learning function (to be enabled).

Open window function.

Valve/circulator anti-lock function.

Display switch-on duration setting: 10÷60 seconds (default duration 10 seconds).

In the case of battery-powered devices, the higher the value, the more limited the battery life.

Compatibility with Amazon Alexa and Google Home Assistant.





Thempra chronothermostat and chronohygrostat

NEW

Technical data

Power supply:

- model 230 Vac: 230 Vac, 50/60 Hz
- battery-powered model: 4 AAA batteries

ZigBee 3.0 wireless communication, 2.4 GHz (maximum distance from the gateway is 300 m in open space)

Dimensions LxHxP: 130x85x15 mm

Heating/cooling consent relay capacity:

- 230 Vac model: 3 A @ 250 Vac
- battery model: 1 A @ 250 Vac

Dehumidification/humidification consent relay capacity:

- 230 Vac model: 3 A @ 250 Vac
- battery model: 1 A @ 250 Vac

Temperature measurement unit: °C or °F

Adjustable room temperature setpoint: 5 to 35 °C

Adjustable room temperature differential: 0.1 to 1 °C (default 0.3 °C)

Measured room temperature resolution: 0.1 °C

Room temperature measurement accuracy: ±0.3 °C

Adjustable antifreeze temperature setpoint: 5 to 35 °C

Adjustable relative ambient humidity setpoint: 0 to 100%

Adjustable ambient humidity differential: 5 to 35% (default 5%)

Resolution of measured ambient humidity: 0.1%

Ambient humidity measurement accuracy: ±2%

Operating temperature: 0 to 45 °C

Storage temperature: -10 to 65 °C

Operating humidity: 20% to 90% RH non-condensing

Protection rating: IP30

Delegated Regulation (EU) No 811/2013; Annex IV-3:

- Class of temperature control device: Class 4; Class IV
- Contribution of the temperature control device to the seasonal space heating energy efficiency in %: 2%

Model	Pcs. pack	Code	Price €
Thempra a 230 Vac	1	02018200	124,90
Thempra a batterie	1	02018210	115,90



Unisenza Plus Gateway

NEW

This item is required for remote management of one or more Thempra chronothermostats/chronohygrostats via smartphone and app, in combination with a modem router.

A gateway can connect more than one Thempra device to the internet (for example, if there are four Thempra thermostats in the home, only one gateway is required).

Communication between Thempra and the Gateway takes place via the ZigBee 3.0 wireless communication protocol.

Supplied complete with: 230 Vac/5 Vdc power supply; RJ-45 Ethernet cable; bracket, screws and wall fixing plugs.

Technical data

Wireless communication interfaces:

- ZigBee 3.0, 2.4 GHz, for communication with Thempra thermostats (maximum distance from the thermostat is 300 m in open space)

- Bluetooth: v4.2 BR/EDR and BLE, for initial pairing of the Gateway with the modem router

- Wi-Fi: 802.11 b/g/n, for communication between the Gateway and the modem router

Wired communication interface: 10/100 Mbps Ethernet connection.

Firmware update: via internet (OTA, over the air).

Power supply: 5 Vdc from micro USB port (power supply included).

Maximum power consumption: 3 W

Installation environment: indoor

Operating temperature: 0÷50 °C

Relative humidity: 5-95% non-condensing

Storage temperature: -10÷60 °C

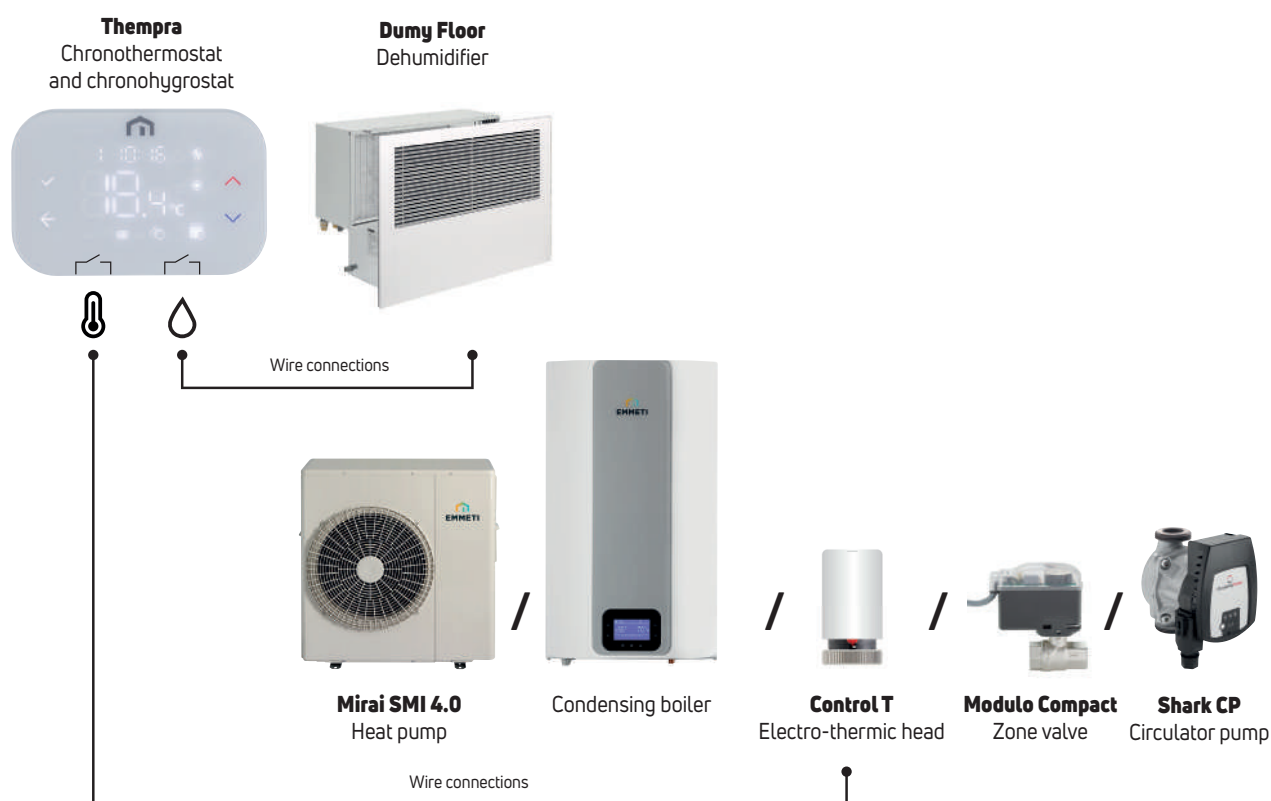
Dimensions WxHxD: 98x93x24 mm

Protection rating: IP30

CE compliance: RED 2014/53/EU, RoHS 2011/65/EU, REACH (EC 1907/2006) Directives

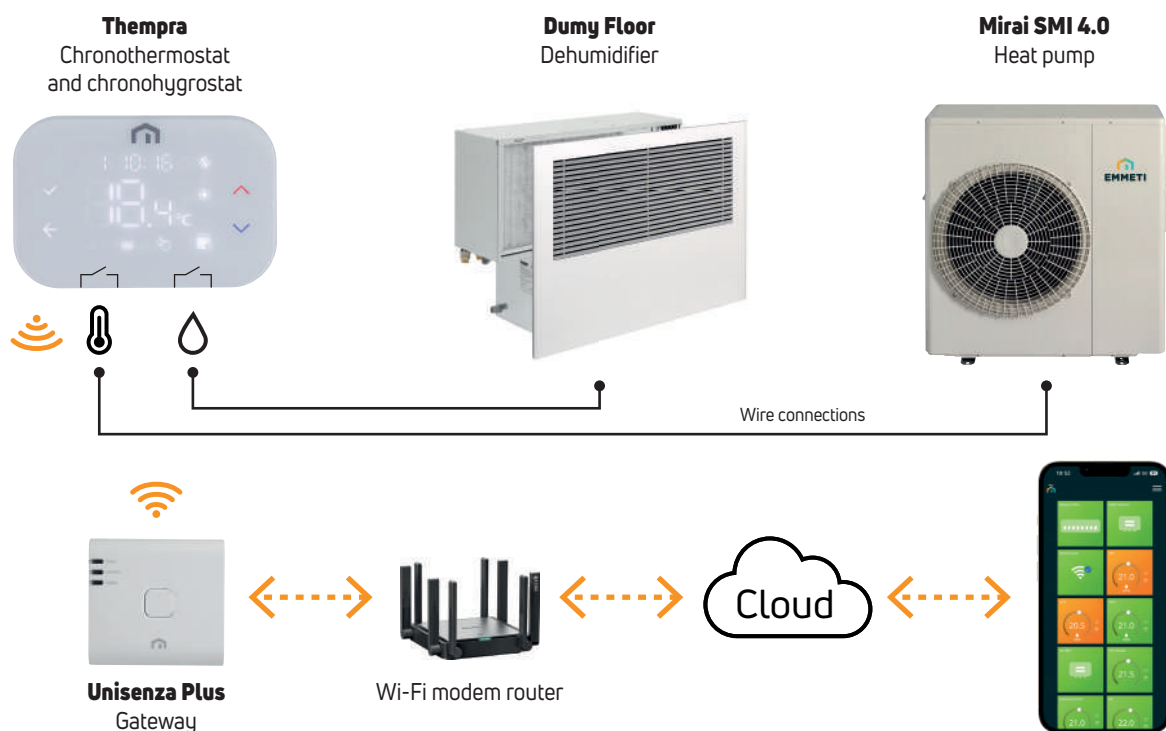
Model	Pcs. pack	Code	Price €
Unisenza Plus Gateway	1	02018220	119,90

Example of installation STAND-ALONE



Note: refer to the wiring diagrams in the instruction manuals for correct installation.

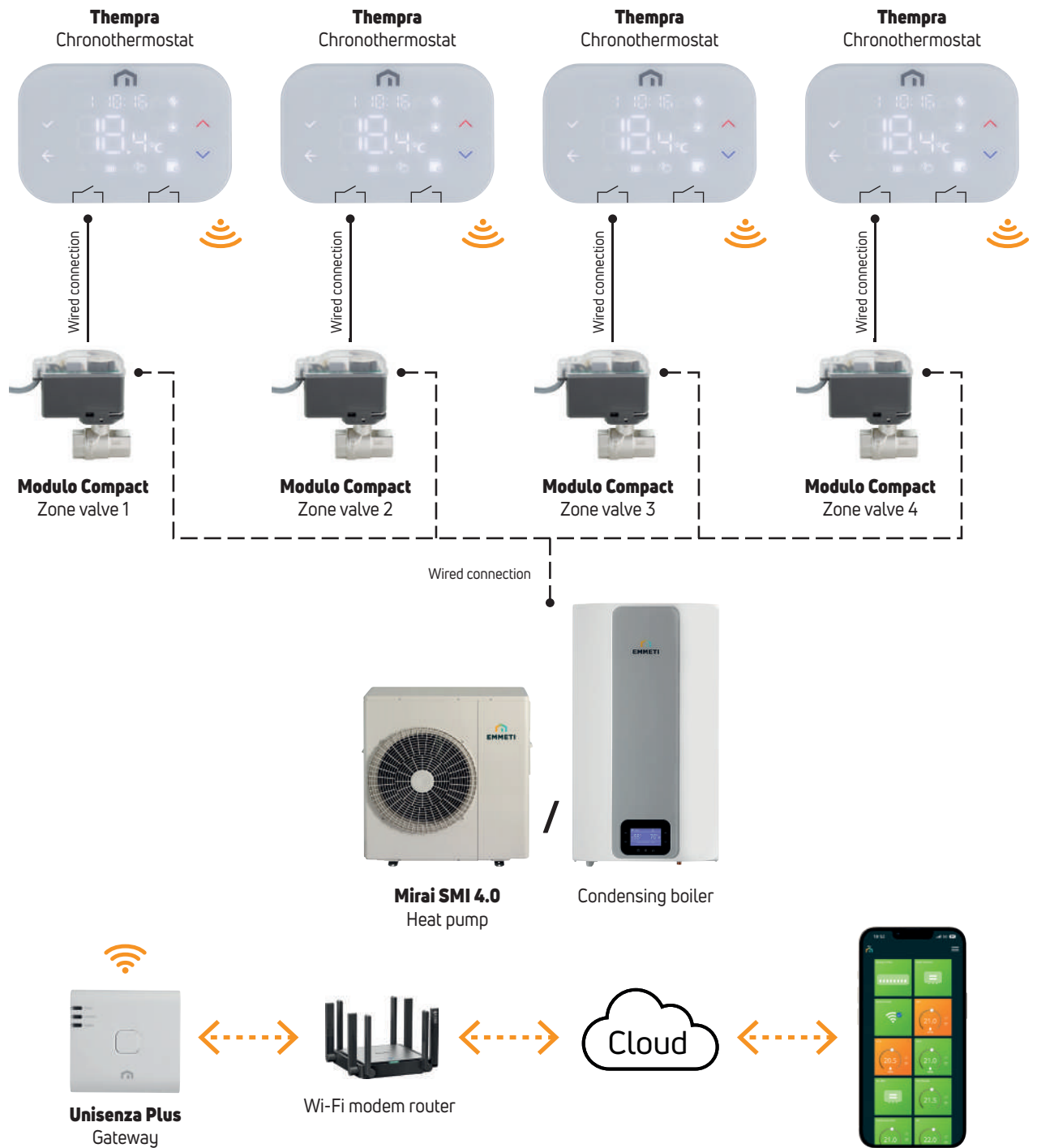
Example of installation WITH CONNECTIVITY



Note: refer to the wiring diagrams in the instruction manuals for correct installation.

Themptra

Example of installation WITH CONNECTIVITY: autonomous multi-zone system with zone valves



Note: refer to the wiring diagrams in the instruction manuals for correct installation.

Key:

----- consent for delayed activation of the heat generator from the zone valve microswitches (wire connections).

Unisenza Plus

Intelligent wireless control system
for optimising energy efficiency and comfort

NEW



Unisenza Plus is a smart solution for controlling heating systems that allows users to easily connect and control numerous devices at the touch of a button.

It includes an extensive range of possibilities and compatible products, as well as the added value of a completely wireless network that allows for optimal flexibility in both new construction and renovation projects.

With just a few components, such as:

- Gateway (mandatory component);
- Themptra thermostat;
- Chronothermostatic actuator;
- Receiver;

it is very easy to create different combinations and configure an entire building.

Through the Unisenza Plus app, users can monitor and control all products connected to the app, even remotely and at any time (for this use, an internet connection is required inside the building, for example via a modem/router).

Up to 100 devices can be easily connected to form an integrated network that optimises each individual component for maximum performance and comfort.

System features

- Future-proof range using the latest Zigbee 3.0 wireless technology;
- Complete solution from the first installation, or easily expandable later;
- Modern and functional design that can be easily adapted to different installation requirements;
- Simple and intuitive Unisenza Plus app (available in the following languages: Italian, English, German, French, Romanian, Polish, Dutch, Norwegian, Finnish, Swedish, Danish), which allows centralised control of comfort and energy efficiency, initial system configuration, and display of any alarms;
- Possibility to configure the system even without an internet connection (using the Unisenza Plus app, exploiting the local Wi-Fi network generated by the Gateway);
- Possibility to control multiple gateways and various buildings within the same app;
- Compatibility with Amazon Alexa and Google Home Assistant.



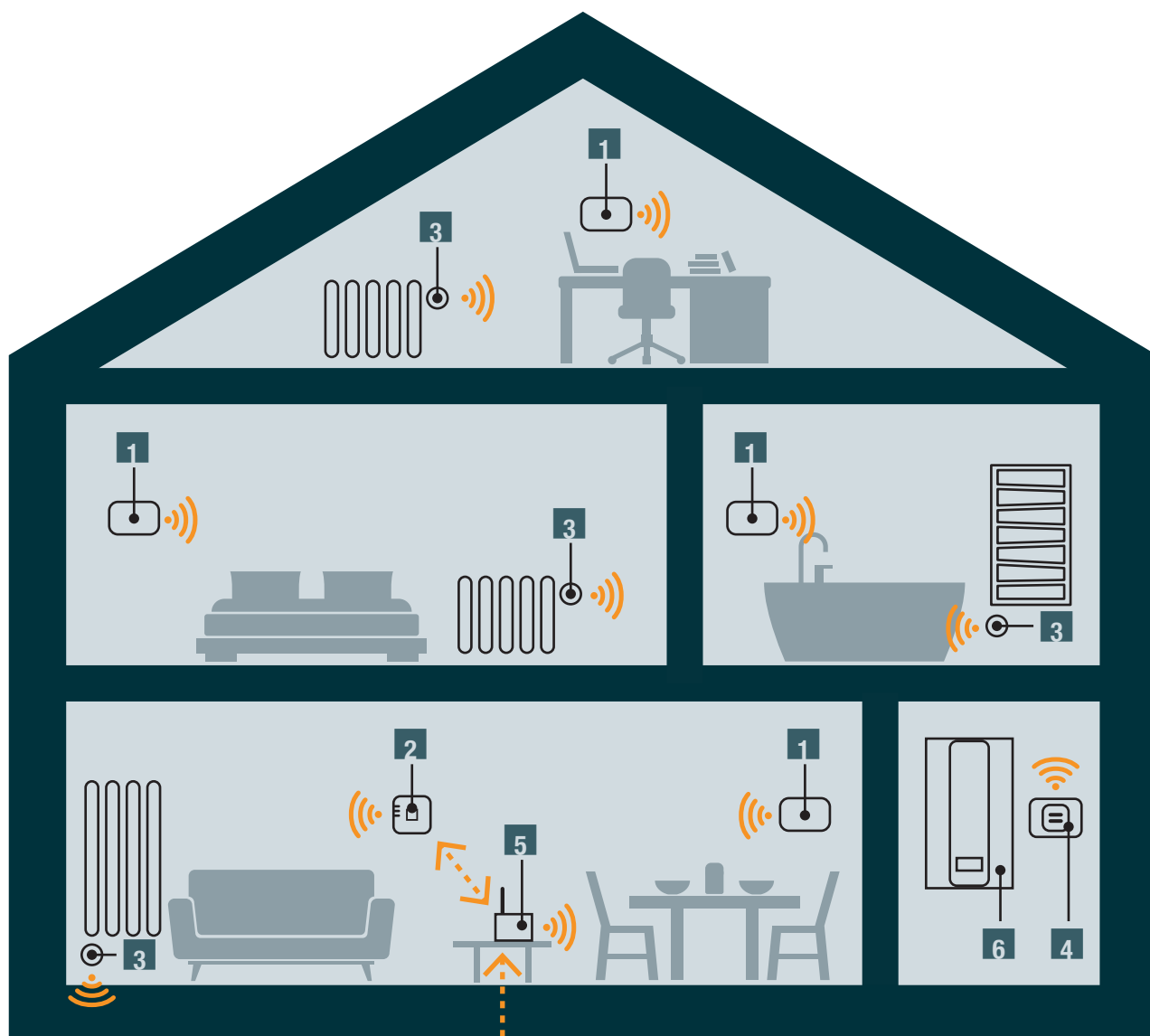
Download the Unisenza Plus APP:



Unisenza
Plus



Unisenza Plus: example of application in a residential building



1 Thempra
Chronothermostat



3 Unisenza Plus
Chronothermostatic
actuator



5 Wi-Fi modem router

6 Condensing boiler



2 Unisenza Plus
Gateway



4 Unisenza Plus
Receiver





Unisenza Plus Gateway

NEW

Central unit required for:

- enabling wireless communication between thermostats, chronothermostatic actuators and receivers using the ZigBee 3.0 communication standard (up to a maximum of 100 devices);
- connecting the above devices to the cloud via a modem router (the Gateway can be connected to the modem router via Wi-Fi or Ethernet cable).

It also allows the creation and management of multiple zones of the heating system.

Supplied complete with: 230 Vac/5 Vdc power supply; RJ-45 Ethernet cable; bracket, screws and wall mounting plugs.

Dati tecnici

Wireless communication interfaces:

- ZigBee 3.0, 2.4 GHz, for communication with Unisenza Plus devices (maximum distance between each device is 300 m in open space)
- Bluetooth: v4.2 BR/EDR and BLE, for initial pairing of the Gateway with the modem router
- Wi-Fi: 802.11 b/g/n, for communication between the Gateway and the modem router

Wired communication interface: 10/100 Mbps Ethernet connection.

Firmware update: via the internet (OTA, over the air).

Power supply: 5 Vdc from micro USB port (power supply included).

Maximum power consumption: 3 W

Installation environment: indoor

Operating temperature: 0÷50 °C

Relative humidity: 5-95% non-condensing

Storage temperature: -10÷60 °C

Dimensions WxHxD: 98x93x24 mm

Protection rating: IP30

CE compliance: RED 2014/53/EU, RoHS 2011/65/EU, REACH (EC 1907/2006) Directives

Model	Pcs. pack	Code	Price €
Unisenza Plus Gateway	1	02018220	119,90



Thempra chronothermostat and chronohygrostat

NEW

Features and functionality

Partial flush mounting (230 V model) or surface mounting (battery model) on standard 503 box.

Keypad: 4 touch keys located on either side of the display

Communication interface: ZigBee 3.0, 2.4 GHz (maximum distance between each device is 300 m in open space)

Operating modes: heating/cooling/off/anti-freeze

Type of control: On/Off or proportional (default On/Off)

Hourly programming up to a maximum of 6 daily time slots (start time and relative set temperature and humidity), with 3 different options:

- different for each day of the week;
- the same from Monday to Friday, and different for Saturday and Sunday (5+2 mode);
- the same for every day of the week;

Option to disable the dehumidification contact in winter (default setting).

Automatic changeover between standard time and daylight saving time (both for stand-alone installation and for installation with connectivity) and automatic synchronisation of the date and time when connected to the internet.

Keypad lock to prevent unauthorised changes (two levels: complete or partial).

Temperature self-learning function (to be enabled).

Open window function.

Valve/circulator anti-lock function.

Display switch-on duration setting: 10÷60 seconds (default duration 10 seconds).

In the case of battery-powered devices, the higher the value, the more limited the battery life.

Technical data

Power supply:

- model 230 Vac: 230 Vac, 50/60 Hz
- Battery-powered model: 4 AAA batteries

Dimensions LxHxD: 130x85x15 mm

Heating/cooling consent relay capacity:

- 230 Vac model: 3 A @ 250 Vac
- Battery-powered model: 1 A @ 250 Vac

Dehumidification/humidification relay capacity:

- 230 Vac model: 3 A @ 250 Vac
- battery-powered model: 1 A @ 250 Vac

Temperature measurement unit: °C or °F

Adjustable room temperature setpoint: 5 ÷ 35 °C

Adjustable room temperature differential: 0.1 to 1 °C (default 0.3 °C)

Measured room temperature resolution: 0.1 °C

Room temperature measurement accuracy: ±0.3 °C

Adjustable anti-freeze temperature setpoint: 5 to 35 °C

Adjustable relative ambient humidity setpoint: 0 to 100%

Adjustable ambient humidity differential: 5 to 35% (default 5%)

Resolution of measured ambient humidity: 0.1%

Ambient humidity measurement accuracy: ±2%

Operating temperature: 0 to 45 °C

Storage temperature: -10 to 65 °C

Operating humidity: 20% to 90% RH non-condensing

Protection rating: IP30

Delegated Regulation (EU) No 811/2013; Annex IV-3:

- Class of temperature control device: Class 4; Class IV
- Contribution of the temperature control device to the seasonal space heating energy efficiency in %: 2%

Model	Pcs. pack	Code	Price €
Thempra at 230 Vac	1	02018200	124,90
Thempra with batteries	1	02018210	115,90



Unisenza Plus Chronothermostatic actuator

NEW

Electronic chronothermostatic actuator suitable for installation on thermostatic and thermostatisable radiator valves for room temperature control.

The actuator can operate independently (stand-alone) using the buttons on the device, but it is also equipped with a ZigBee 3.0 wireless communication interface, through which:

- it can receive actuation commands from a Thempra chronothermostat via the Gateway. In this case, the actuator receives the setpoint from the associated chronothermostat; commands can come directly from the thermostat or via the Unisenza Plus application. Up to a maximum of 6 chronothermostatic actuators can be connected to a Thempra thermostat.
- it can send activation commands for the heat generator (without using thermostats) directly to the receiver via the gateway.

The chronothermostatic actuator can only be programmed using the Unisenza Plus app; a weekly schedule can be set, with 6 time slots for each day.

This item can be combined with the following Emmeti valves: Full thermostatic and thermostatic; Poker Plus thermostatic; Full-D thermostatic; 3/4' and 1' thermostatic valves.

Features

- Dual integrated temperature sensor.
- Backlit LCD display.
- Buttons for quick setpoint adjustment (stand-alone mode).
- Modulating control algorithm for optimising comfort and energy efficiency.
- Temporary manual setpoint override function.
- Open window function.
- Anti-freeze function.
- Anti-seizing valve function..

Technical data

- Power supply: 2 x 1.5 V batteries (type AA), included
- Temperature scale: °C or °F
- Displayed temperature range: 0÷40 °C (32÷104 °F)
- Displayed temperature resolution: 0.5 °C (1 °F)
- Settable temperature range: 5÷35 °C (41÷95 °F)
- Set temperature resolution: 0.5 °C (1 °F)
- Measured temperature accuracy: ±1 °C @15-25 °C, ±1.5 °C at other temperatures
- Valve connection: M30x1.5
- Actuator stroke: 4 mm
- Firmware update: via internet (OTA, over the air)
- Wireless communication: ZigBee 3.0, 2.4 GHz (max. distance between each device 300 m in open space)
- Installation environment: indoor
- Operating temperature: 0÷50 °C
- Storage temperature: -10÷60 °C
- Relative humidity: 10-95% non-condensing
- Dimensions ØxH: 58x95 mm
- Protection rating: IP20
- CE compliance: RED 2014/53/EU, RoHS 2011/65/EU, REACH (EC 1907/2006) Directives

Model	Pcs. pack	Code	Price €
Unisenza Plus Chronothermostatic actuator	1	02018240	159,90

Unisenza Plus



Unisenza Plus Receiver

NEW

Device equipped with ZigBee 3.0 wireless communication, to receive commands from a Thempra chronothermostat or chronothermostatic actuator (via the Gateway) to activate a heat generator (e.g. boiler or heat pump), zone valve or circulation pump.

Equipped with 2 voltage-free changeover relays (on/off) and an Opentherm interface.

Up to 16 devices, including Thempra and chronothermostatic actuators, can be connected to a receiver.

Supplied complete with screws and wall fixing plugs.

Technical data

Output interfaces:

- 2 voltage-free changeover relays (on/off);
- 1 Opentherm (OT/+) protocol specification v4.1.

Firmware update: via internet (OTA, over the air)

Wireless communication: ZigBee 3.0, 2.4 GHz (max. distance between each device 300 m in open space)

Power supply: 230 Vac, 50 Hz

Installation environment: indoor

Operating temperature: 0÷50 °C

Storage temperature: -10÷60 °C

Relative humidity: <90% non-condensing

Dimensions WxHxD: 145x100x35 mm

Protection rating: IP30

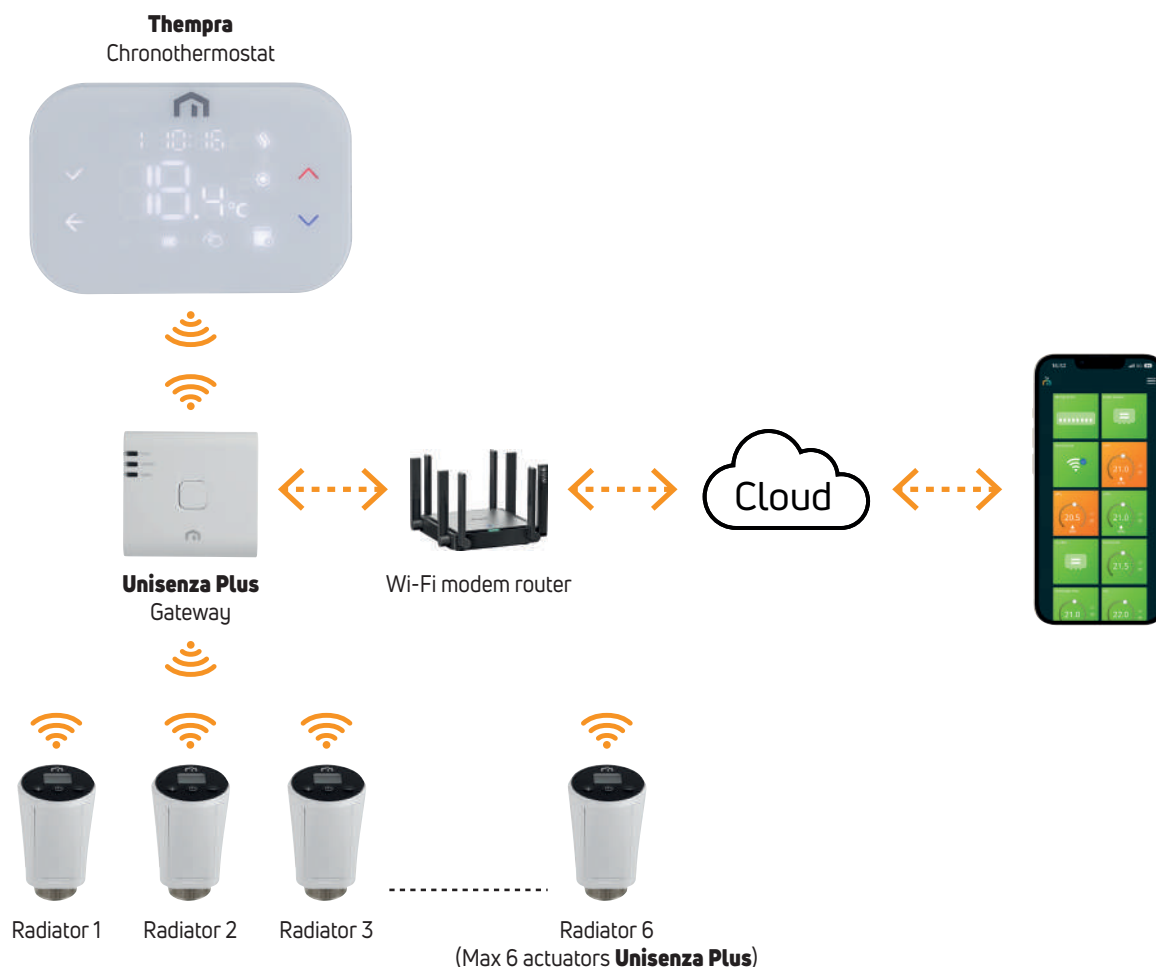
CE compliance: RED 2014/53/EU, RoHS 2011/65/EU, REACH (EC 1907/2006)

Directives

Model	Pcs. pack	Code	Price €
Unisenza Plus Receiver	1	02018230	169,90

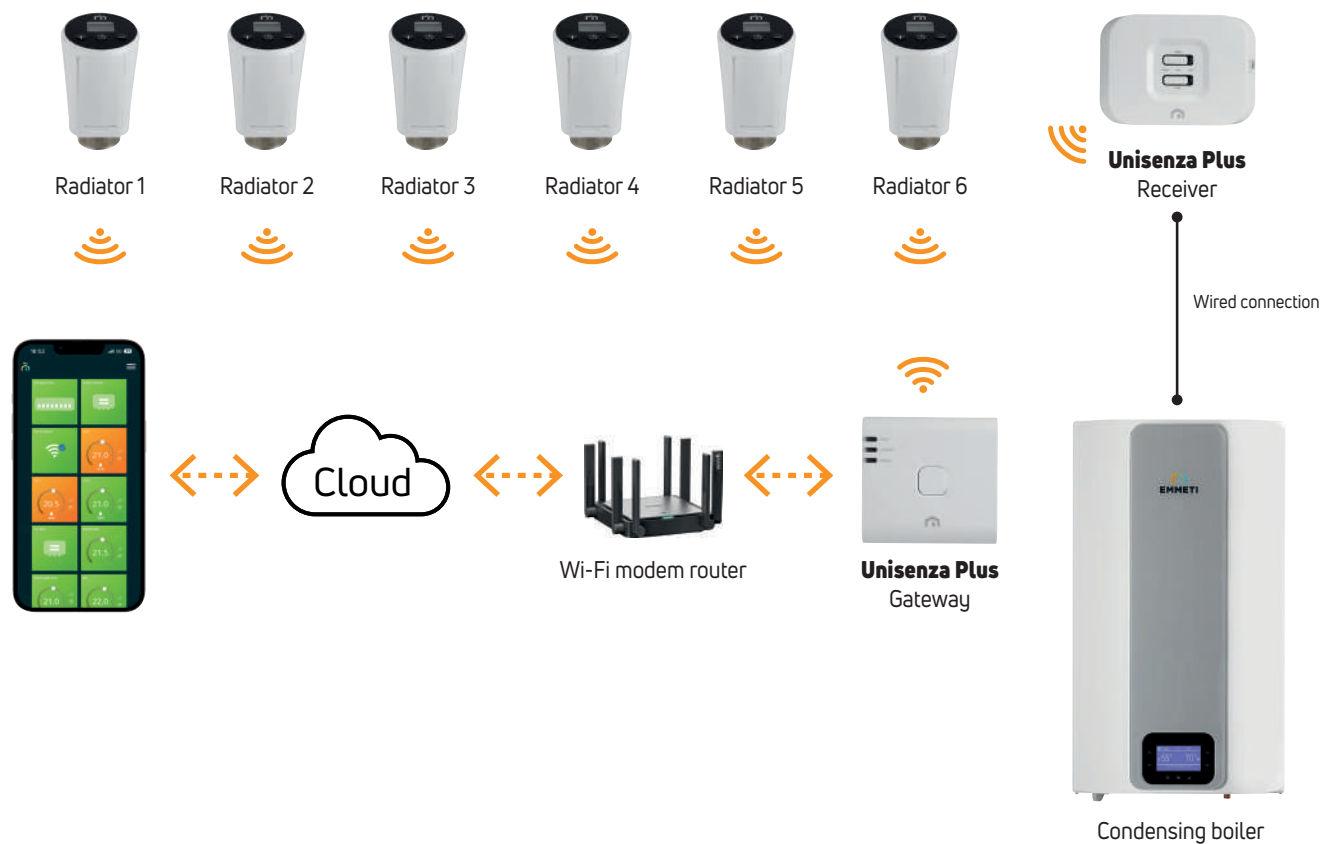
Example 1: centralised radiator system

The thermostat sends the room setpoint to the actuators, which will open if the room temperature they detect is lower than the setpoint received..



Example 2: autonomous multi-zone radiator system, **WITHOUT** thermostats

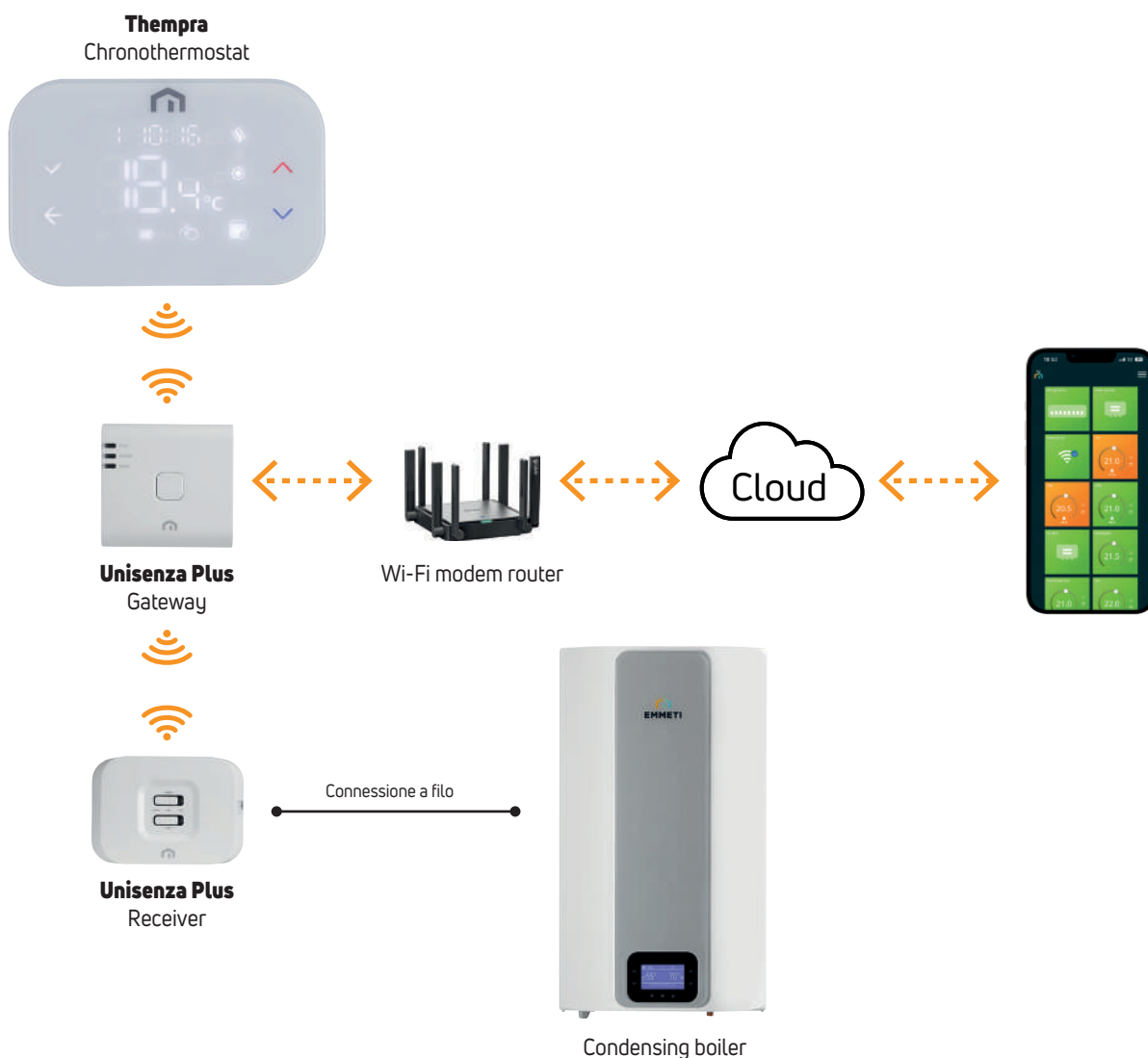
The first actuator that finds itself in a condition where the room setpoint is not satisfied sends the receiver the command to activate the boiler.



Note: verify that the minimum water flow rate required by the boiler is guaranteed in all operating conditions of the system.

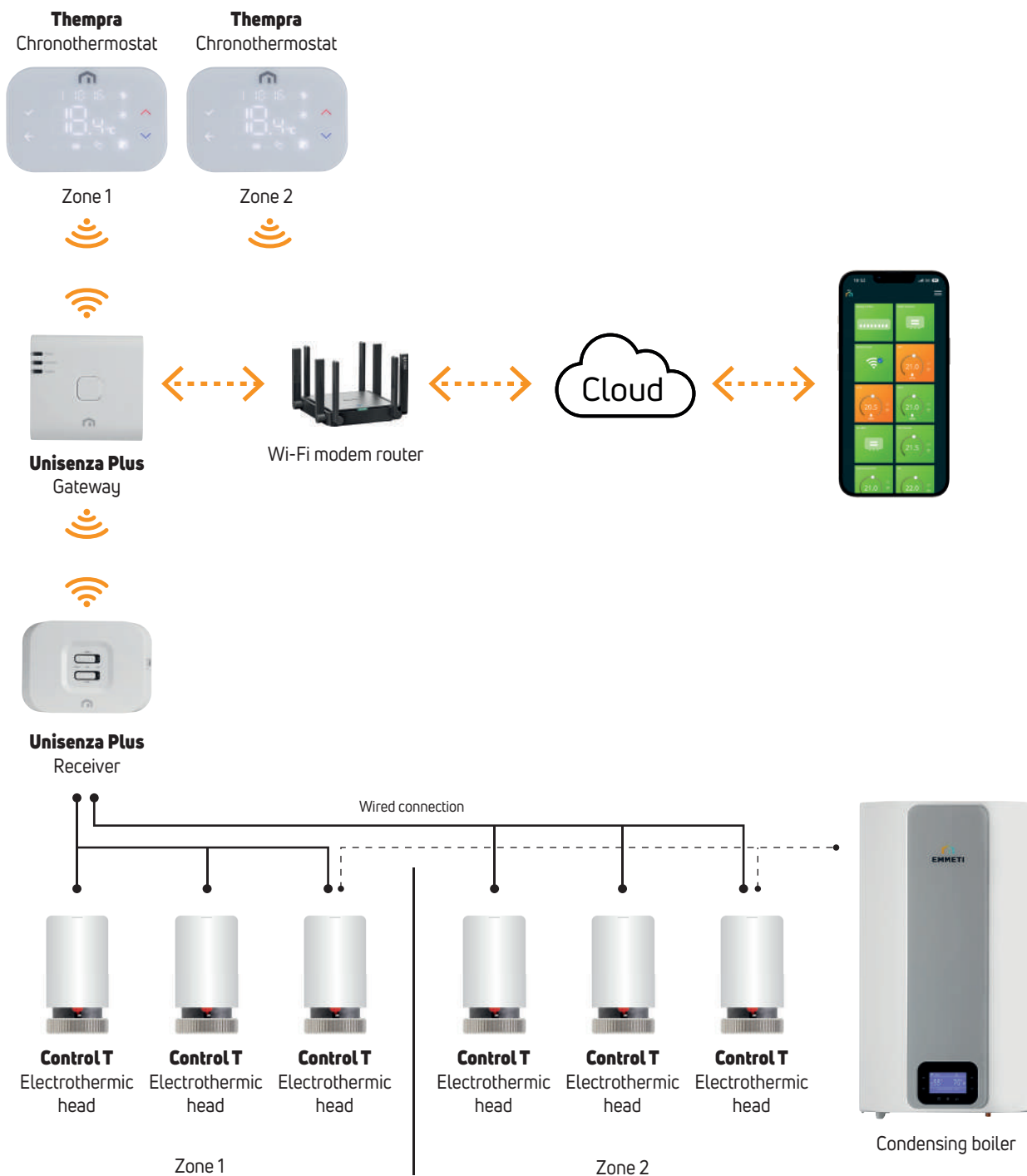
Unisenza Plus

Example 3: single-zone autonomous system (without chronothermostatic actuators, electrothermal heads, zone valves)



Example 4: autonomous multi-zone system with electrothermal heads (max. 2 zones)

Wireless connection between thermostats and electrothermal heads, via Receiver.



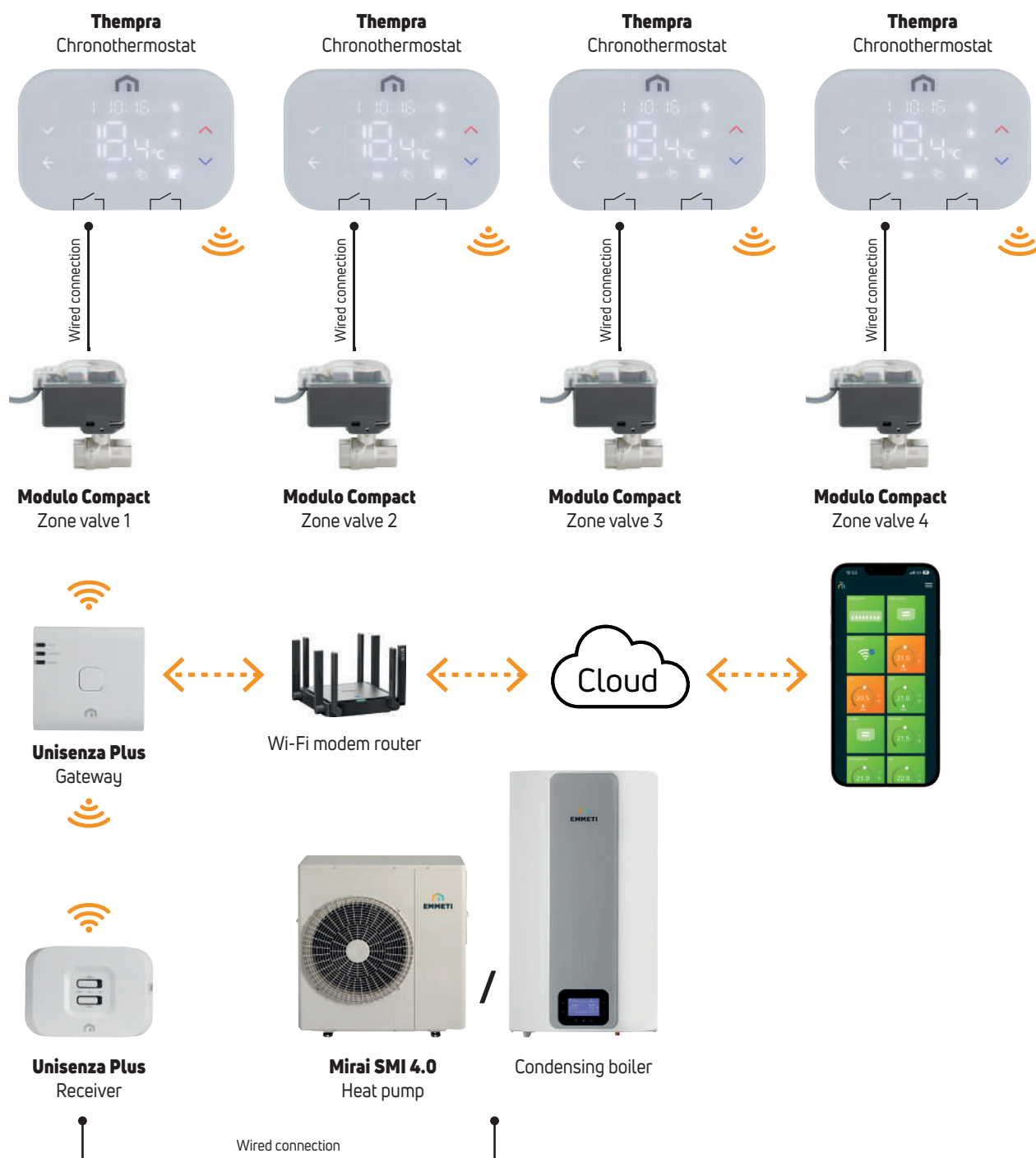
key:

----- consent for delayed activation of the boiler from the micro-switches of the electrothermal heads (wire connections).

Unisenza Plus

Example 5: autonomous multi-zone system with zone valves

The thermostats open the zone valves via a wired connection and activate the heat generator via a wireless connection using a Receiver.



Note 1: verify that the minimum water flow rate required by the heat generator is guaranteed in all operating conditions of the system.

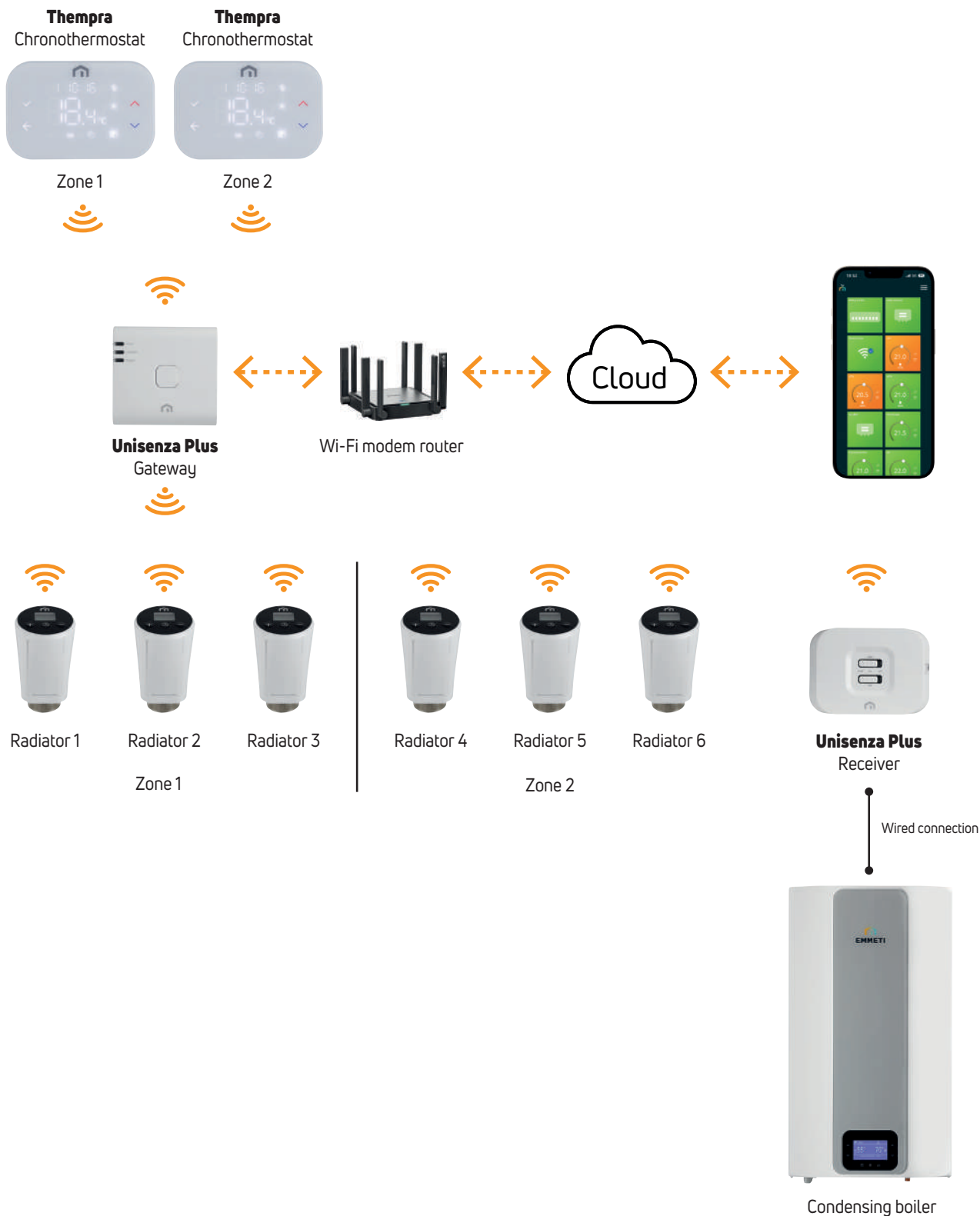
Note 2: refer to the wiring diagrams in the instruction manuals for correct installation.

Example 6: autonomous multi-zone radiator system WITH thermostats

The thermostats send the room setpoint to the associated actuators.

The first actuator that finds itself in a condition where the room setpoint is not met sends the receiver the command to activate the boiler.

Therefore, during configuration, the receiver must be paired with the actuators and not with the thermostats..



Note: verify that the minimum water flow rate required by the boiler is guaranteed in all operating conditions of the system.

Unified solution to control radiant heating and cooling systems



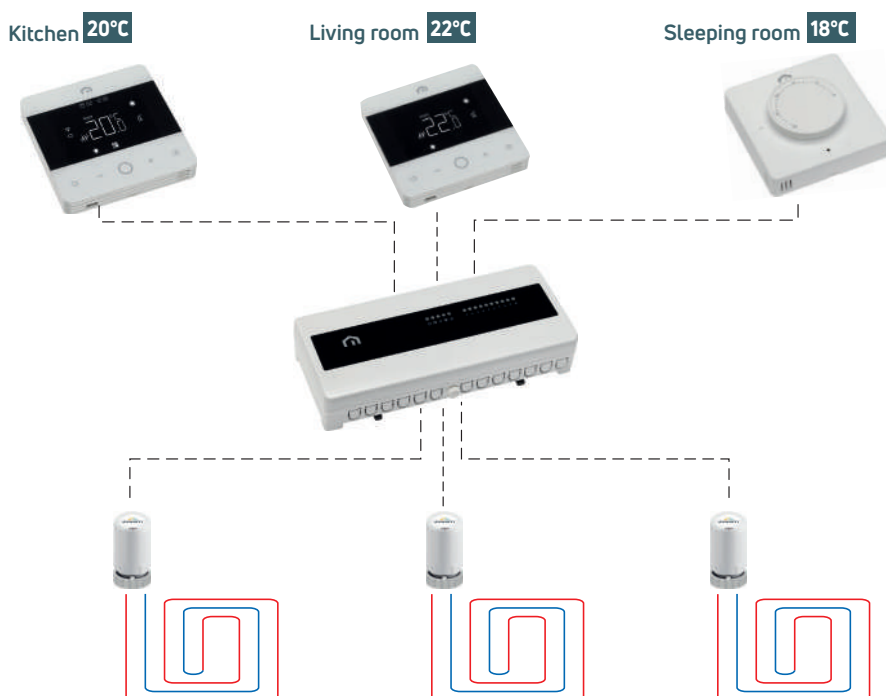
Want to enjoy an optimal temperature in every room all year round? It's easier than ever before with new Unisenza control range that ensures a unique sense of comfort and efficiency in radiant heating and cooling with a complete, unified solution that's as easy to install as it is to use.

Simply set the ideal temperature with one of the three user-friendly thermostats; an easy electronic dial thermostat, a modern digital thermostat or a WiFi thermostat with clock and plug & play APP control. Each thermostat allows you to control both heating and cooling so that you can relax and enjoy optimal indoor comfort every day of the year.

Once the temperature has been set, the wiring centre takes over. As the heart of the system, it translates the settings from the thermostat into open-loop signals for the thermal actuators. This way, each individual heating circuit receives exactly the amount of water that every room needs to maintain the temperature set on the thermostat.

The control system quickly responds to every change and adapts effortlessly to guarantee efficient heating and cooling for maximum comfort with minimal energy use. This is perfectly in line with our vision to deliver comfort and create sustainable indoor climate comfort solutions.

Scheme Unisenza





Unisenza Electronic dial OnWall thermostat

Simple dial thermostat for easy-to-understand temperature control. Modern and discrete design for on-wall mounting with a white matt finish. Dual LED displays the system status (heating = red, cooling = blue).

Functions

Heating and cooling.

It can be switched centrally from Comfort to Eco mode (temperature reduction by 2°C), or from Heating to Cooling mode, via WiFi thermostat or via Wiring Centre.

Technical data

Dimensions WxHxD: 85x85x30 mm

Setting range: +5÷+30 °C

Supply voltage: 230 Vac ± 10%, 50/60 Hz

Power consumption: 3 W

Capacity of the contacts: 2 (1) A 230 Vac (not voltage free)

Type of automatic action: 1

Construction: Class II

Protection rating: IP 30

Operating temperature: 0÷40 °C

Operating humidity: 20÷90 % RH non condensing

Storage temperature: -20÷60 °C

Model	Pcs. pack	Code	Price €
Electronic dial thermostat, 230 V	1	02019000	41,29



Unisenza Digital InWall thermostat

Simple digital thermostat for recessed mounting in a wide range of mounting boxes.

Intuitive display with easy-to-understand icons for modes and status.

Ultra-flat design with only 17 mm depth.

Functions

Heating and cooling.

Selectable programme options (Comfort, Eco, Program, Manual), freely definable setback temperature.

It can be also switched centrally from Comfort to Eco mode, and from Heating to Cooling mode, via WiFi thermostat or via Wiring Centre.

Open window.

External sensor can be used for remote air, floor or limit functions

Technical data

Dimensions WxHxD: 85x85x17 (30 recessed) mm

Setting range: 5÷30 °C

Supply voltage: 230 Vac ±10 %, 50/60 Hz

Power consumption: 3 W

Capacity of the contacts: 2 (1) A 230 Vac (not voltage free)

Type of automatic action: 1

Construction: Class II

Protection rating: IP 30

Operating temperature: 0÷40 °C

Operating humidity: 20÷90% RH non condensing

Storage temperature: -20÷60 °C

Model	Pcs. pack	Code	Price €
Digital thermostat, 230 V	1	02019004	96,11



Unisenza

Unisenza Wi-Fi InWall thermostat

Digital thermostat with Wi-Fi connection for plug & play App control (Unisenza App).

Paired with its intuitive App, the Wi-Fi thermostat can be used to control your comfort on the go using geo location within the App.

Heating reacts to the end users' movements for maximum energy efficiency.

Fully programmable time/temperature settings to tailor the system to the users' behaviour.

Thermostat in every room for individual time control or positioned centrally to control the dial or digital thermostats.

Ultra-flat design with only 17 mm depth.

Compatible with Amazon Echo & Google Assistant.

Functions

Heating and cooling.

Selectable programme options (Comfort, Eco, Program, Manual); changing between Comfort and Eco by programmed timing.

Clock thermostat with weekly programme also as central control for time control of Dial and Digital thermostats.

It can be also switched centrally from Heating to Cooling mode, via Wiring Centre.

Open window.

External sensor can be used for remote air, floor or limit functions.

Management through Unisenza App.

Technical data

Dimensions WxHxD: 85x85x17 (30 recessed) mm

Setting range: +5÷+30 °C

Supply voltage: 230 Vac ±10 %, 50/60 Hz

Power consumption: 3 W;

Capacity of the contacts: 2 (1) A 230 Vac (not voltage free)

Type of automatic action: 1

Construction: Class II

Protection rating: IP 30;

Operating temperature: 0÷40 °C

Operating humidity: 20÷90 % rH non condensing

Storage temperature: -20÷60 °C

Model	Pcs. pack	Code	Price €
Wi-Fi thermostat, 230 V	1	02019002	114,80



Unisenza Wiring centre, 10 zones

For safe and easy wiring of Unisenza room thermostats and actuators.
Up to 20 actuators per 10-zone wiring centre

Functions

Suitable for heating and cooling operation.
Pump delay selector which allows the individual circuits to open before circulating to prevent wear and noise from the pump.
Pump exercise function that allows the pump to be exercised for 5 minutes every 24 hours to prevent pump seizures following long dormant periods (e.g. summer shut-off).
Simple changeover from heating to cooling thanks to the external changeover input.
Input for an optional dew point and/or excess temperature sensor to protect the system from condensation when cooling or excess temperature when heating.
Easy-to-understand LED indicators provide a quick status reference.
Quick and easy installation.
Multiple system applications are possible when used in conjunction with the Unisenza thermostat range.

Technical data

Supply voltage: 230 Vac $\pm 10\%$, 50/60 Hz - Fuse: 5x20, 5 A 250 V
Power consumption: depends on the loads connected
Capacity of the contacts:
Pump output: 10 A 250 Vax (Live and neutral)
Generator output: 10 A 250 Vax (voltage free)
Change output (COout): 10 A 250 Vac (voltage free)
Zones: The maximum output power of each zones depends of the thermostat connecting on this zone but for easy installation we recommend a maximum of 10 actuators by zones and maximum 20 actuators for the Wiring Centre
Construction: Class II - Protection rating: IP 20 - Storage temperature: $-20 \div 60$ °C
Operating temperature: $0 \div 40$ °C - Operating humidity: $20 \div 90\%$ RH non condensing

Model	Pcs. pack	Code	Price €
Wiring centre, 10 zones, 230 V	1	02019006	112,30



Control T - Electro-thermic head normally closed

The valve opens upon receiving the command from the thermostat or any similar control device
Absorption 3,45 VA - Protection: IP 40 (IP 44 vertical position)
Cable length: 1 m - Breakaway current: 0,25 A
Closing/opening time: 5-6 min

Dimension	Ring nut	Pcs. pack	Code	Price €
230 V (AC/DC)	Plastic ring nut	1	01213242	25,04
230 V (AC/DC)	Metal ring nut	1	01213245	25,71



Floor sensor

It can be used as:

- external temperature sensor for Unisenza Digital and Wi-Fi thermostats;
- floor temperature sensor, to be connected to the Unisenza Wiring Centre, to protect the installation against temperature overruns in heating mode.

Model	Pcs. pack	Code	Price €
NTC 10 k Ω @ 25 °C, IP68	1	07245210	14,70



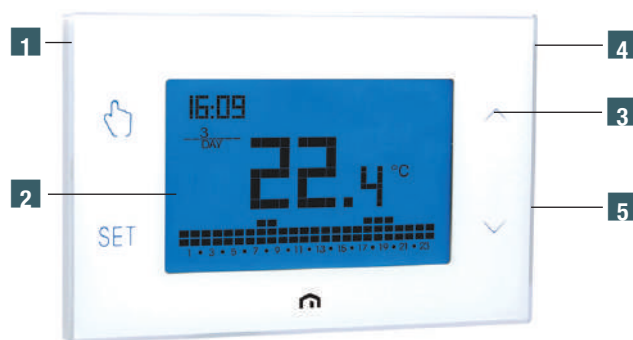
Dew point sensor

External condensation sensor, to protect the system from condensation in cooling mode.
Connection to Unisenza wiring centre.

Model	Pcs. pack	Code	Price €
Dew point sensor	1	28139078	119,50

Sintesi Wall Wi-Fi

Weekly chronothermostat with Wi-Fi



Electronic chronothermostat with Wi-Fi connection, weekly programming and wall installation, designed for room temperature control both in heating mode (winter) and in air conditioning mode (summer).

The free App, available on the AppStore and Google Play, also allows programming and complete control from your Smartphone or Tablet. Any alarm situations are reported by sending an email to the specified address.

The keyboard consists of four touch keys located on the sides of the display.

- 1 Plastic base for wall installation or cover on 3-module flush-mounted box
- 2 Large backlit display to view the measured temperature and set programming
- 3 Backlit touch keys on the sides of the display
- 4 Terminal block on the back of the device for charging and power connection
- 5 Built-in Wi-Fi module compatible with standard 802.11 b/g/n

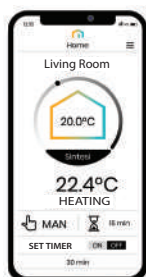
Free Emmeti Sintesi App available for iOS and Android systems



Compatible with Google Home and Amazon Echo



Emmeti Sintesi



Technical data

Installation: wall or cover on standard 503 type box
230Vac power supply (-15% ÷ +10%) 50/60Hz, maximum consumption: 6 VA / 230Vac

Relay capacity at 250 Vac: 5 A

Operating mode: summer/winter/off

Control type: ON/OFF or proportional

Differential: 0.1 ÷ 1 °C

Programming: weekly, minimum interval 1 hour

Settable temperatures: 3 + manual + anti-freeze

Settable setpoint: 2 ÷ 50 °C

Measured temperature resolution: 0.1°C

Measurement accuracy: 0.5°C

Antifreeze temperature (excludable): 1 ÷ 50°C

Start-up delay: 15, 30 or 45 minutes

Clock accuracy: ± 1 s/day

Keyboard lock with password to prevent unauthorised changes

Automatic summer/winter time change and automatic date and time synchronisation when connected to the network

Blue backlit touch screen

Operating temperature: 0 ÷ 50 °C

Storage temperature: -10 ÷ 65 °C

Operating humidity: 20% ÷ 90% non-condensing RH

Degree of protection: IP40

Delegated regulation (EU) no. 811/2013; annex IV-3:

- Class of the temperature control device: Class 4; Class IV

- Contribution of the temperature control device to the seasonal energy efficiency of room heating in %: 2%

The Emmeti Sintesi App allows you to remotely control the thermostat using your Smartphone or Tablet.

In detail:

- turn on and off the air conditioning system;
- create and change the weekly programs;
- change the operating temperature values;
- simplify programming by copying and pasting a program over several days;
- set holidays when the system remains off;
- configure email address to receive notifications when the measured temperature has exceeded a minimum or maximum value that can be set;
- lock keyboard operation ("local operation lock"), allowing for the device to be controlled only from the App itself.

Dimensions: see section Technical Attachments



Weekly chronothermostat with Wi-Fi

Model	Pcs. pack	Code	Price €
Sintesi Wall Wi-Fi (*)	1	02018146	242,60

(*) Item to be out of stock

Sintesi Wall Wi-Fi with battery

Battery-powered Wi-Fi weekly chronothermostat



Electronic chronothermostat with Wi-Fi connection, with battery power, weekly programming and wall installation, designed for adjusting the room temperature both in heating mode (winter) and in air conditioning mode (summer).

The free app, available on the AppStore and Google Play, allows programming and complete control even from your smartphone or tablet. The energy saving function allows you to set the daily frequency with which the programmable thermostat connects to the cloud, thus optimizing battery life.

Any alarm situations such as exceeding temperature limits or approaching battery discharge are reported by sending an email to the specified address or via notification in the app. The keyboard consists of four touch keys located on the sides of the display.

- 1 Plastic base for wall installation or to cover the 3-module recessed box
- 2 Large backlit display for viewing the measured temperature and the set programming
- 3 Backlit touch keys on the sides of the display
- 4 Terminal block on the back of the device for connecting the load and power supply
- 5 Integrated Wi-Fi module compatible with 802.11 b / g / n standard

Free Emmeti Sintesi App available for iOS and Android systems

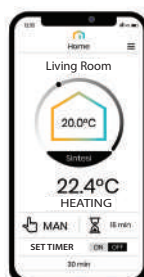
Dimensions: see section Technical Attachments



Compatible with Google Home and Amazon Echo



Emmeti Sintesi



Technical data

Fixing: to the wall or to cover on a standard 503 type box
 Power supply 4 1.5 V AA alkaline non-rechargeable batteries (not supplied). With standard setting (update every 8 hours) and nominal conditions of the Wi-Fi network, the estimated battery life is 36 months. - Relay capacity at 250 Vac: 5 A
 Operating modes: summer / winter / off
 Type of regulation: ON / OFF or proportional
 Differential: 0.1 ÷ 1 °C
 Programming: weekly, minimum interval 1 hour
 Settable temperatures: 3 + manual + antifreeze
 Settable setpoint: 2÷50 °C - Resolution of measured temperature: 0.1 °C
 Measurement accuracy: 0.5 °C
 Antifreeze temperature (excludable): 1 ÷ 50 °C
 Ignition delay: 15, 30 or 45 minutes
 Clock accuracy: ± 1 s / day
 Keypad lock with password to prevent changes by unauthorized persons
 Automatic change of daylight saving time and automatic synchronization of date and time when connected to the network

Dimensions LxHxP: 130x85x28 mm
 Blue backlit touch screen
 Operating temperature: 0 ÷ 50 °C
 Storage temperature: -10 ÷ 65 °C
 Operating humidity: 20% ÷ 90% RH non condensing
 Degree of protection: IP40
 Delegated regulation (EU) n. 811/2013; annex IV-3:
 - Class of the temperature control device: Class 4; Class IV
 - Contribution of the temperature control device to seasonal space heating energy efficiency in%: 2%

The Emmeti Sintesi application allows you to remotely control the thermostat using your smartphone or tablet.

In detail:

- turn on and off the air conditioning system;
 - create and modify weekly programs;
 - change the values of the operating temperatures;
 - simplify programming thanks to the copy-paste of a program over several days;
 - set some holiday days in which the system remains off;
 - configure e-mail address to receive notifications when the measured temperature has exceeded a minimum or maximum value that can be set;
 - block operation from the keyboard ("local operation block"), allowing the device to be controlled only from the App itself.
- Interval between two connections to the cloud: 10 min - 8 h



Wi-Fi weekly chronothermostat

Model	Pcs. pack	Code	Price €
Sintesi Wall Wi-Fi with battery (*)	1	02018168	242,50

(*) Item to be out of stock

Sintesi Mini Wi-Fi

Built-in weekly chronothermostat with Wi-Fi



Electronic chronothermostat with Wi-Fi connection, weekly programming and installation on a flush-mounted box with a space of only 2 modules, designed for room temperature control both in heating mode (winter) and in air conditioning mode (summer).

The free App, available on AppStore and Google Play, allows programming and full control from your Smartphone or Tablet.

Any alarm situations are reported by sending an email to the specified address.

- 1 Installation on flush-mounted boxes with a height of 45 mm
- 2 Adapters supplied to install the device with the plates of the main civil series
- 3 White LED display for temperature display and red LED for status indication
- 4 Terminal block on the back of the device for charging and power connection
- 5 Built-in Wi-Fi module compatible with 802.11 b/g/n

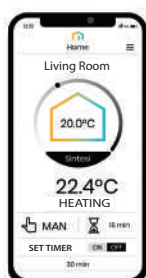
Free Emmeti Sintesi App available for iOS and Android systems



Compatible with Google Home and Amazon Echo



Emmeti Sintesi



Technical data

Installation: flush-mounted with only 2 modules in the box type 503
230Vac power supply (-15% ÷ +10%) 50/60Hz, maximum consumption: 6 VA / 230Vac

Relay capacity at 250 Vac: 5 A - Operating mode: summer/winter/off
Control type: ON/OFF or proportional - Differential: 0.1 ÷ 1 °C

Programming: weekly, minimum interval 1 hour

Settable temperatures: 3 + manual + anti-freeze

Settable setpoint: 2 ÷ 50 °C - Measured temperature resolution: 0.1°C

Measurement accuracy: 0.5°C

Antifreeze temperature (excludable): 1 ÷ 50°C

Start-up delay: 15, 30 or 45 minutes - Clock accuracy: ± 1 s/day

Automatic summer/winter time change and automatic synchronisation of date and time when connected to the network

Emergency control with manual operation and setting of the setpoint using the button on the device in case of lack of Wi-Fi connection

Operating temperature: 0 ÷ 50 °C - Storage temperature: -10 ÷ 65 °C

Operating humidity: 20% ÷ 90% non-condensing RH

Degree of protection: IP40

Delegated regulation (EU) no. 811/2013; annex IV-3:

- Class of the temperature control device: Class 4; Class IV

- Contribution of the temperature control device to the seasonal energy efficiency of room heating in %: 2%

The Emmeti Sintesi App allows you to remotely control the thermostat using your Smartphone or Tablet.

In detail:

- turn on and off the air conditioning system;
- create and change the weekly programs;
- change the operating temperature values;
- simplify programming by copying and pasting a program over several days;
- set holidays when the system remains off;
- configure email address to receive notifications when the measured temperature has exceeded a minimum or maximum value that can be set;
- lock keyboard operation ("local operation lock"), allowing for the device to be controlled only from the App itself.

Adaptors included for use with the following plates:

ABB: Mylos

AVE: S44

BTICINO: Axolute, Axolute AIR, Light, Living International, LivingLight, LivingLight AIR, Matrix

GEWISS: Chorus

VIMAR: Arkè, Eikon, Eikon Evo, Plana

Dimensions: see section Technical Attachments



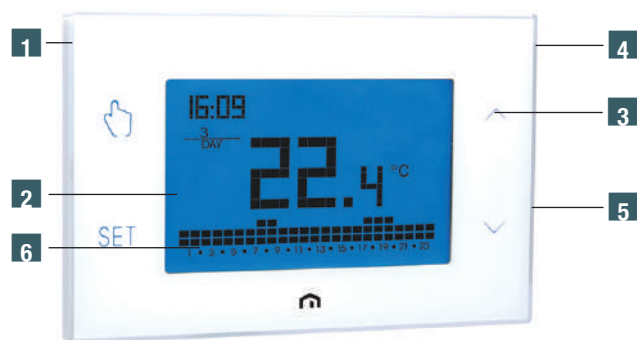
Built-in weekly chronothermostat with Wi-Fi

Model	Pcs. pack	Code	Price €
Sintesi Mini Wi-Fi (*)	1	02018150	253,30

(*) Item to be out of stock

Sintesi Wall Wi-Fi RF

Weekly chronothermostats with Wi-Fi and radio frequency



Electronic chronothermostat with Wi-Fi connection and radio frequency module, weekly programming and wall installation, designed for room temperature control both in heating mode (winter) and in air conditioning mode (summer).

The free App, available on the AppStore and Google Play, also allows programming and complete control from your Smartphone or Tablet. Any alarm situations are reported by sending an email to the specified address.

The heat generator can be activated by means of a remote actuator (controlled by sending a radio frequency signal), or by cable (thanks to the on-board relay).

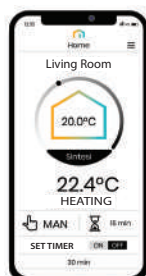
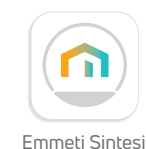
The keyboard consists of four touch keys located on the sides of the display. The display backlight colour can be customised by the user.

- 1 Plastic base for wall installation or cover on 3-module flush-mounted box
- 2 Large backlit display to view the measured temperature and humidity and set programming
- 3 Backlit touch keys on the sides of the display
- 4 Terminal block on the back of the device for charging and power connection
- 5 Built-in Wi-Fi module compatible with standard 802.11 b/g/n
- 6 Built-in radio frequency module to send control signals to the remote actuators

Free Emmeti Sintesi App available for iOS and Android systems



Compatible with Google Home and Amazon Echo



Technical data

Installation: wall or cover on standard 503 type box
 230Vac power supply (-15% ÷ +10%) 50/60Hz, maximum consumption: 6 VA / 230Vac - Relay capacity at 250 Vac: 5 A
 Operating mode: summer/winter/off
 Control type: ON/OFF, proportional or setpoint sending for autonomous management of the radio frequency actuator
 Differential: 0.1 ÷ 1 °C - Programming: weekly, minimum interval 1 hour;
 Settable temperatures: 3 + manual + anti-freeze
 Settable setpoint: 2 ÷ 50 °C
 Measured temperature resolution: 0.1°C
 Measurement accuracy: 0.5°C
 Antifreeze temperature (excludable): 1 ÷ 50°C
 Start-up delay: 15, 30 or 45 minutes - Clock accuracy: ± 1 s/day
 Relative humidity display: range 20÷90%
 Keyboard lock with password to prevent unauthorised changes
 Automatic summer/winter time change and automatic date and time synchronisation when connected to the network
 Operating temperature: 0 ÷ 50 °C - Storage temperature: -10 ÷ 65 °C
 Operating humidity: 20% ÷ 90% non-condensing RH
 Degree of protection: IP40

Touch screen with configurable backlight: always off, colour of choice between 48 possible shades or variable between red, green and blue depending on the difference between the measured temperature and the set temperature.

Compatible with both DIN bar and chronothermostatic radio frequency actuators for thermostatic valves

Maximum distance between Sintesi WALL WI-FI RF and radio frequency actuator: 50 metres in free range

Delegated regulation (EU) no. 811/2013; annex IV-3:

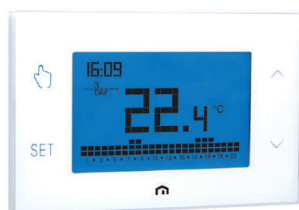
- Class of temperature control device: Class 4; Class IV
- Contribution of the temperature control device to the seasonal energy efficiency of room heating in %: 2%

The Emmeti Sintesi App allows you to remotely control the thermostat using your Smartphone or Tablet.

In detail:

- turn on and off the air conditioning system;
- create and change the weekly programs;
- change the operating temperature values;
- simplify programming by copying and pasting a program over several days;
- set holidays when the system remains off;
- configure email address to receive notifications when the measured temperature has exceeded a minimum or maximum value that can be set;
- lock keyboard operation ("local operation lock"), allowing for the device to be controlled only from the App itself.

Dimensions: see section Technical Attachments



Weekly chronothermostat with Wi-Fi and radio frequency

Model	Pcs. pack	Code	Price €
Sintesi Wall Wi-Fi RF (*)	1	02018148	530,30

(*) Item to be out of stock

Weekly chronothermostats with Wi-Fi and radio frequency

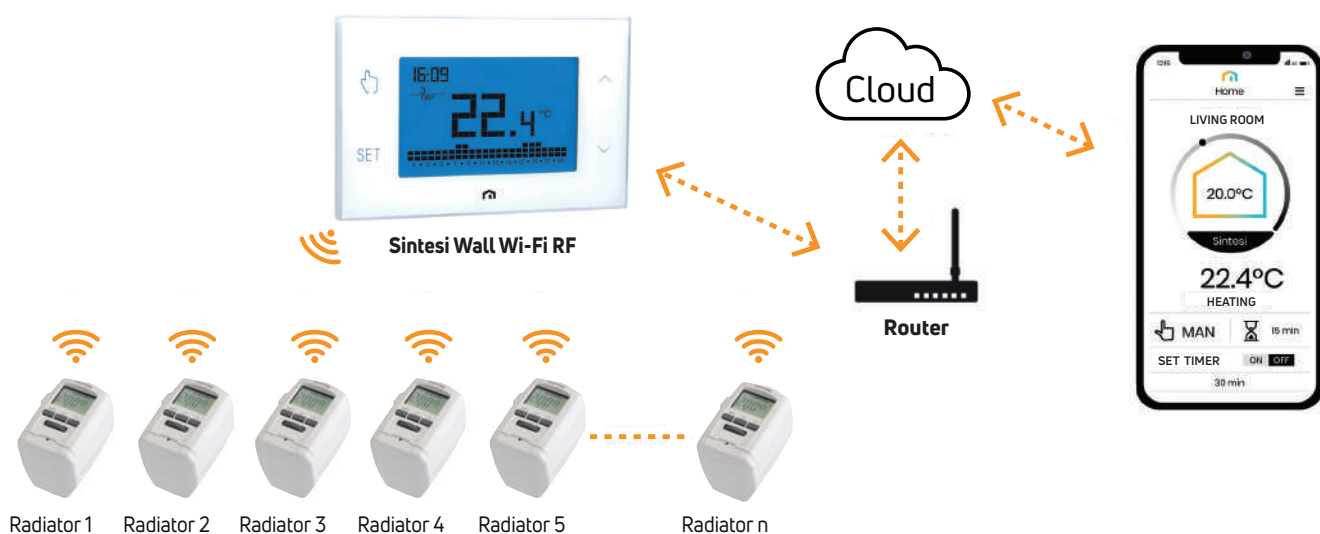


Electronic radio frequency programmable thermostatic actuator for radiator valves

Description	Pcs. pack	Code	Price €
Electronic radio frequency programmable thermostatic actuator for radiator valves (*)	1	02018094	161,00

Can be combined with: Tris 3 thermostatic valves, Full and Poker thermostatic and manual valves, 3/4" and 1" thermostatic valves.

(*) Item to be out of stock



Sintesi chronothermostat

Weekly chronothermostat with touch screen



Electronic chronothermostat with backlit touch screen display, weekly programming and wall installation, designed for room temperature control both in heating mode (winter) and in air conditioning mode (summer). The keyboard consists of four icons located in the lower part of the touch screen display. Available in mains or battery powered versions

- 1 Plastic base for wall installation or cover on 3-module flush-mounted box.
- 2 Large backlit display to view the measured temperature and set programming
- 3 Touch-screen keyboard in the lower part of the display
- 4 Terminal block on the back of the device for charging and power connection (230 Vac version) or external contact (battery version).
- 5 Frame

Dimensions: see section Technical Attachments

Technical Data

Installation: wall or cover on standard 503 type box
Operating mode: summer/winter/off
Control type: ON/OFF or proportional
Differential: $0.1 \div 1^\circ\text{C}$
Programming: weekly, minimum interval 1 hour
Settable temperatures: 3 + manual + anti-freeze
Settable setpoint: $2 \div 50^\circ\text{C}$
Measured temperature resolution: 0.1°C
Measurement accuracy: 0.5°C
Antifreeze temperature (excludable): $1 \div 50^\circ\text{C}$
Start-up delay: 15, 30 or 45 minutes
Clock accuracy: $\pm 1 \text{ s/day}$
Keyboard lock with password to prevent unauthorised changes
Operating temperature: $0 \div 50^\circ\text{C}$
Storage temperature: $-10 \div 65^\circ\text{C}$
Operating humidity: 20% ÷ 90% non-condensing RH
Degree of protection: IP40
Delegated regulation (EU) no. 811/2013; annex IV-3:
- Class of the temperature control device: Class 4; Class IV
- Contribution of the temperature control device to the seasonal energy efficiency of room heating in %: 2%

Electrical data of version with 230 V power supply

230Vac power supply ($-15\% \div +10\%$) 50/60Hz, maximum consumption: 6 VA / 230Vac
Touch screen with multi-colour backlighting (can be deactivated)
Relay capacity at 250 Vac: 5 A

Electrical data of battery powered version

Battery powered: 2x1.5 V alkaline (type AAA) not supplied, 12 months autonomy
Touch screen with blue backlight active when keys are pressed
Relay capacity at 250 Vac: 5 A
Configurable digital input for connection of an external contact with which to reduce the set temperature by 3°C .



Sintesi chronothermostat

Model	Pcs. pack	Code	Price €
Chronothermostat Sintesi 230 V (*)	1	02018152	199,30
Chronothermostat Sintesi with battery (*)	1	02018154	199,30

(*) Item to be out of stock

Sintesi Thermostat

Touch screen thermostat



Electronic thermostat with backlit touch screen with wall installation, designed for room temperature control both in heating mode (winter) and in air conditioning mode (summer). The keyboard consists of two icons located in the lower part of the touch screen display. Available battery powered version.

- 1 Plastic base for wall installation or cover on 3-module flush-mounted box.
- 2 Large backlit display to view the measured temperature
- 3 Touch-screen keys in the lower part of the display
- 4 Terminal block on the back of the device for external contact.
- 5 Frame.

Dimensions: see section Technical Attachments

Technical Data

Installation: wall or cover on standard 503 type box
Operating mode: summer/winter/off
Control type: ON/OFF or proportional
Differential: $0.1 \div 1^\circ\text{C}$
Settable setpoint: $2 \div 50^\circ\text{C}$
Measured temperature resolution: 0.1°C
Measurement accuracy: 0.5°C
Antifreeze temperature (excludable): $1 \div 50^\circ\text{C}$
Keyboard lock with password to prevent unauthorised changes
Operating temperature: $0 \div 50^\circ\text{C}$
Storage temperature: $-10 \div 65^\circ\text{C}$
Operating humidity: 20% ÷ 90% non-condensing RH
Degree of protection: IP40
Delegated regulation (EU) no. 811/2013; annex IV-3:
- Class of the temperature control device: Class 4; Class IV
- Contribution of the temperature control device to the seasonal energy efficiency of room heating in %: 2%

Battery powered: 2x1.5 V alkaline (type AAA) not supplied, 12 months autonomy
Touch screen with blue backlight active when keys are pressed
Relay capacity at 250 Vac: 5 A
Configurable digital input for connection of an external contact with which to reduce the set temperature by 3°C .



Sintesi Thermostat

Model	Pcs. pack	Code	Price €
Sintesi Thermostat with battery (*)	1	02018158	156,20

(*) Item to be out of stock

Touch Screen backlight thermostats



Technical data Chronothermostat with daily programming

External dimensions: 120 x 90 x 28 mm
 Touch-screen display 80 x 55 mm (3,8")
 Weekly programming for periods of at last 30 minutes.
 Temperatures can be adjusted on three levels:

- Comfort
- Energy saving
- Off with the option of setting the anti-freeze protection.

Temperature adjustment range from 4 to 40 °C (from 40 to 99.4 °F) with 0.5 °C/F intervals.
 System on/off differential, 0.5 °C (can be modified)
 Summer/Winter function
 Operating and storage temperature between 0 and 40 °C
 Fitted with reminder alarm
 Display with backlight
 Partial recessed (230 V mod.) or covered fastening (battery mod.) in a standard 503 box.
 Delegated Regulation (EU) n. 811/2013; annex IV-3:

- Class of the temperature control device: Class 1: Class I
- Contribution of the temperature control device to the seasonal energy efficiency of environment heating in %: 1%

Technical data of ambient Thermostat with manual control

External dimensions: 120 x 90 x 28 mm
 Touch-screen display 80 x 55 mm (3,8")
 Operating temperature selected manually and switched off manually with the option of setting the anti-freeze protection.
 Temperatures can be adjusted on 2 levels:

- Comfort
- Energy saving

Temperature adjustment range from 4 to 40 °C (from 40 to 99.4 °F) with 0.5 °C/F intervals (adjustable).
 System on/off differential, 0.5 °C (adjustable)
 Summer/Winter function
 Operating and storage temperature between 0 and 40 °C
 Partial recessed (230 V mod.) or covered fastening (battery mod.) in a standard 503 box.
 Delegated Regulation (EU) n. 811/2013; annex IV-3:

- Class of the temperature control device: Class 1: Class I
- Contribution of the temperature control device to the seasonal energy efficiency of environment heating in %: 1%

Technical data of Thermostat with daily programming

External dimensions: 120 x 90 x 28 mm
 Touch-screen display 80 x 55 mm (3,8")
 Daily programming for periods of at last 1 hour.
 Temperatures can be adjusted on 2 levels:

- Comfort
- Energy saving

Switched off manually with the option of setting the anti-freeze protection.
 Temperature adjustment range from 4 to 40 °C (from 40 to 99.4 °F) with 0.5 °C/F intervals.
 System on/off differential, 0.5 °C (can be modified)
 Summer/Winter function
 Operating and storage temperature between 0 and 40 °C
 Fitted with reminder alarm
 Display with backlight
 Partial recessed (230 V mod.) or covered fastening (battery mod.) in a standard 503 box.
 Delegated Regulation (EU) n. 811/2013; annex IV-3:

- Class of the temperature control device: Class 1: Class I
- Contribution of the temperature control device to the seasonal energy efficiency of environment heating in %: 1%

Electrical data - versions with 230 V power supply

Power supply from 110 to 230 V - 50/60 Hz
 Protection rating IP20
 System activation contact: relay with 1 free deviation contact
 6÷230 V - 5 (0.5) A max.
 Contact for telephone actuator or centralised Summer-Winter commuter.

Electrical data - versions with battery power supply

Power supply with 2 alkaline batteries AAA - LR3 - 1.5 V
 Protection rating IP20
 System activation contact: relay with 1 free deviation contact
 6÷230 V - 5 (0.5) A max.

Dimensions: see section Technical Attachments

Touch Screen backlight thermostats



Touch Screen backlight thermostat with daily programming

Model	Pcs. pack	Code	Price €
Semi-recessed backlight thermostat with daily programming and 230 V power supply (*)	1	01514224	143,50

(*) Items to be out of stock



Manually room backlight thermostat touch screen

Model	Pcs. pack	Code	Price €
Wall backlight thermostat with battery power supply (*)	1	01514230	117,50
Semi-recessed backlight thermostat with 230 V power supply (*)	1	01514228	142,10

(*) Items to be out of stock

Touch screen chronothermostat for recessed installation

Touch screen chronothermostat with weekly programming for recessed installation



Electronic touch-screen chronothermostat with weekly programming and recessed installation in a 3-modules box, designed to control the room temperature, both in heating and air-conditioning mode. Both mains and battery-operated versions available.

- Installation in a 3-modules recessed box (503)
- Supports to adapt the instrument to the plates of the main civil series
- Touch-screen display to show the measured temperature and program the instrument
- Terminal board at the back of the instrument to connect the output relay of the power supply (only for the 230 Vac model) and the external contact (only for the battery-operated model)
- Interchangeable front panel available in white and anthracite grey (included)
- Procedure to extract the push-push instrument (only for the battery-operated model) to make it easier to replace the battery
- Backlight display: multicolour red, green, blue for the 230 Vac model; single-colour blue touch-screen display for the battery-operated model

Adapters included for use with the following plates:

ABB: Chiara, Mylos

AVE: S44

BTICINO: Axolute, Light, Light tech, Living, Livinglight, Livinglight Air (via a frame that can be purchased separately), Matix

GEWISS: Chorus

VIMAR: Eikon, Eikon Evo, Idea, Plana, Arké

Technical Data

- Power supply:
230 VAC 230 (-15% ÷ +10%) 50/60 Hz (230 model)
2 x 1.5 V (AAA) (battery-operated model)
- Installation: recessed
- Maximum cable cross-section: mm² 1.5
- Programming: weekly
- Operating modes: summer / winter / off
- Type of adjustment: ON/OFF and proportional / integral
- Differential: 0.1÷1 °C
- Temperatures that can be set: 3 + manual + antifreeze
- Setpoint values that can be set: 2÷35 °C
- Measured temperature resolution: 0.1 °C
- Measurement accuracy: 0.5 °C
- Antifreeze temperature (can be excluded) 1÷10 °C
- Programming resolution: 1 hour
- Start-up delay: 15, 30 or 45 minutes
- Output relay capacity: 5 A / 250 V (bistable)
- Clock accuracy: ± 1 s/day
- Digital input (only for the battery-operated model): to turn off the instrument remotely
- Operating temperature: 0÷50 °C
- Storage temperature: -10 ÷ 65 °C
- Operating humidity: RH 20%÷90%, non-condensing
- Protection rating: IP40
- Delegated Regulation (EU) n. 811/2013; annex IV-3:
- Class of the temperature control device: Class 4: Class IV
 - Contribution of the temperature control device to the seasonal energy efficiency of environment heating in %: 2%

Dimensions: see section Technical Attachments



Recessed touch-screen chronothermostat

Model	Pcs. pack	Code	Price €
230 V	1	02018086	245,20
Battery	1	02018088	236,40
BTicino LivingLightAir plate adapter	1	01306296	6,98

Touch-screen thermostat for recessed installation

Touch-screen electronic thermostats for recessed installations



Touch-screen electronic thermostat with recessed installation in a 3-modules box, designed to control the room temperature, both in heating and air-conditioning mode, both mains and a battery-operated versions available.

- Installation in a 3-modules recessed box (503)
- Supports to adapt the instrument to the plates of the main civil series
- Touch-screen display to show the measured temperature and program the instrument
- Terminal board at the back of the instrument to connect the output relay of the power supply (only for the 230 Vac model) and the external contact (only for the battery-operated model)
- Interchangeable front panel available in white and anthracite grey (included)
- Procedure to extract the push-push instrument (only for the battery-operated model) to make it easier to replace the battery
- Backlight display: multicolour red, green, blue for the 230 Vac model; single-colour blue touch-screen display for the battery-operated model

Adapters included for use with the following plates:

ABB: Chiara, Mylos

AVE: S44

BTICINO: Axolute, Light, Light tech, Living, Livinglight, Livinglight Air (via a frame that can be purchased separately), Matix

GEWISS: Chorus

VIMAR: Eikon, Eikon Evo, Idea, Plana, Arké

Technical Data

Power supply:

230 VAC 230 (-15% ÷ +10%) 50/60 Hz (230 model)

2 x 1.5 V (AAA) (battery-operated model)

Installation: recessed

Maximum cable cross-section: 1.5 mm²

Output relay capacity: 5A/250V (bistable)

Operating time: 12 months

Input: two terminals to reduce the setpoint (battery-operated model only)

Operating modes: summer/winter/off

Type of adjustment: ON/OFF and proportional / integral

Setpoint values that can be set: 2÷35 °C

Differential: 0.1÷1 °C

Measured temperature resolution: 0.1 °C

Measurement accuracy: 0.5 °C

Antifreeze temperature: 1÷10 °C

Operating temperature: 0÷50 °C

Storage temperature: -10÷65°C

Operating humidity: 20%÷90%, non-condensing RH

Protection rating: IP40

Delegated Regulation (EU) n. 811/2013; annex IV-3:

- Class of the temperature control device: Class 4: Class IV

- Contribution of the temperature control device to the seasonal energy efficiency of environment heating in %: 2%

Dimensions: see section Technical Attachments



Recessed touch-screen thermostat

Model	Pcs. pack	Code	Price €
230 V	1	02018082	187,60
Battery	1	02018084	187,60
BTicino LivingLightAir plate adapter	1	01306296	6,98

Termec EVO

Room thermostat



Technical data

Gas expansion sensible element

Temperature limiting/blocking device

Protection class: IP 20

Contact's rating at 250 V: 16 (2,5) A or 10 (1,5) A (dependent of the model)

Temperature range: from 5 to 30 °C

Temperature differential: $DT \leq 1^{\circ}C$

Thermal gradient: $1^{\circ}C / 15 \text{ min}$

Delegated Regulation (EU) n. 811/2013; annex IV-3:

- Class of the temperature control device: Class 1: Class I

- Contribution of the temperature control device to the seasonal energy efficiency of environment heating in %: 1%

Dimensions: see section Technical Attachments



Termec EVO thermostat

Model	Pcs. pack	Code	Price €
3 contacts	1	02018160	24,83
3 contacts with light	1	02018162	26,67
3 contacts with light + on/off switch	1	02018164	31,53
2 contacts with light + summer / winter switch	1	02018166	33,06

Thermostats



Electronic room thermostat



Electronic room thermostat

Power supply: 230 Vac 50 Hz
 Temperature adjustment: from 6 to 30 °C
 Range temperature: 0÷40 °C
 Protection rate: IP 30
 Absorption: 1 VA
 Contact's rating: 5 (1) AC 250 Vac
 Rcd triggering: 0,5 °C
 Dimensions: 85 x 85 x 31 mm
 Delegated Regulation (EU) n. 811/2013; annex IV-3:
 - Class of the temperature control device: Class 1: Class I
 - Contribution of the temperature control device to the seasonal energy efficiency of environment heating in %: 1%

Model	Pcs. pack	Code	Price €
With summer/winter switch	1	02018046	64,80

Thermostats for fancoils



Contact thermostat for fan-coil

Free contact: 250 V -10 (2,5 A) - Contact closes: 42 °C - Contact opens: 34 °C

Model	Pcs. pack	Code	Price €
	1	02012030	12,41

Wall-mounted chronothermostat with humidistat

Chronothermostat with humidistat



Chronothermostat with weekly programming with built-in humidity sensor to adjust the temperature and control the ambient humidity thanks to two separate relays.

The first relay is controlled by the temperature setting, while the second relay is activated when the humidity threshold is reached. Depending on the setting, it serves as an instrument to measure the maximum or minimum value. For instance, it can control a dehumidifier or a humidifier, with automatic switch from standard time to daylight-saving time and keypad lock for installation in public areas.

- It has a plastic base for wall installation or it can be secured to a 503 box (or a similar one)
- Wide display to show the operating status, time and day, temperature and humidity in the room
- Keyboard concealed underneath the front panel and used to program the instrument.

Technical Data

Power supply: battery 1 x 1.5 V (AAA)

Battery charge: 1 h

Fixing system: Wall-mounted/503 box

Protection rating: IP XXD

Operating temperature: 0÷50 °C

Storage temperature: -10-65°C

Relative humidity: 20%÷90%, non-condensing RH

Delegated Regulation (EU) n. 811/2013; annex IV-3:

- Class of the temperature control device: Class 4: Class IV

- Contribution of the temperature control device to the seasonal energy efficiency of environment heating in %: 2%

Humidistat Technical Data

Operating range: HR Off, 30÷90%

Fixed centred differential: HR 5%

Time between two switchings: 1 min

Accuracy: HR ±3%

Resolution: HR 1%

N.O. bistable relay capacity at 250 Vac: A5

Chronothermostat Technical Data

Programming: weekly

Operation: summer/winter

Temperatures that can be set: 3 + antifreeze + manual

Temperature measurement: 0÷50 °C

Measurement accuracy: 0.5 °C

Temperature resolution: 0.1 °C

Programming resolution: 1 h

Interval between two temperature measurements: 20 s

Start-up delay: 15, 30, 45 min

Differential that can be set: 0.1÷1 °C

Exchange relay capacity at 250 Vac: 5 A

Dimensions: see section Technical Attachments



Chronothermostat with humidistat for wall-mounted

Dimension	Pcs. pack	Code	Price €
(*)	1	02018090	348,50

(*) Item to be out of stock

Humidistat

Recessed humidistat



Recessed electronic humidistat

Recessed humidistat to adjust humidity in domestic environments

Installation in boxes for three recessed modules

Interchangeable front panel in two colours: anthracite grey and white (included in the package)

Adapters included for use with following plates:

ABB: Chiara, Mylos

AVE: S44

BTICINO: Axolute, Light, Light tech, Living, Livinglight, Livinglight Air, Matrix

GEWISS: Chorus

VIMAR: Eikon, Eikon Evo, Idea, Plana, Arké

Technical data:

Power supply: 230 VAC 50-60 Hz

Consumption: 4 VA (0.7 W)

Contact capacity 250 VAC: 5 A

Adjustment range: 30% - 90%

Differential: $\pm 2.5\%$

Operating temperature: 0 °C - 50 °C

Storage temperature: -10 °C - 60 °C

Protection rating: IP40 front

Dimension	Pcs. pack	Code	Price €
	1	28154581	216,50

Dimensions: see section Technical Attachments

Radio frequency thermoregulation

Radio frequency touch screen weekly programmable chronothermostat



Radio frequency touch screen weekly programmable chronothermostat to be combined with the radio frequency programmable chronothermostat actuators for radiator valves; this allows to control one or more radiators.

- 1 Plastic base for wall-mounting or covering the box 503
- 2 Wide backlit touch screen display to view the operating status, time, day and temperature measured
- 3 Touch screen keyboard to program the device

General features

Power supply: 2 x 1,5 V (type AAA)
Power reserve (to change batteries): 1 minute
Autonomy: 12 months (with low battery indication, estimated but not guaranteed)
Summer/Winter mode
Automatic programming with:
- 7 programs for winter operation (changeable)
- 7 programs for summer operation (changeable)
Temperature adjustment ON/OFF or proportional
5 settable temperatures:
- T1, T2, T3 in automatic mode
- Tm in manual mode
- Toff in off mode (anti-freeze temperature, excludable)
Minimum adjustment interval: 1 hour
Communication delay settable between 15, 30 or 45 minutes (independent for each hour)
Keylock with password
Summer/winter time change automatic
Open window detection function
Display with blue backlight (active at the touch of a button)

Technical data

Battery powered: 2x1,5 V battery (type AAA) (not supplied)
Fixing: wall mounting
Weekly programming
Operating mode: summer / winter / off
Type of control: ON / OFF or proportional or setpoint sending for autonomous management of the radiofrequency actuator
Differential: 0,1 ÷ 1 °C
Temperature settings: 3 + manual + antifreeze
Setting setpoint: 2 ÷ 35 °C
Measured temperature resolution: 0,1 °C
Measurement precision: 0,5 °C
Antifreeze temperature (excluded): 1 ÷ 10 °C
programming resolution: 1 hour
Ignition delay: 15, 30 or 45 minutes
Watch accuracy: ± 1 / day
Maximum distance between radiofrequency chronothermostat and actuator: 50 meters in free field
Operating temperature: 0 ÷ 50 °C
Storage temperature: -10 ÷ 65 °C
Operating humidity: 20% to 90% RH non-condensing
Degree of protection: IP40
Delegated Regulation (EU) No. 811/2013; annex IV-3:
- Class of the temperature control device: Class 4; class IV
- Contribution of the temperature control device to the energy efficiency of ambient heating season in%: 2%

Dimensions: see section Technical Attachments



Radio frequency programmable chronothermostat

Description	Pcs. pack	Code	Price €
Radio frequency programmable thermostat (*)	1	02018144	201,00

(*) Item to be out of stock

Radio frequency thermoregulation

1-channel DIN rail radio frequency actuator with fixed delay



1-channel DIN rail radio frequency actuator with fixed delay

Radio frequency actuator that receives the actuation command directly from the Emmeti electronic radio frequency chronothermostat, operating as a normal remote actuator, installed on a DIN rail for boiler management, for example. Actuation occurs 5 minutes after the actuator has received the command from the chronothermostat.

- 1 Green LED indicating the operating status
- 2 Red LED indicating the relay status
- 3 SET button for programming and resetting the channel

Technical data

Power supply: 230 Vac (-15%/+10%) 50/60 Hz

Outputs:

- 1 relay with 8A 250 Vac changeover contact with resistive load
- Activation with a fixed delay of 5 minutes after receiving the command from the Emmeti radio frequency chronothermostat, and instantaneous deactivation
- Connection to an external antenna (optional)

Maximum distance between radiofrequency chronothermostat and actuator: 50 meters in free field.

Operating temperature: 0 ÷ 50 °C - Storage temperature: -10 ÷ 65 °C

Installation on DIN rail - Measurement: 2 DIN modules - Protection degree: IP40

Compliant with EU Directives:

- Low voltage (LVD)
- Electromagnetic compatibility (EMC)

Dimension	Pcs. pack	Code	Price €
2 DIN modules (*)	1	02018124	143,90

(*) Item to be out of stock

Dimensions: see section Technical Attachments

Radio frequency thermoregulation

6-channel DIN rail radio frequency actuator, with additional contact with settable delay



6-channel DIN rail radio frequency actuator, with additional contact with settable delay

Electronic 6-channel radio frequency actuator, each channel can receive the actuation command directly from an Emmeti radio frequency chronothermostat.

The actuator operates as a normal remote actuator, installed on a DIN rail for boiler management, for example.

Actuation of additional contact occurs after a set time (from 3 seconds to 5 minutes) from the moment at least one channel of the actuator has received the first command from an Emmeti radio frequency chronothermostat paired with the corresponding channel.

- 1 Green LED indicating the device status (power on)
- 2 Red LEDs indicating the outputs status (1-6)
- 3 Yellow LED indicating the output status (7)
- 4 SET button for programming and resetting the channels
- 5 Trimmer for setting relay 7 switching delay

Technical data

Power supply: 230 Vac (-15%/+10%) 50/60 Hz

Absorption: 3 W (8VA)

Outputs:

- 6 relays with 5A / 250 Vac contact normally open
- 1 relay with 5A / 250 Vac contact normally open with delay
- external antenna (standard)
- connection to an external antenna (optional)

Switching delay of relay 7 that can be set between 3 seconds and 5 minutes with the trimmer
Maximum distance between radiofrequency chronothermostat and actuator: 50 meters in free field

Cable terminals with a maximum cross-section of 6 mm²

Operating temperature: 0 ÷ 50 °C - Storage temperature: -10 ÷ 65 °C

Operating humidity: 20 ÷ 90% non-condensing

Installation on DIN rail - Measurement: 4 DIN modules - Protection degree: IP20

Insulation: reinforced between front and all other terminals

Combinable with electrothermal heads (230 cvac or 24 Vac) in the Normally Closed version

Compliant with EU Directives:

- Low voltage (LVD)
- Electromagnetic compatibility (EMC)

Dimension	Pcs. pack	Code	Price €
4 DIN modules (*)	1	02018126	460,60

(*) Item to be out of stock

Dimensions: see section Technical Attachments

Antenna for DIN rail radio frequency actuators



Antenna for DIN rail radio frequency actuators

Technical data

Frequency range: 433.92 ± 10 Mhz

Input impedance: 50 ohm

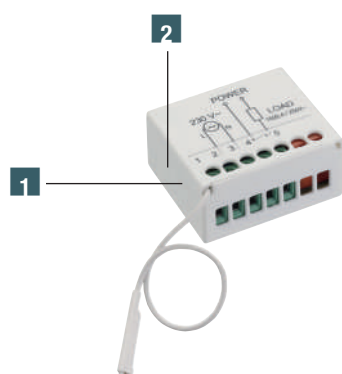
Cable length: 4.5 metres

Dimension	Pcs. pack.	Code	Price €
(*)	1	02018128	93,32

(*) Item to be out of stock

Radio frequency thermoregulation

Built-in radio frequency actuator



Built-in radio frequency actuator

Radio frequency actuator that receives the actuation command directly from the Emmeti radio frequency chronothermostat, operating as a normal remote actuator. The actuator is installed flush in any civil electrical box (for example 503) with the possibility of managing a load, such as an electric radiator.

- 1 Button for channel configuration
- 2 Green/red LED indicating the operating status

Technical data

Power supply: 230 V AC (-15%/+10%) 50/60 Hz
 Output: bistable relay with capacity of 16(8)A / 250Vac
 Maximum distance between radiofrequency chronothermostat and actuator: 50 meters in free field
 Operating temperature: 0°C ÷ 40°C
 Storage temperature: -10°C ÷ 70°C
 Enclosure: suitable for built-in box (occupies the space of a module)
 Protection rating: IP20
 Combinable with electrothermal heads (230 Vac or 24 Vac) in the Normally Closed version
 Compliant with Community Directives:
 - Low voltage (LVD)
 - Electromagnetic compatibility (EMC)

Dimension	Pcs. pack	Code	Price €
(*)	1	02018130	156,60

(*) Item to be out of stock

Dimensions: see section Technical Attachments

Radio frequency chronothermostat pairing to various radio frequency actuators

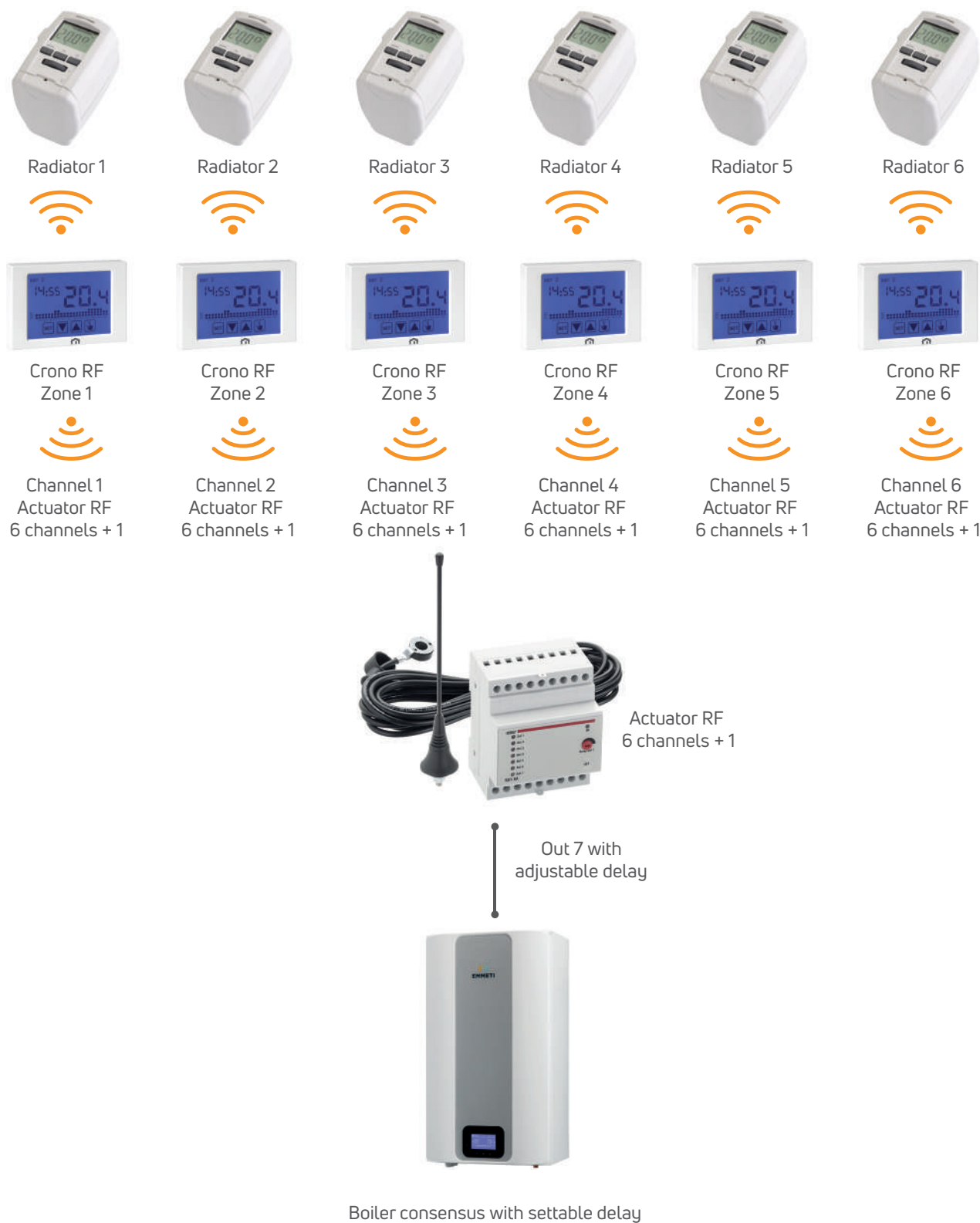
Configurations	Radio frequency chronothermostat Code 02018144	Electronic radio frequency thermostatic actuator for radiator valves code 02018094	1-channel DIN rail radio frequency actuator with fixed delay code 02018124	6-channel DIN rail radio frequency actuator, with additional contact with settable delay code 02018126	Built-in radio frequency actuator code 02018130
					
1: autonomous multi-zone radiator system (up to 6 zones)	up to 6	n for each chronothermostat		1	
2: autonomous system multi-zone type (up to 6 zones) in which the zone they are interceptable in one single point, for example with electrohermic heads installed on a collector	up to 6			1	
3: autonomous system of monozone type	1		1		
4: remote management of an electric radiator	1				1

n: maximum number of chronothermostat actuators that can be paired with a radio frequency chronothermostat. The limit is given by the distance. For the configurations, see the diagrams on the next pages.

Radio frequency thermoregulation

Configuration 1

Radio frequency chronothermostat + radio frequency chronothermostat actuators + 6-channel DIN rail radio frequency actuator, with additional contact with settable delay

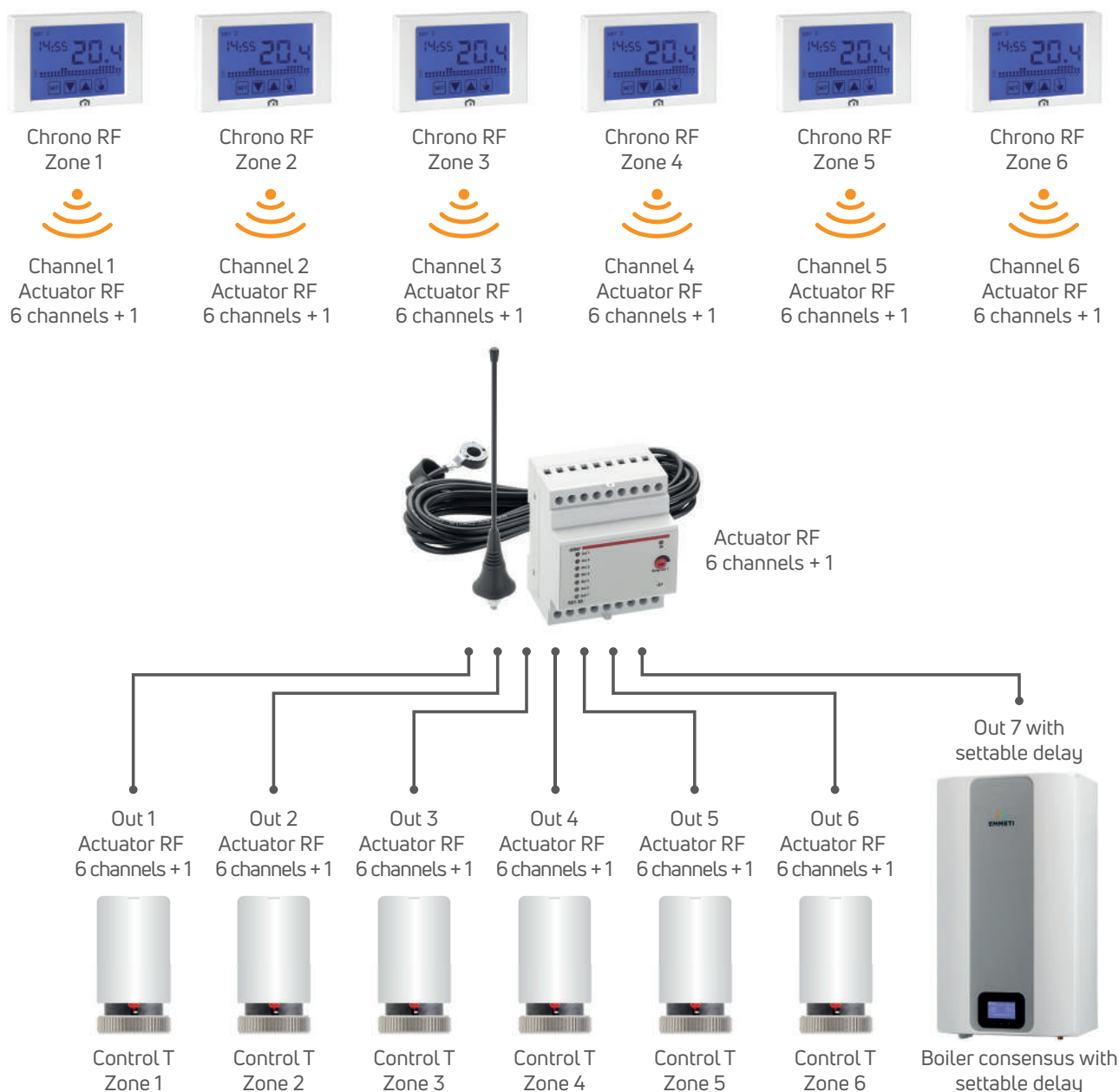


Use: autonomous system with multi-zone radiators (up to 6 zones)

Radio frequency thermoregulation

Configuration 2

Radio frequency chronothermostat + 6-channel DIN rail radio frequency actuator, with additional channel with settable delay



Use: autonomous multi-zone system (up to 6 zones) where the zones can be intercepted in a single point, for example with electrothermic heads installed on a manifold

Radio frequency thermoregulation

Configuration 3

Radio frequency chronothermostat + 1-channel DIN rail radio frequency actuator with fixed delay

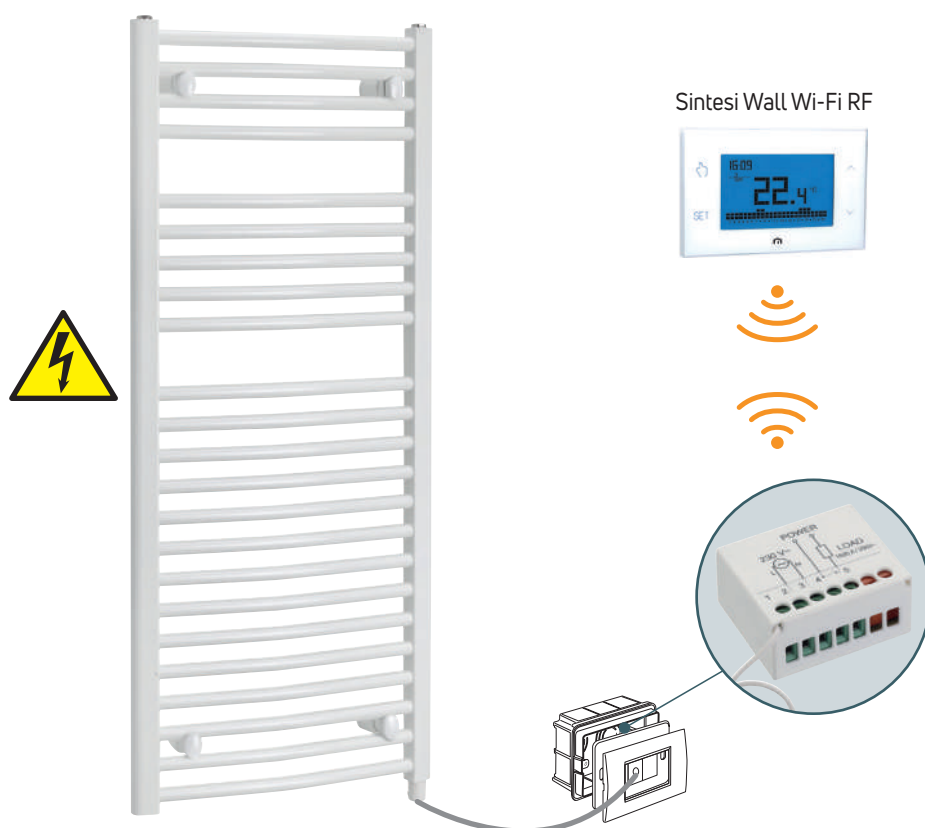


(*) RF actuator from DIN bar for boiler consent with 5 minutes delay.

Use: autonomous single-zone system

Configuration 4

Radio frequency chronothermostat + built-in radio frequency actuator



Use: remote management of an electric radiator

RCE - Emmeti Climatic Regulator

RCE - Emmeti Climatic Regulator for mixing units



Mixing system thermoregulator for automatic control of heating and cooling functions of small and medium systems with radiant panels (floor and ceiling) or with high temperature (radiators, fancoils), such as houses, apartments, shops, offices, etc. Option of managing a centralised system.

This regulator manages the different functions required for the climatic control of the mixing system, such as controlling a mixing valve and relative pump.

Features

One of the main features is the different management of the delivery temperature according to the selected mode:

- 'Fixed point' mode: fixed delivery temperature in both heating and cooling mode;
- 'Modulating' mode: fixed delivery temperature in cooling mode and variable delivery temperature in heating mode.

In the latter case, the delivery temperature is modified compared to the temperature set according to the system return temperature.

- 'Climatic' mode: the delivery temperature is calculated according to the outdoor temperature (winter and summer climatic curve).

The regulator also manages the pump of the system and can control a mixing valve with floating servomotor 3-point or modulating servomotor 0-10 Vdc.

Important

Install a dew sensor for every delivery manifold in systems that also run in cooling mode. Every delivery manifold must be positioned in an area adjacent to the room to be cooled, in order to have equal temperature and humidity conditions. Moreover, the room must have a suitable air handling system (e.g. a dehumidifier regulated by a humidistat to control room humidity).

How to choose the components

Single system

Two-floor detached house with one mixing valve and two delivery manifolds (one per floor).

The system runs both in heating and cooling mode.

Components required:

nr. 1 Emmeti climatic regulator kit for mixing units (code 28139070).

Note: the required components for "fixed point" mode or "modulating" mode are found in the packaging.

For "climatic" mode, add 1 "external probe housing" (code 28139076) to install one of the probes found in the packaging outdoors.

nr. 2 "dew sensors" (code 28139072), install one for each delivery manifold. Both probes must be connected directly to the climatic regulator.

RCE - Emmeti Climatic Regulator for mixing units



Emmeti Climatic regulator kit for mixing units

Composition

- nr. 1 Emmeti Climatic Regulator (RCE)
- nr. 2 NTC temperature probes
- nr. 1 Probe-holder kit
- nr. 1 Wall plug for display
- nr. 1 male/female connector kit for display extension cable (connectors for 4-pin MSTB printed circuit boards)

Technical data of the climatic Regulator

Power supply: 110-230 Vac $\pm 10\%$; 50/60 Hz - Double insulation - Contact capacity: 5 A / 230 Vac - Protection rating IP20 - Connected to DIN (EN 60715) guide according to standards DIN 43880 - Regulator material: Self-extinguishing PPO - Regulator colour: RAL 7035 grey - Dimensions: 6 DIN modules (95 x 105 x 82 mm) - Display material: PC/ABS - Display colour: white
Delegated Regulation (EU) n. 811/2013; annex IV-3:
- Class of the temperature control device: Class 3: Class III
- Contribution of the temperature control device to the seasonal energy efficiency of environment heating in %: 1.5%

Inputs and outputs climate Regulator

2 analogic inputs for NTC temperature probes (flow temperature, return/external temperature), 4 digital inputs free of voltage (heating/cooling/dehumidification consensus, change of season, remote on/off, alarms).

1 digital output for the circulator, 1 digital output for the generator consensus, 1 digital output to a floating servomotor 3 points and 1 analogic output to a modulating servomotor 0-10 V (the regulator can manage only one servomotor)

Technical data of temperature Probes

Type: NTC; 10K Ω at 25°C; IP68; cable length: 3 m; probe length 50 mm, probe diameter 6 mm

Technical data of the wall plug for display

Fixing on 503 standard box

Dimension	Pcs. pack	Code	Price €
	1	28139070	429,90

Dimensions: see section Technical Attachments

Accessories for Emmeti Climatic Regulator for mixing units



Dew sensor

Power supply: 15 Vdc $\pm 10\%$ - RH% of intervention: 90-95%

Dimension	Pcs. pack	Code	Price €
	1	28139078	119,50

To be used in the event that the Emmeti climatic regulator for mixing units operates also in cooling mode. Order one dew sensor for each system delivery manifold.

Dimensions: see section Technical Attachments



Transformer 230/24V 10 VA

230/24V, P=10VA, f=50/60Hz

Dimension	Pcs. pack	Code	Price €
2 DIN modules	1	28139130	44,50

To be used to power maximum two converters per dew sensor (code 28139074) or to power 0-10V / 24 Vac servomotors (the number of servomotors that can be powered depends on the load required).

Dimensions: see section Technical Attachments

RCE - Emmeti Climatic Regulator for mixing units



Socket for immersion type water sensor

Dimension	Pcs. pack	Code	Price €
G 1/4", L=83 mm (*)	1	28153220	55,94

(*) Item to be out of stock

Dimensions: see section Technical Attachments



Housing for external probe

Material: Self-extinguishing ABS - Colour: white - Housing equipped with cable gland
Dimensions: 80x80x25 mm

Dimension	Pcs. pack	Code	Price €
	1	28139076	23,68

To be ordered if you use the Emmeti Climatic Regulator in climatic mode



Probe holders kit

2 permanent adhesive probe holders for probes (diameter 6 mm, maximum length 70 mm) in contact on the pipe

Dimension	Pcs. pack	Code	Price €
	1	01306294	8,53

Dimensions: see section Technical Attachments



DIN rail kit for RCE

DIN rail installation kit for RCE components (controller, converter, transformer).
Consisting of two guides omega DIN 35x7.5 mm, L = 80 mm and 4 screws.

Dimension	Pcs. pack	Code	Price €
	1	01301242	7,81



Recessed electronic humidistat

Recessed humidistat to adjust humidity in domestic environments - Installation in boxes for three recessed modules - Interchangeable front panel in two colours: anthracite grey and white (included in the package)

Adapters included for use with following plates:

ABB: Chiara, Mylos

AVE: S44

BTICINO: Axolute, Light, Light tech, Living, Livinglight, Livinglight Air, Matrix

GEWISS: Chorus

VIMAR: Eikon, Eikon Evo, Idea, Plana, Arké

Technical data:

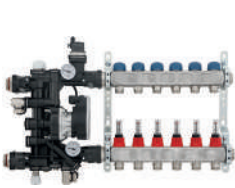
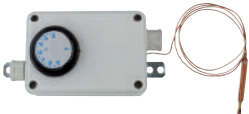
Power supply: 230 VAC 50-60 Hz - Consumption: 4 VA (0.7 W) - Contact capacity 250 VAC: 5 A - Adjustment range: 30% - 90% - Differential: $\pm 2.5\%$ - Operating temperature: 0 °C - 50 °C - Storage temperature: -10 °C - 60 °C - Protection rating: IP40 front

Dimension	Pcs. pack	Code	Price €
	1	28154581	216,50

Dimensions: see section Technical Attachments

RCE - Emmeti Climatic Regulator for mixing units

RCE Climate control unit selection guide

Components	Type of application				
	 Floor Control Unit S Section 4	 Mixing Unit M3V Section 4	 Firstbox Section 4	 Modular Firstbox Section 4	 3-ways mixing valve Section 11
 28139070 - Section 5	1	1	1	1	1
 28157212 or 28157222 - Section 4	1	1	1	1	
 28130208 or 28130314 ⁽²⁾ or 28130316 ⁽³⁾ - Section 11					1
 28130084 ⁽¹⁾ - Section 11					1
 28130632 - Section 4	1	1	1	1	
 02012034 - Section 11					1
 28153220 ⁽⁴⁾ - Section 5					1

⁽¹⁾ Code 28130084: to be combined with the three-way mixer valves codes 28130218, 28130220, 28130222.

⁽²⁾ Code 28130314: Can be used in combination with three-way mixing valves for electronic adjustment kits with codes 28130210 - 28130214 - 28130316.

⁽³⁾ Code 28130316: Can be used in combination with three-way mixing valves for electronic adjustment kits with codes 28130218 - 28130220 - 28130222.

⁽⁴⁾ Code 28153220: If the RCE regulator is used in modulating mode, order two wells, one for the delivery probe and the other one for the return probe.

Consumption measuring system modules for the accounting of thermal and sanitary consumption



- > Energy Box Compact, Energy Box V and Energy Box modules for accounting in box



268

- > Single modules for accounting



277

- > Energy Wall built-in cabinets



280

- > Energy Combibox Floor HIU module for accounting in box for instant ACS production



284

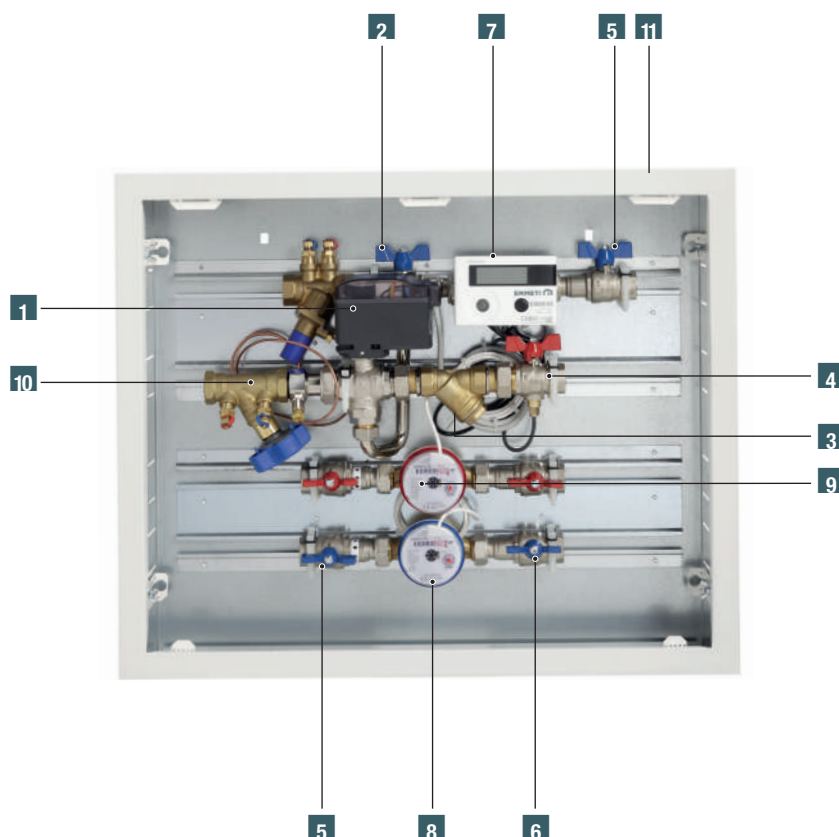
- > Instruments



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Energy Box Compact

Compact modules for accounting of heating and plumbing consumption



Construction

- 1 Motorized ball valve DN20 4-way with by-pass passage (or 2-way depending on the model)
- 2 Ball valve DN20 with 3rd by-pass way
- 3 Impurity collection filter DN20
- 4 Ball valve DN20 with probe connection M10x1
- 5 Ball valve DN20 with integrated retaining cartridge
- 6 Ball valve DN20 with swivel nut for measuring instruments
- 7 Thermal energy meter with 3 pulse inputs and M-Bus output.
- 8 Cold water pulse-emitting volumetric meter
- 9 Hot water pulse-emitting volumetric meter
- 10 Dynamic balancing kit
- 11 Plastified galvanised metal box with key-operated lock for 120 mm partition

Technical data

Heat carrier fluid: water
 Maximum operating temperature, heating circuit: 90 °C
 Maximum operating pressure, heating circuit: 6 bar
 Maximum temperature of domestic hot water: 85 °C
 Maximum temperature of domestic cold water: 30 °C
 Maximum domestic water pressure: 6 bar
 Thread of connection valve UNI EN 10226-1

Operation

Compact thermal and domestic water heating consumption measuring modules (with centralized production of hot water), equipped with 2- or 4-way zone valve, set up for installation of a DN15 or DN20 energy meter and DN15 volumetric meter.

The zone valve is controlled by the temperature control thermostat of the individual residential unit, and this allows complete separation of the thermal zone of each flat on the centralized distribution network. In the models equipped with a 4-way zone valve, the by-pass passage realizes the pressure drops when the 4-way valve is open, so as to stabilize the operating conditions of the centralized system. Furthermore, to facilitate the balancing of the condominium distribution system and to avoid any problems of poor service caused by the greater transit of fluid in some modules to the disadvantage of others, a calibration and balancing gate valve is supplied installed on the fluid flow line in the housing in order to guarantee the transit of the design flow for each individual residential unit. As an accessory it is possible to equip the module with a dynamic balancing kit, to be installed on the delivery and return lines, to guarantee the maintenance of the differential pressure in any operating condition with different flow rates.

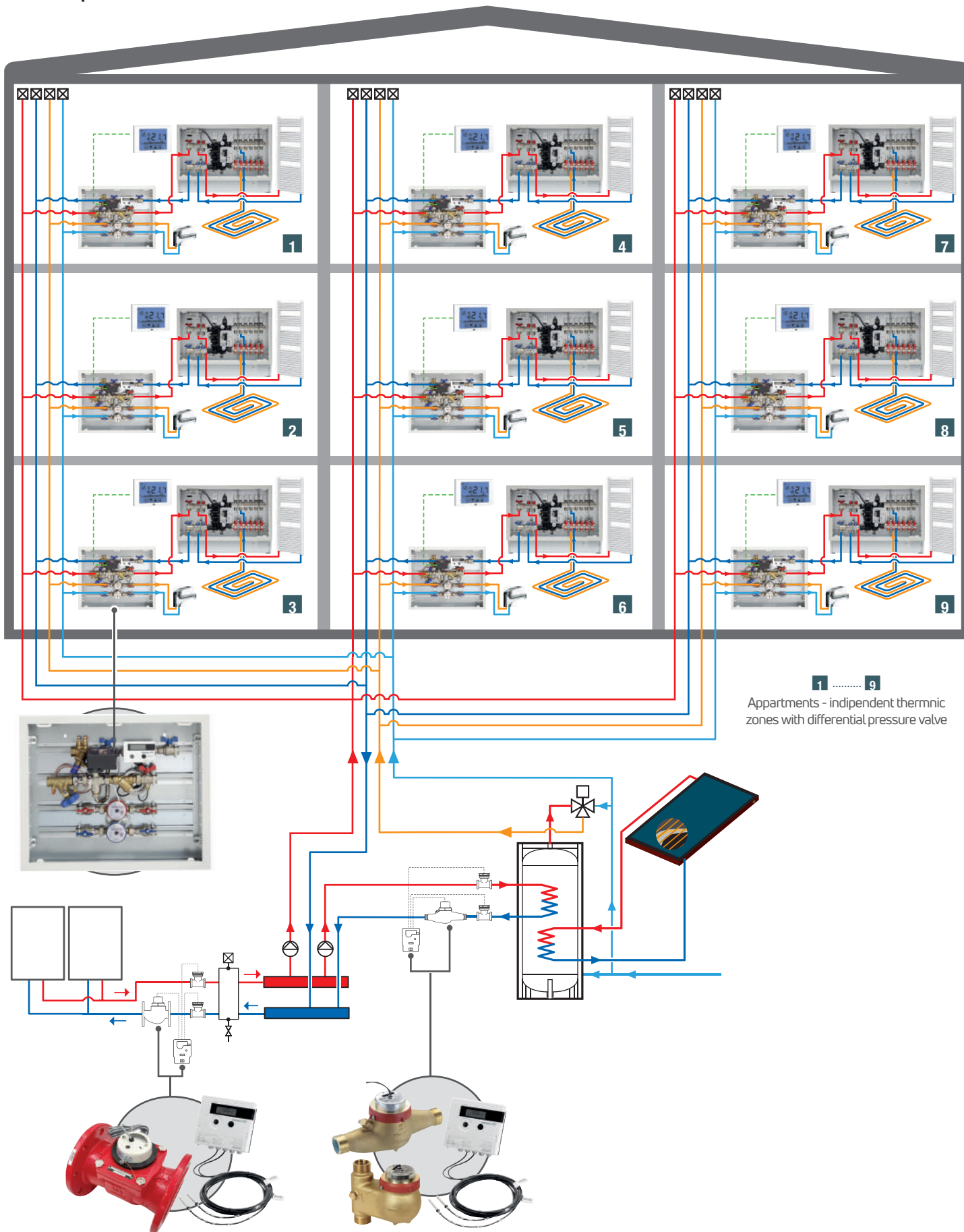
Plant expansion

N.B. Testing and starting up the system are not included in the sales price.

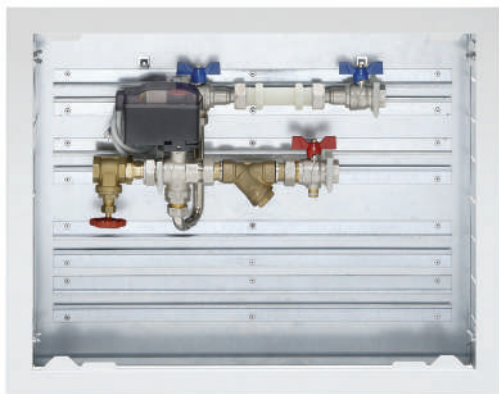
Dimensions: see section Technical Attachments

Compact modules for accounting

Example of installation



Compact modules for accounting



Heating/cooling compsumption measuring, 4-way zone valve

Composition

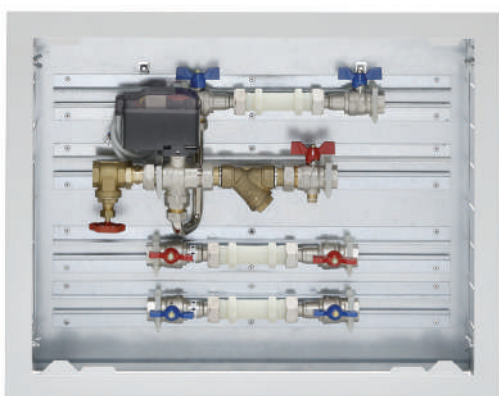
Galvanized metal box with key-operated lock
 Zone valve DN20 4-way with by-pass passage
 Servomotor: 230 Vac, 50 Hz
 Impurity collection filter DN20
 Ball valve DN20 with pipe union
 Gate valve DN20 to calibrate and balance the heating/cooling circuit

Dimension	Box Dimension	Pcs. pack	Code	Price €
DN 15 (*)	L 600	1	28170130	672,30
DN 20 (**)	L 600	1	28170132	674,40

(*) setup for thermal energy counter size DN15 (connection 3/4")

(**) setup for thermal energy counter size DN20 (connection 1")

The boxes thus assembled are suitable for connection on the left side of the main pipelines of the centralized system.



Heating/cooling and hot/cold domestic water consumption measuring, 4-way zone valve

Composition

Galvanized metal box with key-operated lock
 Zone valve DN20 4-way with by-pass passage
 Servomotor: 230 Vac, 50 Hz
 Impurity collection filter DN20
 Ball valve DN20 with pipe union
 Ball valve DN20 with integrated retaining cartridge on domestic water line
 Gate valve DN20 to calibrate and balance the heating/cooling circuit

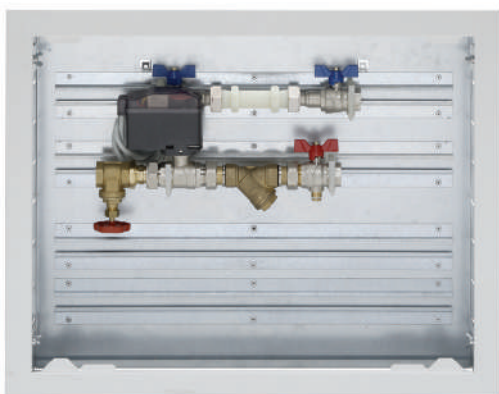
Dimension	Box Dimension	Pcs. pack	Code	Price €
DN15 (*)	L 600	1	28170134	817,90
DN20 (**)	L 600	1	28170136	819,80
DN20 / DN20 (***)	L 600	1	28170138	820,20

(*) setup for thermal energy meter size DN15 (connection 3/4") and volumetric counter DN15 (connection 3/4")

(**) setup for thermal energy meter size DN20 (connection 1") and volumetric counter DN15 (connection 3/4")

(***) setup for thermal energy meter size DN20 (connection 1") and volumetric counter DN20 (connection 1")

The boxes thus assembled are suitable for connection on the left side of the main pipelines of the centralized system



Heating/cooling consumption measuring, 2-way zone valve

Composition

Galvanized metal box with key-operated lock
 Zone valve DN20 2-way
 Servomotor: 230 Vac, 50 Hz
 Impurity collection filter DN20 - Ball valve DN20 with pipe union
 Gate valve DN20 to calibrate and balance the heating/cooling circuit

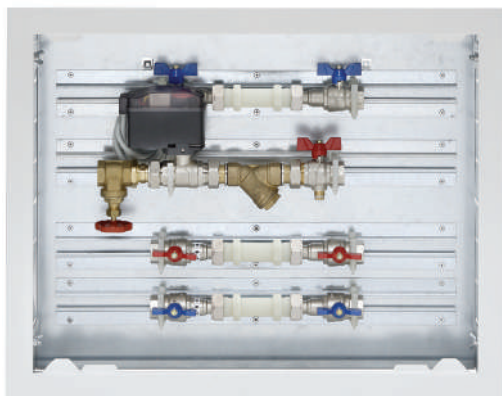
Dimension	Box Dimension	Pcs. pack	Code	Price €
DN15 (*)	L 600	1	28170146	604,10
DN20 (**)	L 600	1	28170148	606,00

(*) setup for thermal energy counter, size DN15 (connection 3/4")

(**) setup for thermal energy counter, size DN20 (connection 1")

The boxes thus assembled are suitable for connection on the left side of the main pipelines of centralized system

Compact modules for accounting



Heating/cooling and hot/cold domestic water consumption measuring, 2-way zone valve

Composition

Galvanized metal box with key-operated lock

Zone valve DN20 2-way

Servomotor: 230 Vac, 50 Hz

Impurity collection filter DN20 - Ball valve DN20 with pipe union

Ball valve DN20 with integrated retaining cartridge on domestic water line

Gate valve DN20 to calibrate and balance the heating/cooling circuit

Dimension	Box Dimension	Pcs. pack	Code	Price €
DN15 (*)	L 600	1	28170150	749,50
DN20 (**)	L 600	1	28170152	751,30
DN20 / DN 20 (***)	L 600	1	28170154	751,60

(*) setup for thermal energy meter size DN15 (connection 3/4") and volumetric counter DN15 (connection 3/4")

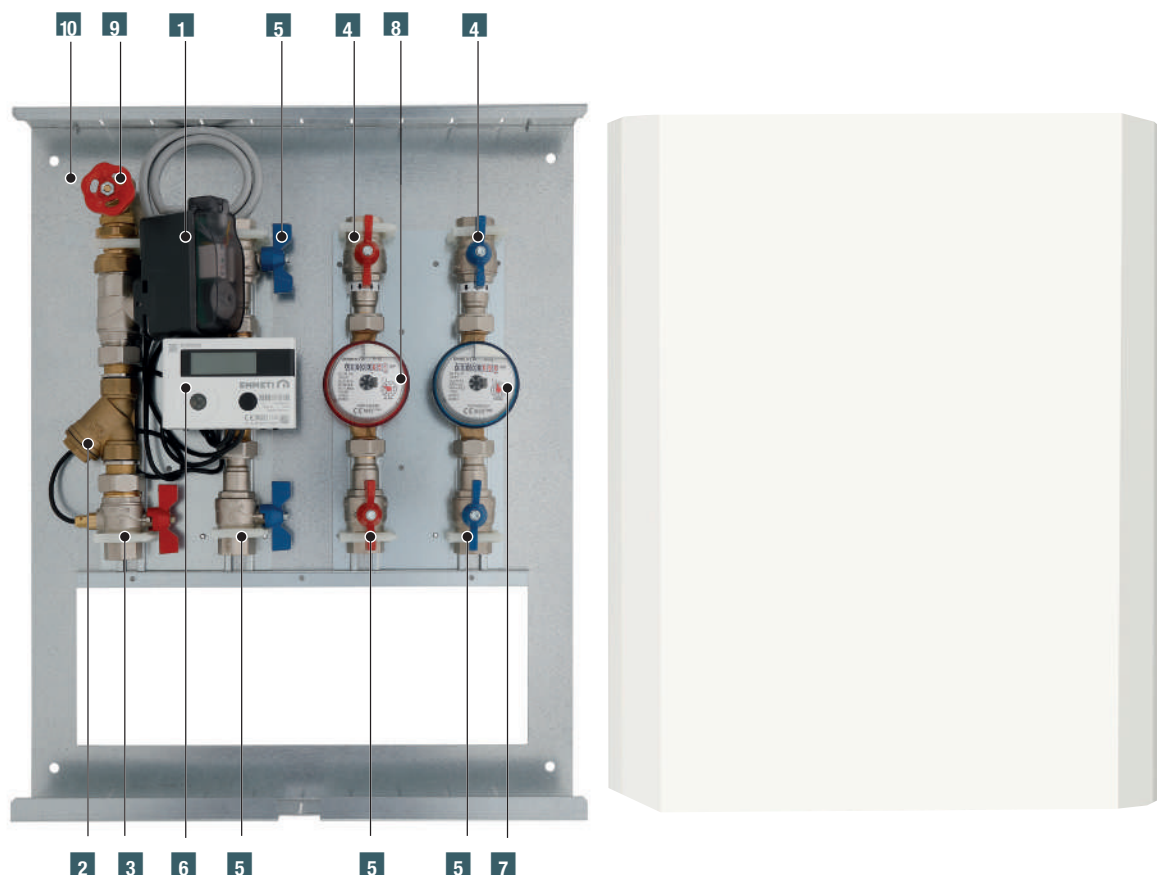
(**) setup for thermal energy meter size DN20 (connection 1") and volumetric counter DN15 (connection 3/4")

(***) setup for thermal energy meter size DN20 (connection 1") and volumetric counter DN20 (connection 1")

The boxes thus assembled are suitable for connection on the left side of the main pipelines of the centralized system

Energy Box V

Vertical modules for accounting of heating and plumbing consumption



Construction

- 1 Motorized valve DN20 2-ways
- 2 Impurity collection filter DN20
- 3 Ball valve DN20 with probe connection M10x1
- 4 Ball valve DN20 with integrated check cartridge
- 5 Ball valve DN20 with swivel joint for accounting instruments
- 6 Measuring device for thermal energy
- 7 Cold water impulse launch volumetric counter
- 8 Hot water impulse launch volumetric counter
- 9 DN20 interception and balancing gate valve
- 10 Metal cabinet

Technical data

Fluido termovettore: acqua
 Temperatura massima d'esercizio circuito riscaldamento: 90 °C
 Pressione massima di esercizio circuito riscaldamento: 6 bar
 Temperatura massima acqua calda sanitaria: 85 °C
 Temperatura massima acqua fredda sanitaria: 30 °C
 Pressione massima acqua calda sanitaria: 6 bar
 Filettatura attacco valvole UNI EN 10226-1

Instructions for ordering the product

Order the metal box, and additionally the Heating/Cooling Unit for cabinets and, if necessary, the Lines for metering the consumption of domestic hot water (with centralised production) and cold water.

Introduction

Energy Box V is a counter module particularly suitable for installation as a replacement for a boiler, thanks to the arrangement of the components in a vertical position, which facilitates the plumbing connections to the centralised system at the top, taking advantage of the existing chimney. The pipe inlet can be either from below or directly from the wall.

The metal box itself is designed to be particularly suitable for replacing a boiler, both in terms of aesthetics and in terms of size and bulk. Energy Box V is supplied with the metal box separated from the hydraulic components for easy transport and work on site.

Plant expansion

N.B.: testing and starting up the system is not included in the sales price.



Metal box for Energy Box V

Galvanised sheet metal box with painted sheet metal lid, colour white RAL 9010, complete with key lock at the bottom.
 Off-track installation.

Model	Pcs. pack	Code	Price €
W 500 x H 600 x D 150 mm	1	01301490	316,70

Dimensions: see section Technical Attachments

Vertical modules for accounting



Heating/cooling unit for Energy Box V

Composition: 2-ways motorised valve DN20 with servomotor 230 Vac, 50 Hz
dirt collector filter DN20 - ball valve DN20 with probe connection M10x1
shut-off and balancing gate valve DN20 - ball valves DN20 with union.

Model	Pcs. pack	Code	Price €
DN15 (*)	1	01301250	429,90
DN20 (**)	1	01301252	433,20

(*) set-up for installation of energy meter DN15 (3/4" connections)

(**) set-up for installation of energy meter DN20 (1" connections)

Main connections: 3/4" F

Complete with No. 4 plastic supports for fixing to the vertical rails of the metal box.

Dimensions and hydraulic performances: see technical attachments



Sanitary hot line for Energy Box V

Composition: ball valve DN20 with integrated non-return cartridge and union -
ball valve DN20 with union.

Model	Pcs. pack	Code	Price €
DN15 (*)	1	01301254	92,54
DN20 (**)	1	01301258	94,16

(*) set-up for installation of domestic hot water volumetric meter DN15 (3/4" connections)

(**) set-up for installation of domestic hot water volumetric meter DN20 (1" connections)

Main connections: 3/4" F

Complete with No. 2 plastic supports for fixing to the vertical rails of the metal box.

Dimensions and hydraulic performances: see technical attachments



Sanitary cold line for Energy Box V

Composition: ball valve DN20 with integrated non-return cartridge and union -
ball valve DN20 with union.

Model	Pcs. pack	Code	Price €
DN15 (*)	1	01301256	92,54
DN20 (**)	1	01301260	94,29

(*) set-up for installation of domestic cold water volumetric meter DN15 (3/4" connections)

(**) set-up for installation of domestic hot water volumetric meter DN20 (1" connections)

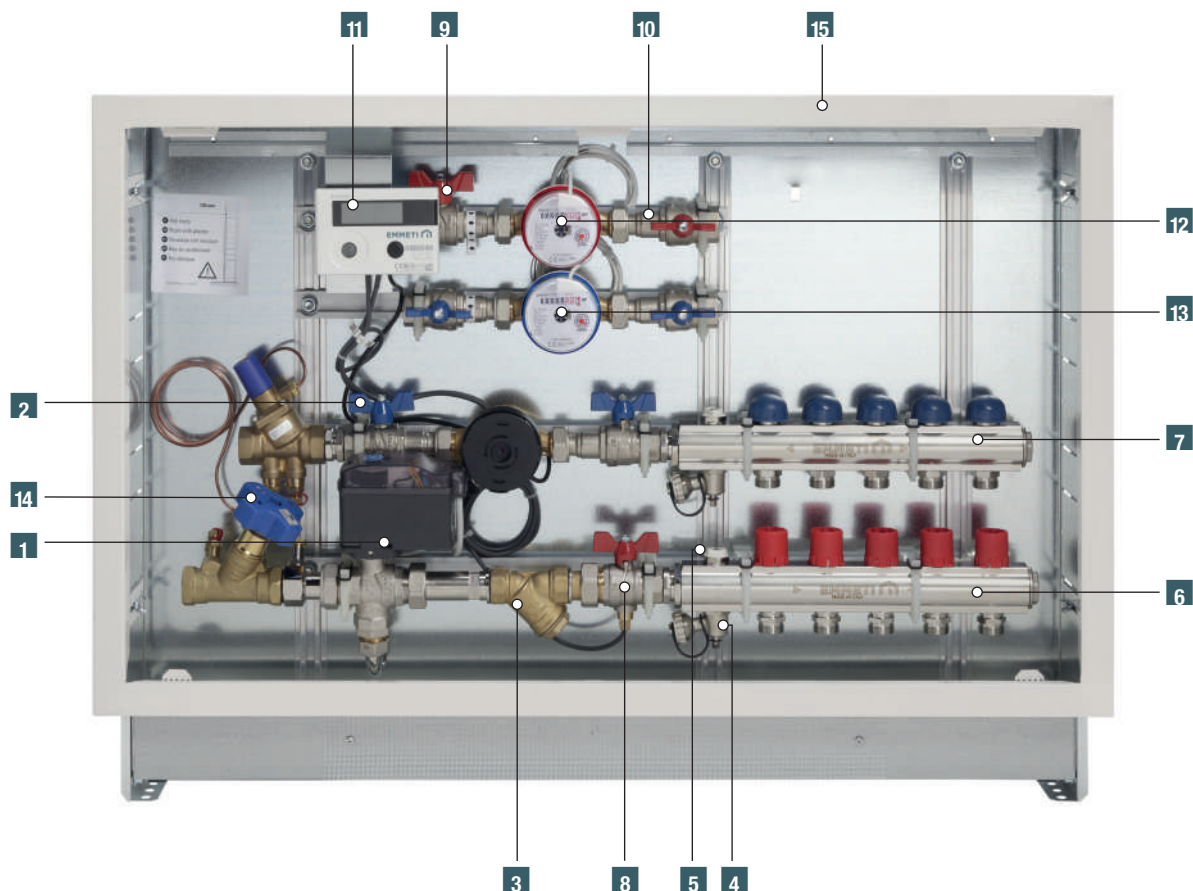
Main connections: 3/4" F

Complete with No. 2 plastic supports for fixing to the vertical rails of the metal box.

Dimensions and hydraulic performances: see technical attachments

Energy Box

Modules for accounting of heating and plumbing consumption



Construction

- 1 Motorized valve DN20 4-way with by-pass passage
- 2 Ball valve DN20 with 3rd by-pass way
- 3 Impurity collection filter DN20
- 4 Discharge bibcock
- 5 Manual vent valve
- 6 Delivery manifold
- 7 Return manifold
- 8 Ball valve DN20 with probe connection M10x1
- 9 Ball valve DN20 with integrated check cartridge
- 10 Ball valve DN20 with swivel joint for accounting instruments
- 11 Measuring device for thermal energy with 3 impulsive input and M-Bus output
- 12 Hot water impulse launch volumetric counter
- 13 Cold water impulse launch volumetric counter
- 14 Metal cabinet Metalbox Plus with key-operated lock
- 15 Dynamic balancing kit DN20

Technical data

Heat carrier fluid: water
 Maximum operating temperature, heating circuit: 90 °C
 Maximum operating pressure, heating circuit: 6 bar
 Maximum temperature of domestic hot water: 90 °C
 Maximum temperature of domestic cold water: 30 °C
 Maximum domestic water pressure: 6 bar
 Thread of connection valve UNI EN 10226-1

Operation

Thermal and domestic water heating consumption measuring modules (with centralized production of hot water), equipped with 4-way zone valve, set up for installation of a DN15 energy meter and DN15 volumetric meter, with distribution collectors: available in a box for built-in installation or with brackets for direct wall-mounted installation. The zone valve is controlled by the temperature control thermostat of the individual residential unit, and this allows complete separation of the thermal zone of each flat on the centralized distribution network; the by-pass passage realizes the pressure drops when the 4-way valve is open, so as to stabilize the operating conditions of the centralized system.

Furthermore, to facilitate the balancing of the condominium distribution system and to avoid any problems of poor service caused by the greater transit of fluid in some modules to the disadvantage of others, a kit with a dynamic balancing valve is supplied as an accessory to be installed on the delivery and return lines to guarantee the maintenance of the differential pressure in all operating conditions, with different flow rates.

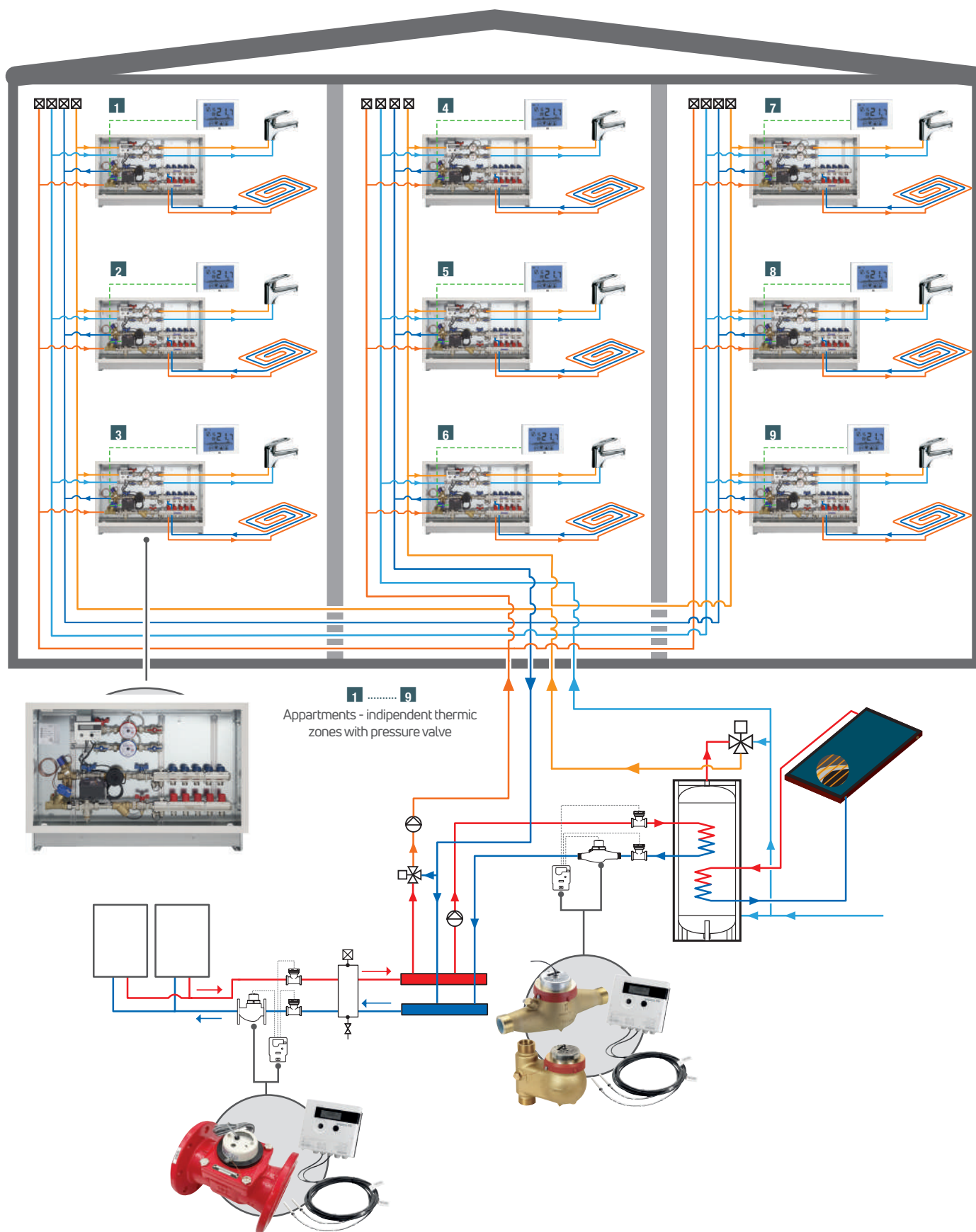
Plant expansion

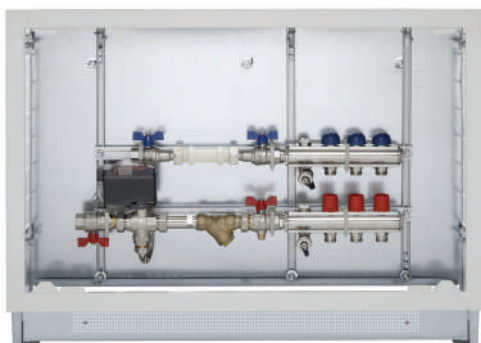
N.B. Testing and starting up the system are not included in the sales price.

Dimensions: see section **Technical Attachments**

Modules for accounting

Example of installation with accounting modules complete with dynamic balancing kit





Heating/cooling consumption measuring with flow-return manifolds of 1" (2÷12 ways) equipped with valves and lockshields

Composition

Galvanized metal box with key-operated lock - Zone valve DN20 4-way with bypass passage - Servomotor: 230 Vac, 50 Hz - Impurity collection filter DN20 - Charge/discharge bibcocks - Manual vent valve - Ball valve DN20 with pipe union - Flow-return manifolds 1" (2÷12 ways) equipped with valves and lockshields - Setup for thermal energy counter, size DN15 (connection 3/4")

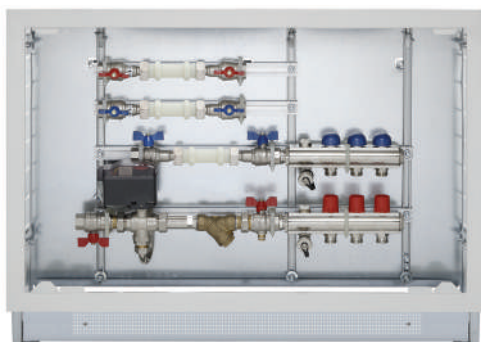
A flow rate meter can be installed instead of the stoppers once all of the hydraulic connections have been made on site. This must be done by the installer

Dimension	Box Dimension	Pcs. pack	Code	Price €
DN15 - 2 ways	L 700	1	28170350	1.025,00
DN15 - 3 ways	L 850	1	28170352	1.100,00
DN15 - 4 ways	L 850	1	28170354	1.138,00
DN15 - 5 ways	L 850	1	28170356	1.174,00
DN15 - 6 ways	L 1000	1	28170358	1.230,00
DN15 - 7 ways	L 1000	1	28170360	1.276,00
DN15 - 8 ways	L 1000	1	28170362	1.311,00
DN15 - 9 ways	L 1200	1	28170364	1.417,00
DN15 - 10 ways	L 1200	1	28170366	1.452,00
DN15 - 11 ways	L 1200	1	28170368	1.488,00
DN15 - 12 ways	L 1200	1	28170370	1.522,00

The boxes thus assembled are suitable for connection on the left side of the main pipelines of the centralized system.

Note: for correct built-in installation, the module should be installed with a distance of 135 mm between the back of the box and the wall.

Available on request: 5 days to order confirm



Heating/cooling and hot/cold domestic water consumption measuring with flow-return manifolds of 1" (2÷12 ways) equipped with valves and lockshields

Composition

Galvanized metal box with key-operated lock - Zone valve DN20 4-way with bypass passage - Servomotor: 230 Vac, 50 Hz - Impurity collection filter DN20 - Charge/discharge bibcocks - Manual vent valve - Ball valve DN20 with pipe union - Ball valve DN20 with check valve on sanitary water line - Flow-return manifolds 1" (2÷12 ways) equipped with valves and lockshields - Setup for thermal energy counter, size DN15 (connection 3/4") - Setup for volumetric counters of domestic water, size DN15 (connection 3/4")

A flow rate meter can be installed instead of the stoppers once all of the hydraulic connections have been made on site. This must be done by the installer

Dimension	Box Dimension	Pcs. pack	Code	Price €
DN15 - 2 ways	L 700	1	28170450	1.236,00
DN15 - 3 ways	L 850	1	28170452	1.302,00
DN15 - 4 ways	L 850	1	28170454	1.340,00
DN15 - 5 ways	L 850	1	28170456	1.372,00
DN15 - 6 ways	L 1000	1	28170458	1.448,00
DN15 - 7 ways	L 1000	1	28170460	1.483,00
DN15 - 8 ways	L 1000	1	28170462	1.517,00
DN15 - 9 ways	L 1200	1	28170464	1.612,00
DN15 - 10 ways	L 1200	1	28170466	1.647,00
DN15 - 11 ways	L 1200	1	28170468	1.683,00
DN15 - 12 ways	L 1200	1	28170470	1.719,00

The boxes thus assembled are suitable for connection on the left side of the main pipelines of the centralized system.

Note: for correct built-in installation, the module should be installed with a distance of 135 mm between the back of the box and the wall.



Single heating/cooling accounting module with 4-way zone valve with bypass passage

Composition

Zone valve DN20 4-way with bypass passage - Servomotor: 230 Vac, 50 Hz - Impurity collection filter DN20 - Ball valve DN20

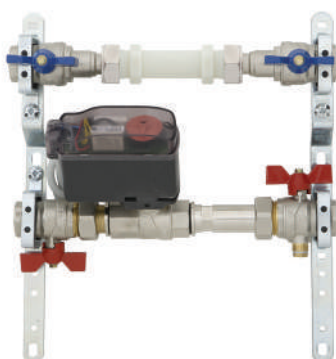
Dimension	Pcs. pack	Code	Price €
DN 15 (*)	1	28170906	531,70
DN 20 (**)	1	28170908	549,20

(*) Prepared for installation of energy meter DN15 (3/4" connection)

(**) Prepared for installation of energy meter DN20 (1" connection)

It is not possible to install the "balancing valve kit" instead of the impurity collection filter inside the module. The assembly thus assembled is suitable for connection on the left side of the main pipelines of the centralized system

Thread of connection valve UNI EN 10226-1



Single heating/cooling accounting module with 2-way zone valve

Composition

Zone valve DN20 2-way - Servomotor: 230 Vac, 50 Hz - Ball valve DN20 - Setup for thermal energy counter, size DN15 (connection 3/4")

Dimension	Pcs. pack	Code	Price €
	1	28170904	451,00

Thread of connection valve UNI EN 10226-1



Domestic cold water single accounting module

Composition

Ball valve DN20 with check valve and pipe union - Ball valve DN20 with pipe union - Setup for volumetric counters of domestic cold water, size DN15 (connection 3/4")

Dimension	Pcs. pack	Code	Price €
	1	28170900	94,25

Thread of connection valve UNI EN 10226-1



Domestic hot water single accounting module

Composition

Ball valve DN20 with check valve and pipe union - Ball valve DN20 with pipe union - Setup for volumetric counters of domestic hot water, size DN15 (connection 3/4")

Dimension	Pcs. pack	Code	Price €
	1	28170902	94,13

Thread of connection valve UNI EN 10226-1

Accessories Energy Box and Energy Box Compact



Dynamic balancing kit for Energy Box and Energy Box Compact

It allows to distribute the flow that serves a circuit, maintaining the constant differential pressure.

The differential pressure value can be adjusted, within a certain range, to guarantee the required flow rate within the circuit.

Technical data

Nominal pressure: PN20

Minimum operating temperature: -10 °C

Maximum working temperature: 120 °C

Maximum differential pressure: 450 kPa

Construction

DZR brass, stainless steel, greyron, pps with fiberglass

Seals: EPDM, HNBR

Size	Differential pressure regulation range	Pcs.pack	Code	Price €
3/4" F	20-60 kPa DN20 - PVM20	1	01306870	516,70



Balance valve kit

Uses

Balance valves for correct calibration and adjustment of heating, cooling, and plumbing systems.

They are equipped as standard with two pressure plugs, quick coupling, for connection to the differential electronic pressure gauge.

Technical data

Maximum operating pressure: 20 bar

Minimum operating temperature: -20 °C (for water and glycol solutions)

Maximum operating temperature: 120 °C (for water and anti-boiling additives solutions)

Minimum pressure drop: 2 kPa

Construction

Body: DZR brass

Gaskets: EPDM

Note:

kit are setup for installation of temperature delivery sensor of thermal energy counter

Dimension	Pcs. pack	Code	Price €
3/4"	1	01306364	135,30

The kit is to be installed in place of the impurity collection filter (if present) once the system has been cleaned.



Differential pressure gauge

Instrument for measuring differential pressure, for dynamic balancing valve kit. Supplied with two rechargeable NiMH AA batteries, carrying case, flexible hoses complete with needles for grafts on pressure taps.

Technical data

Error margin for pressure: 0.15%

Error margin for temperature: 1.5%

Fluid temperature: from -5 °C to 90 °C

Battery powered: 2xAA

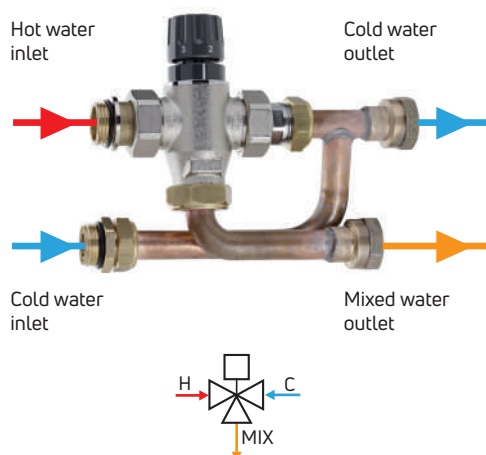
Display: illuminated 128x64 pixels

Dimensions: 94x218x40 mm

Degree of protection: IP65

Size	Pcs. pack	Code	Price €
	1	01406314	3.119,00

Accessories Energy Box and Energy Box Compact



Thermostatic mixer kit for domestic water

Dimensional data

Inlet connections: 3/4" male (O-Ring seal) - Outlet connections: 3/4" female
Connection centre distances: 75 mm - Maximum length of kit: 205 mm

Thermostatic mixer valve technical data

Maximum static pressure: 10 bar - Dynamic working pressure: 0 ÷ 5 bar

Maximum input temperature: 85 °C - Range of adjustment: 15 ÷ 45 °C*

Kv = 1.82 ÷ 2.90*

* Ideal conditions:

$T_H = 45\text{ °C}$

$T_C = 15\text{ °C}$

$\Delta p_{H-MIX} = \Delta p_{C-MIX}$

where:

H= hot water inlet - C= cold water inlet - MIX= mixed water outlet

Dimension	Pcs. pack	Code	Price €
	1	02708192	315,70

Accessory kit to be installed on the domestic hot and cold water lines downstream from the volumetric counters.

Thread UNI EN ISO 228-1



Set insulation shells for Energy Box Compact

Dimension	Pcs. pack	Code	Price €
	1	01306582	76,26

In closed-cell crosslinked expanded polyethylene.

For installation of the insulating shell, it's necessary to first remove the hydraulic assembly from the box (thus do not make the hydraulic and electrical connections before having installed the insulating shell).

Installed on all models Energy Box Compact DN15 - DN20, for connection to the left or right to the the main pipes of the centralized plant.



Kit flow meter

Dimension	Pcs. pack	Code	Price €
0 ÷ 2,5 l/min	4	01306828	6,12

The flow-rate meters can be installed on the Topway collectors in the place of the shut-off valves, once all the hydraulic connections have been made in the building site.

This operation is performed by the installer

Energy Wall

Built-in or off-track cabinet meters for domestic water use consumption



Built-in or surface-mounted water heating consumption measuring cabinets for several users (up to 3 flats for the “max 3 users” model, up to 4 flats for the “max 4 users” model, up to 6 flats for the “max 6 users” model).

The cabinet can be built-in (recessed) or surface-mounted, and is fixed to the wall (as a shell) once the hydraulic modules are installed on the 2 vertical aluminium tracks supplied with the cabinet (and previously fixed to the wall with the plugs provided) and the hydraulic connections have been made; these connections can be made by passing the pipes through the lateral sides of the cabinet (using the precuts located on the cabinet) or having the pipes come out of the wall and then go back into it without exceeding the lateral dimension of the cabinet (in this case it's recommended that you use the “Templates Kit” and “Fittings for wall connection Kit”).

The small individual doors with key-operated lock guarantee that each user can only access the reading of his own consumption, without learning the consumptions of others (thus guaranteeing the users' privacy); furthermore the presence of a main lock on the door facilitates the reading of all the instruments installed by the assigned person (e.g.: condominium administrator).

Inside a cabinet for “max 3 users” it's possible to simultaneously install:

- max 3 “heating/cooling” assemblies, with setup for installation of a DN15 or DN20 thermal energy meter (depending on the model);
- max 3 “domestic hot water lines”, with setup for installation of a DN15 volumetric meter for domestic hot water;
- max 3 “domestic cold water lines”, with setup for installation of a DN15 volumetric meter for domestic cold water.

The analogous holds for the “max 4 users” and “max 6 users” models

As an accessory, it is possible to equip the module with a dynamic balancing kit, to be installed on the delivery and return lines, to guarantee the maintenance of the differential pressure in any operating condition with different flow rates.

Product ordering instructions

Order the desired cabinet (max 3 users, max 4 users or max 6 users) and order separately the “heating/cooling” assemblies and the “domestic hot water” and “domestic cold water” lines, depending on the number of flats for which the thermal and domestic water heating consumption must be measured.

Technical data

Heat carrier fluid: water
Maximum operating temperature, heating circuit: 90 °C
Maximum operating pressure, heating circuit: 6 bar
Maximum temperature of domestic hot water: 85 °C
Maximum temperature of domestic cold water: 30 °C
Maximum domestic water pressure: 6 bar
Thread of connection valve UNI EN 10226-1

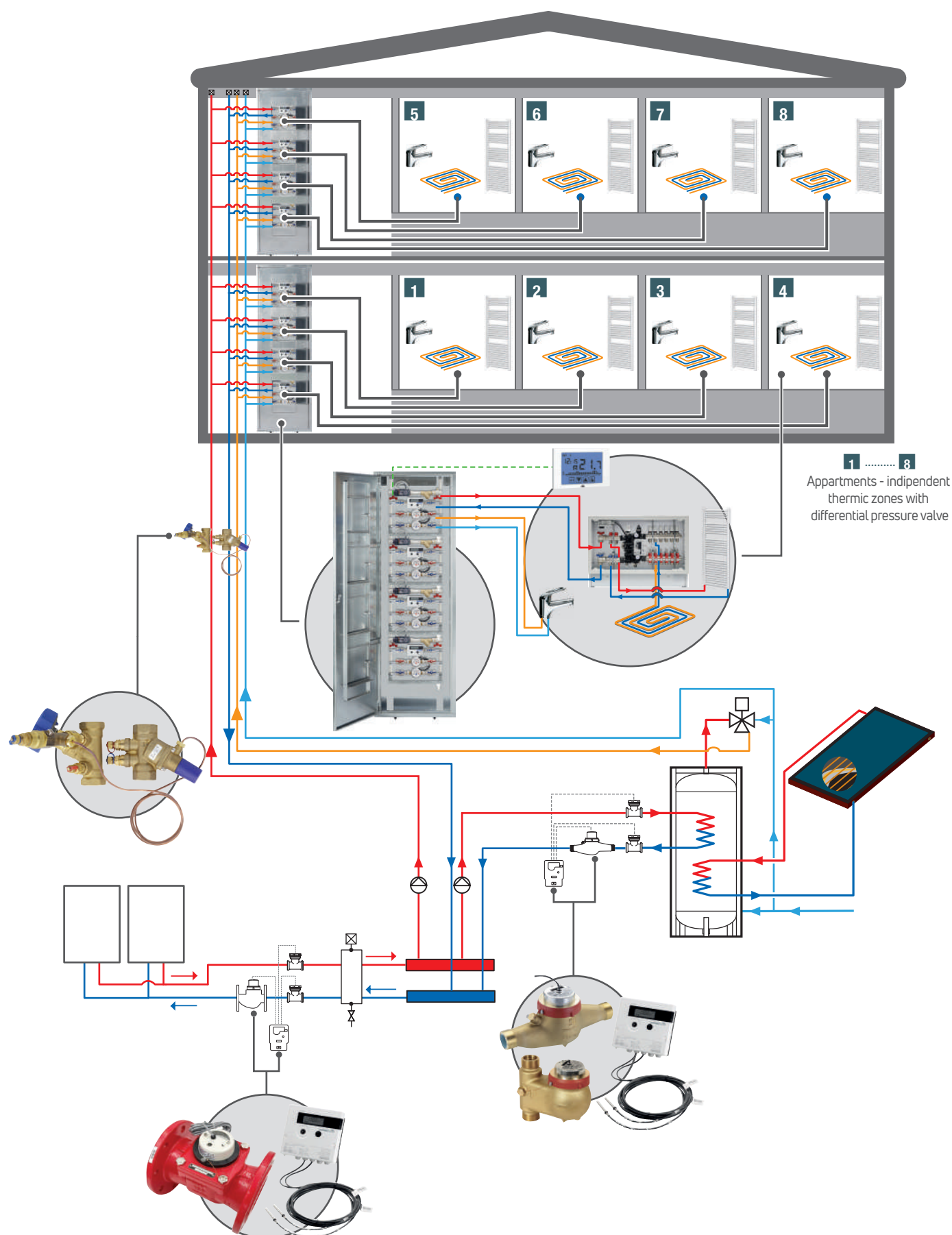
Plant expansion

N.B. Testing and starting up the system are not included in the sales price.

Dimensions: see section [Technical Attachments](#)

Cabinet meters

Example of installation with main distribution lines complete with dynamic balancing valves kit



Cabinet meters



Cabinet for metering units

Material: metal sheeting in galvanized steel, depth 12/10 mm, paintable, complete with 2 vertical aluminium guides (for wall mounting the hydraulic modules for the various utilities) and 10 blocks with screws. Prepared for installation of impulse adaptors on the inside of the hatch door. The cabinet should be wall mounted only after installing the utility units and executing hydraulic connections.

Dimension	Pcs. pack	Code	Price €
Max 3 utilities (*)	1	01301204	1.101,00
Max 4 utilities (**)	1	01301200	1.382,00
Max 6 utilities (***)	1	01301202	1.690,00

(*) Allows simultaneous installation of:

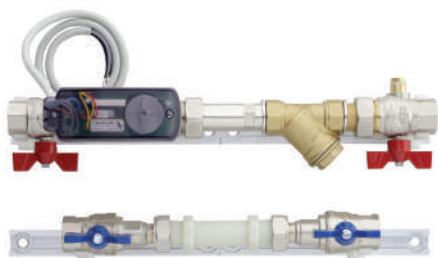
- max 3 "heating/cooling" units DN15 or DN20
- max 3 "domestic hot water lines"
- max 3 "domestic cold water" lines

(**) Allows simultaneous installation of:

- max 4 "heating/cooling" units DN15 or DN20
- max 4 "domestic hot water lines"
- max 4 "domestic cold water" lines

(***) Allows simultaneous installation of: max 6 "heating/cooling" units DN15 or DN20

- max 6 "domestic hot water lines"
- max 6 "domestic cold water lines"



Heating/cooling unit for cabinets

Composition

2-way valve for area DN20 - Servo-motor: 230 Vac, 50 Hz - Impurity collection filter DN20 - Ball valve DN20 with plug

Dimension	Pcs. pack	Code	Price €
DN15 (*)	1	01301210	391,60
DN20 (**)	1	01301212	393,40

(*) prepared for installation of energy meter DN15 (coupling 3/4")

(**) prepared for installation of energy meter DN20 (coupling 1")

Main couplings: 3/4" F. Complete with 2 aluminium crosspieces and 4 plastic supports for mounting the unit to the vertical guides provided with the cabinet.

Thread of connection valve UNI EN 10226-1



Domestic hot water line for cabinets

Composition

Ball valve DN20 with no-return cartridge built-in and plug - Ball valve DN20 with plug

Dimension	Connection	Pcs. pack	Code	Price €
DN15	3/4" F	1	01301220	106,90

Main couplings: 3/4" F.

Prepared for installation of domestic hot water volumetric meter, measure DN15 (couplings 3/4").

Thread of connection valve UNI EN 10226-1



Domestic cold water line for cabinets

Composition

Ball valve DN20 with no-return cartridge built-in and plug - Ball valve DN20 with plug

Dimension	Connection	Pcs. pack	Code	Price €
DN15	3/4" F	1	01301222	107,00

Main couplings: 3/4" F. Prepared for installation of domestic cold water volumetric meter, measure DN15 (couplings 3/4").

Cabinet meters

Accessories for Energy Wall



Condensation collection tank kit + electronic unit support kit for cabinets

The kit consists of 1 tank complete with drain trap and metal sheet support necessary for detaching the energy meter electronic unit from the brass body of the meter. It is recommended to use this kit (1 for each utility installed in the cabinet) in the case of cooling unit functioning.

Dimension	Pcs. pack	Code	Price €
	1	01301224	66,36



Balance valve kit

Uses

Balance valves for correct calibration and adjustment of heating, cooling, and plumbing systems. They are equipped as standard with two pressure plugs, quick coupling, for connection to the differential electronic pressure gauge.

Technical data

Maximum operating pressure: 20 bar - Minimum pressure drop: 2 kPa

Minimum operating temperature: -20 °C (for water and glycol solutions)

Maximum operating temperature: 120 °C (for water and anti-boiling additives solutions)

Construction

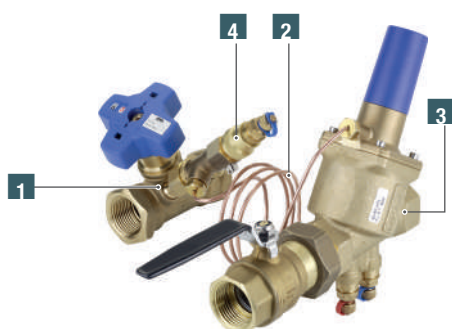
Body: DZR brass; Gaskets: EPDM

Note: kit are setup for installation of temperature delivery sensor of thermal energy counter

Dimension	Pcs. pack	Code	Price €
3/4"	1	01306364	135,30

The kit is to be installed in place of the impurity collection filter (if present) once the system has been cleaned.

Dynamic balancing kit



Dynamic balancing kit

The dynamic balancing kits are composed of:

- 1 Balancing valve
- 2 Capillary tube
- 3 Differential pressure valve
- 4 T-fitting with measuring and drainage socket

They allow to distribute the flow that serves a circuit, maintaining the constant differential pressure. The differential pressure value can be adjusted within a given range to ensure the required flow rate within the circuit.

Technical data

Nominal pressure: PN20 - Minimum operating temperature: -10 °C

Maximum working temperature: 120 °C - Maximum differential pressure: 450kPa

Construction

DZR brass, stainless steel, greyiron, PPS with glass fiber; seals: EPDM, HNBR

Dimension	Differential pressure regulation range		Pcs. pack	Code	Price €
1/2" F	20-60 kPa	DN15 - PVM15	1	01406296	487,90
3/4" F	20-60 kPa	DN20 - PVM20	1	01406298	505,20
1" F	20-80 kPa	DN25 - PVM25	1	01406300	569,60
1 1/4" F	20-80 kPa	DN32 - PVM30	1	01406302	844,60
1 1/2" F	20-80 kPa	DN40 - PVM40	1	01406304	953,40
2" F	20-80 kPa	DN50 - PVM50	1	01406306	1.130,00

Threads: G (UNI EN 10226)



Differential pressure gauge

Instrument for measuring differential pressure, for dynamic balancing valve kit. Supplied with two rechargeable NiMH AA batteries, carrying case, flexible hoses complete with needles for grafts on pressure taps.

Technical data

Error margin for pressure: 0.15% - Error margin for temperature: 1.5%

Fluid temperature: from -5 °C to 90 °C - Battery powered: 2xAA

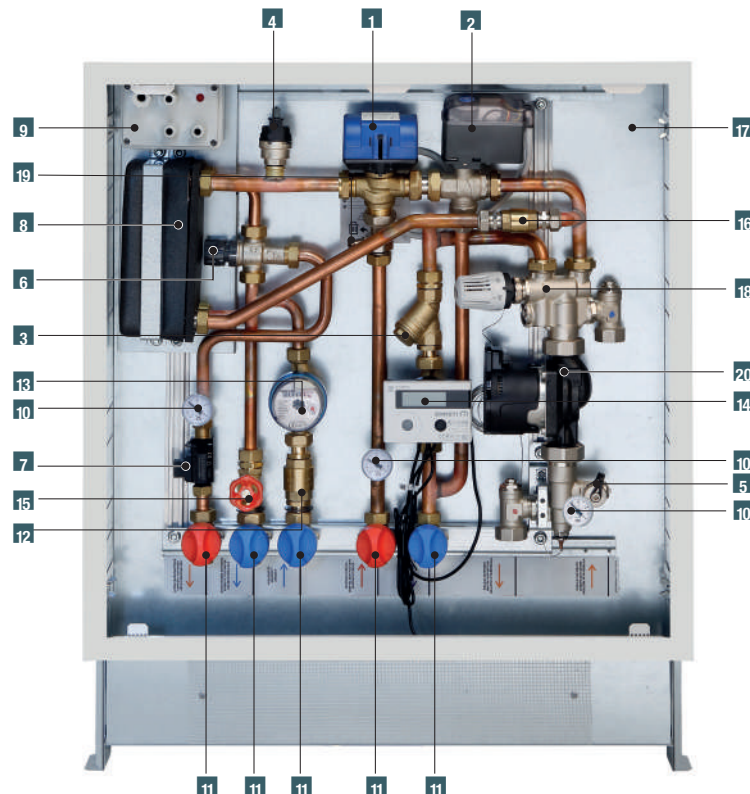
Display: illuminated 128x64 pixels - Dimensions: 94x218x40 mm

Degree of protection: IP65

Dimension	Pcs. pack	Code	Price €
	1	01406314	3.119,00

Energy Combibox Floor HIU

Built-in module for accounting for heating and sanitary consumption with instant production of domestic hot water



Construction

- 1 DN25 motorized diverter valve of sanitary priority
- 2 DN20 3-ways motorized zone valve with by-pass passage
- 3 DN20 dirt collector filter
- 4 Automatic air vent valve
- 5 Drain/filling valve with G 3/4" swivel connection and safety cap
- 6 DN15 thermostatic mixing valve for domestic hot water
- 7 Priority flow switch for instantaneous domestic hot water production
- 8 Brazed plate heat exchanger
- 9 Box for electrical wiring
- 10 Control thermometer scale 0÷80 °C
- 11 DN15 ball valve
- 12 DN20 check valve
- 13 DN15 volumetric meter for domestic cold water
- 14 DN15 energy meter
- 15 DN20 gate valve for domestic cold water circuit calibration and balancing
- 16 DN15 check valve
- 17 Galvanized metal box for 120 mm partition with frame and door color white RAL 9010
- 18 Low-temperature mixing unit, prepared for installation of thermostatic head or electric servomotor (to be purchased separately)
- 19 Energy meter flow probe connection, M10x1 thread
- 20 Electronic circulator

Dimensions: see section Technical Attachments

Built-in modules for accounting

Operation

Energy Combiobox Floor HIU module can work in 3 different conditions:

- 1 - Operation in heating mode: the priority valve (ref. n. 1 introductory figure) is diverted normally to the heating side and the zone valve (ref. n. 2 introductory figure), powered by the room thermostat, is open and conveys the heat carrier fluid into the user system.
- 2 - Operation in domestic hot water production mode: when domestic hot water is requested by the user system, the flow switch (ref. n. 7 introductory figure) switches the position of the priority valve (ref. n. 1 introductory figure), diverting the heat carrier fluid into the primary circuit of the plate exchanger (ref. n. 8 introductory figure). When the domestic hot water request ends, the flow switch returns to its original position (contact open) and the priority valve directs the heat carrier fluid normally to the heating circuit.
- 3 - Operation in by-pass mode: in the case in which neither domestic hot water nor thermal energy for heating the rooms is requested, the priority valve (ref. n. 1 introductory figure) is diverted normally to the heating circuit, while the zone valve (ref. 2 introductory figure) is in the by-pass position; in this manner the heat carrier fluid coming from the central heating plant is not directed to either the user heating system or the plate exchanger, but is redirected to the central heating plant once again.

Conditions of use

Heat transfer fluid: water

Maximum primary circuit fluid temperature: 90 °C

Maximum primary circuit operating pressure: 6 bar

Maximum sanitary circuit pressure: 10 bar

Maximum operating temperature on the sanitary side: 85 °C

Domestic hot water priority valve technical data

Power supply: 230 Vac, 50/60 Hz

Maximum power consumption: 4 W

Degree of protection: IP40

Switching time: 6 s

Maximum differential pressure: 3.5 bar

Zone valve technical data

Power supply: 230 Vac, 50/60 Hz

Power consumption: 4 VA

Maximum differential pressure: 6 bar

Rotation angle: 90° (in closing), 270° (in opening)

Rotation time: 60'' (in closing), 180'' (in opening)

Auxiliary contact: 1 - free 5 A, 230 Vac

Plate heat exchanger technical data

Plate material: 316L stainless steel

Brazing material: copper

No. of plates: 30

Exchange area: 0.31 m²

Exchange coefficient KA: 2744 W/K

Kv (primary = secondary): 8.1

Thermostatic mixing valve for domestic water technical data

Maximum pressure (static): 10 bar

Operating pressure (dynamic): 0÷5 bar

Maximum inlet temperature: 85 °C

Range of adjustment: 30÷65 °C

Kv maximum: 1.8*

Kv minimum: 1.3*

*values obtained with the following conditions:

TH = 45 °C; TC = 15 °C; $\Delta p_{H-MIX} = \Delta p_{C-MIX}$

where: H= hot water inlet; C= cold water inlet; MIX= mixed water outlet

Flow switch technical data

Contact: normally open

ON tripping flow rate: 2 ± 0.3 l/min

OFF tripping flow rate: 2.6 ± 0.3 l/min

Maximum operating pressure: 10 bar

Maximum operating temperature: 90 °C

Minimum ambient temperature: -20 °C (with glycol)

Maximum switching current: 0.5 A

Box technical data

Box material: galvanized steel sheet, thickness 8/10 mm

Frame material: painted galvanized steel sheet (RAL 9010), thickness 8/10 mm

Lock: key

Dimensions (width x height x depth): 740x900x110 mm

Feet with adjustable height from 0 to 100 mm.

Complete with worksite cardboard protection.

Evosta2 OEM 70/130 circulator pump

Connections: G 1 1/2 UNI EN ISO 228-1, takeoff 130 mm.

Maximum head: 7 m

Maximum flow rate: 3.5 m³/h

Electrical connection: 230 V +10%/- 15%, 50/60 Hz

Protection class: IPX4D

Insulation class: F

Power consumption at 230V: 8.2 ÷ 50 W

Current consumption at 230V: 0.07 ÷ 0.44 A

Energy class: A

EEL: <=0.2

Plant expansion

N.B.: testing and starting up the system are not included in the sales price

Circulator pump compliance

ErP Directive

EN 61800-3

EN 61000-6-3 / EN 61000-6-4

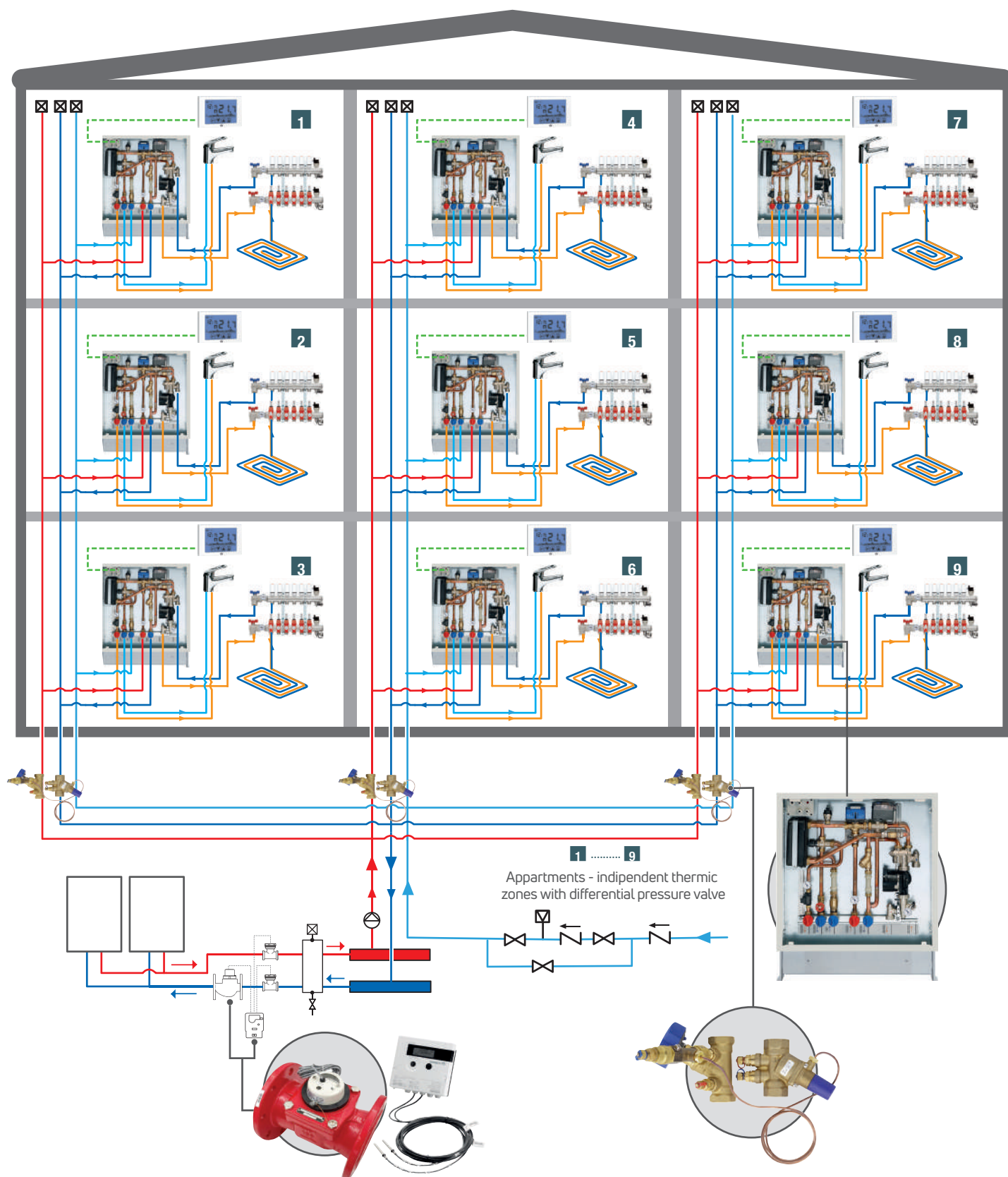
EN 61000-6-2 / EN 61000-6-1

2014/35/UE (low voltage)

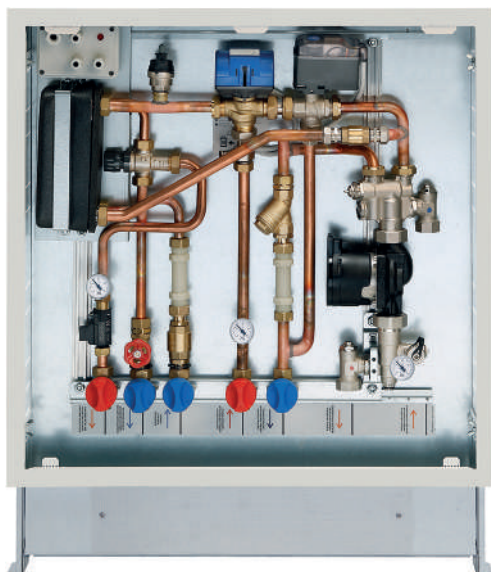
2014/30/UE (electromagnetic compatibility)

Built-in modules for accounting

Example of installation with main distribution lines complete with dynamic balancing valve kit



Built-in modules for accounting



Built-in module for thermosanitary consumption metering with instantaneous domestic hot water production

Dimension	Box Dimension	Pcs. pack	Code	Price €
DN15 (*)	700	1	28170536	3.255,00

(*) Prepared for installation of energy meter DN15 and volumetric meter DN15 for domestic cold water.

Complete with:

- thermostatic head with immersion probe code 90046750
or
- 3-point electric servomotor cod. 28157212
or
- electric servomotor 0-10 V DC cod. 28157222

If an electric servomotor is installed, combine RCE electronic climate control kit for heating and/or cooling

Main connections: male 3/4" ISO 228/1 (cylindric thread).

Note:

for correct built-in installation, the module should be installed with a distance of 135 mm between the back of the box and the wall.

Available on request: 15 days to order confirm

Accessories for Energy Combibox Floor HIU



Thermostatic head with immersion probe for thermostatic regulation group

Setting: 20 ÷ 65 °C - Size thread connection: M30x1,5

Dimension	Pcs. pack	Code	Price €
	1	90046750	39,11



Electric servomotor

3-Point Servomotor technical data

Type of operation: 3-position control - Nominal voltage: 230 Vac (± 15%) - Nominal frequency: 50/60 Hz - Maximum consumption: 6 VA - Permissible room temperature: 0÷55 °C - Maximum permissible fluid temperature: 110 °C - Nominal stroke: 2.5 mm (maximum 5.5 mm) - Stroke time (at 50/60 Hz, regarding a stroke of 2.5 mm): 150 s - Nominal force: 100 N - Degree of protection: IP40 according to EN 60529 - Insulation class: II according to EN 60730 - Threaded fitting size: M30x1.5

0-10 V Servomotor technical data

Type of operation: 0-10 V DC control - Nominal voltage: AC/DC 24 V (±20% / ±25%) - Nominal frequency: 50/60 Hz - Maximum consumption: 2 VA - Permissible room temperature: 1÷50 °C - Maximum permissible fluid temperature: 110 °C - Nominal stroke: 2.5 mm (maximum 5.5 mm) - Stroke time (at 50/60 Hz, regarding a stroke of 2.5 mm): 150 s - Nominal force: 100 N - Degree of protection: IP40 according to EN 60529 - Insulation class: III according to EN 60730 - Threaded fitting size: M30x1.5

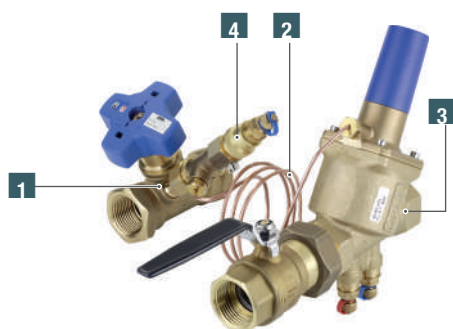
Dimension	Pcs. pack	Code	Price €
3 points	1	28157212	301,00
0-10 V DC	1	28157222	380,70

Complete with adapter for installation of the flow probe (for climatic temperature control) inside the regulation group.

To be combined with RCE for heating and cooling.

Built-in modules for accounting

Dynamic balancing kit



Dynamic balancing kit

The dynamic balancing kits are composed of:

- 1 Balancing valve
- 2 Capillary tube
- 3 Differential pressure valve
- 4 T-fitting with measuring and drainage socket

They allow to distribute the flow that serves a circuit, maintaining the constant differential pressure. The differential pressure value can be adjusted within a given range to ensure the required flow rate within the circuit.

Technical data

Nominal pressure: PN20

Minimum operating temperature: -10 °C

Maximum working temperature: 120 °C

Maximum differential pressure: 450kPa

Construction

DZR brass, stainless steel, greyiron, PPS with glass fiber

Seals: EPDM, HNBR

Size	Differential pressure regulation range		Pcs. pack	Code	Price €
1/2" F	20-60 kPa	DN15 - PVM15	1	01406296	487,90
3/4" F	20-60 kPa	DN20 - PVM20	1	01406298	505,20
1" F	20-80 kPa	DN25 - PVM25	1	01406300	569,60
1 1/4" F	20-80 kPa	DN32 - PVM30	1	01406302	844,60
1 1/2" F	20-80 kPa	DN40 - PVM40	1	01406304	953,40
2" F	20-80 kPa	DN50 - PVM50	1	01406306	1.130,00

Threads: G (UNI EN 10226)



Differential pressure gauge

Instrument for measuring differential pressure, for dynamic balancing valve kit. Supplied with two rechargeable NiMH AA batteries, carrying case, flexible hoses complete with needles for grafts on pressure taps.

Technical data

Error margin for pressure: 0.15%

Error margin for temperature: 1.5%

Fluid temperature: from -5 °C to 90 °C

Battery powered: 2xAA

Display: illuminated 128x64 pixels

Dimensions: 94x218x40 mm

Degree of protection: IP65

Size	Pcs. pack	Code	Price €
	1	01406314	3.119,00

Consumption measuring instruments

Components and accessories for direct reading consumption measuring



Direct reading EVO energy meter

Accuracy class according to UNI EN 1434: 3
 Environmental class according to UNI EN 1434: C
 Permanent flow rate: 0.6 or 1.5 m³/h (DN15 size), 2.5 m³/h (DN20 size)
 Maximum flow rate: 1.2 or 3 m³/h (DN15 size), 5 m³/h (DN20 size)
 Minimum flow rate DN15 size:
 horizontal installation 12 or 30 l/h, vertical installation 24 or 60 l/h
 Minimum flow rate DN20 size:
 horizontal installation 50 l/h, vertical installation 100 l/h
 Nominal pressure: 16 bar - Flow meter temperature range: 5 ÷ 90°C Electronic unit temperature range: 0 ÷ 150°C
 Flow-return temperature difference: 3 ÷ 100 K
 Type of probes: Pt1000 - Ø 5 mm - cable 1.5 m

Battery-powered, maximum estimated life, not guaranteed, of the battery 10 years (battery life is affected by the installation and usage conditions).
 The battery is guaranteed for 4 years from the date of sale.
 The battery can be replaced. Set up for external power supply (230 Vac) with optional feeder. Protection rating: IP65.
 Configured for installation on the return pipe with possibility of installation on the flow pipe.
 Product compliant with UNI EN 1434 and certified in accordance with Leg.Dec. no. 84 of 19/05/2016 (implementation of the MID European Directive 2014/32/EU) only using water as a fluid.

Dimension	Type	Kv	Pcs. pack	Code	Price €
DN15 Conn. M 3/4" - 0,6/1,2 m ³ /h	H/C (*)	1,52	1	02709540	448,30
DN15 Conn. M 3/4" - 1,5/3,0 m ³ /h	H/C (*)	3,27	1	02709542	448,30
DN20 Conn. M 1" - 2,5/5,0 m ³ /h	H/C (*)	6,15	1	02709544	455,60

(*) Hot/Cold

Threads G (UNI EN ISO 228-1)

Dimensions: see section Technical Attachments



230 Vac power supply for EVO energy meter

Technical data

Input: 230 Vac (2.5 m cable);
 Output: 3 Vdc (1 m cable);
 Protection rating: IP65.
 In the event of a power cut, the backup battery (lithium, 3 Vdc) guarantees power for up to one year.

Dimension	Pcs. pack	Code	Price €
	1	02709580	453,70

Dimensions: see section Technical Attachments



Sensor-holder Tee assembly

Dimension	Pcs. pack	Code	Price €
1/2" x (M10x1) x 1/2"	1	02708188	19,73
3/4" x (M10x1) x 3/4"	1	02708190	22,94

Threads G (UNI EN ISO 228-1)

Complete with male plug M10x1 to perform the system test run, before installing the energy meter. The assemblies are not necessary for the installation of the energy meters in individual and cassette Emmeti modules.

Dimensions: see section Technical Attachments

Energy consumption measuring instruments



Direct reading volumetric counter for hot water SJ PLUS

Meter with single jet and dry dial with body made of brass CW617N-DW (UNI EN 12164 and 12165)

Length of counter: 110 mm - Horizontal or vertical installation

Minimum Q1 flow rate: 25 l/h (horizontal installation)

Minimum Q1 flow rate: 39,7 l/h (vertical installation)

Permanent Q3 flow rate: 2.5 m³/h - Maximum Q4 flow rate: 3.13 m³/h

MID metrological class:

R (Q3/Q1) = 100 H (horizontal installation),

R (Q3/Q1) = 63 V (vertical installation)

Operating temperature: from 30 °C to 90 °C

Operating pressure (PN): 16 bar

Kv = 3,15

Product certified in accordance with Leg. Dec. no. 84 of 19/05/2016 (implementation of the MID European Directive 2014/32/EU) and in confirm to Italian Ministerial Decree 174/2004.

Dimension	Kv	Pcs. pack	Code	Price €
DN15 Connection M 3/4"	3,15	1	02709708	80,81

Threads: G (UNI EN ISO 228-1)

Dimensions: see section Technical Attachments



Direct reading volumetric counter for hot water SJ PLUS

Meter with single jet and dry dial with body made of brass CW617N-DW (UNI EN 12164 and 12165)

Length of counter: 130 mm

Horizontal or vertical installation - Minimum Q1 flow rate: 40 l/h (horizontal installation)

Minimum Q1 flow rate: 63,5 l/h (vertical installation)

Permanent Q3 flow rate: 4 m³/h - Maximum Q4 flow rate: 5 m³/h

MID metrological class: R (Q3/Q1) = 100 H (horizontal installation), R (Q3/Q1) = 63 V (vertical installation)

Operating temperature: from 30 °C to 90 °C

Operating pressure (PN): 16 bar - Kv=5,04

Product certified in accordance with Leg. Dec. no. 84 of 19/05/2016 (implementation of the MID European Directive 2014/32/EU) and in confirm to Italian Ministerial Decree 174/2004.

Dimension	Kv	Pcs. pack	Code	Price €
DN20 Connection M 1"	5,04	1	02709716	98,58

Threads: G (UNI EN ISO 228-1)

Dimensions: see section Technical Attachments



Direct reading volumetric counter for cold water SJ PLUS

Meter with single jet and dry dial with body made of brass CW617N-DW (UNI EN 12164 and 12165)

Length of counter: 110 mm

Horizontal or vertical installation

Minimum Q1 flow rate: 25 l/h (horizontal installation)

Minimum Q1 flow rate: 39,7 l/h (vertical installation)

Permanent Q3 flow rate: 2.5 m³/h - Maximum Q4 flow rate: 3.13 m³/h

MID metrological class: R (Q3/Q1) = 100 H (horizontal installation), R (Q3/Q1) = 63 V (vertical installation)

Maximum operating temperature: 50 °C

Operating pressure (PN): 16 bar

Kw=3,15

Product certified in accordance with Leg. Dec. no. 84 of 19/05/2016 (implementation of the MID European Directive 2014/32/EU) and in confirm to Italian Ministerial Decree 174/2004.

Dimension	Kv	Pcs. pack	Code	Price €
DN15 Connection M 3/4"	3,15	1	02709706	77,42

Threads: G (UNI EN ISO 228-1)

Dimensions: see section Technical Attachments

Energy consumption measuring instruments



Direct reading volumetric counter for cold water SJ PLUS

Meter with single jet and dry dial with body made of brass CW617N-DW (UNI EN 12164 and 12165)

Length of counter: 130 mm

Horizontal or vertical installation

Minimum Q1 flow rate: 40 l/h (horizontal installation)

Minimum Q1 flow rate: 63,5 l/h (vertical installation)

Permanent Q3 flow rate: 4 m³/h - Maximum Q4 flow rate: 5 m³/h

MID metrological class: R (Q3/Q1) = 100 H (horizontal installation), R (Q3/Q1) = 63 V (vertical installation)

Maximum operating temperature: 50 °C - Operating pressure (PN): 16 bar

Kv=5,04

Product certified in accordance with Leg. Dec. no. 84 of 19/05/2016 (implementation of the MID European Directive 2014/32/EU) and in confirm to Italian Ministerial Decree 174/2004.

Dimension	Kv	Pcs. pack	Code	Price €
DN20 Connection M 1"	5,04	1	02709714	95,26

Threads: G (UNI EN ISO 228-1)

Dimensions: see section Technical Attachments



Pipes

Dimension	Connections	Pcs. pack	Code	Price €
L=110 mm (*)	3/4"	1	01306354	6,19
L=130 mm (**)	1"	1	01306358	6,62

(*) Predisposition for installation of measuring instruments DN15

(**) Predisposition for installation of measuring instruments DN20

Threads: G (UNI EN ISO 228-1)

Complete with no. 2 gaskets



Pipe union connections kit

Dimension	Pcs. pack	Code	Price €
3/4" F - 1/2" M	1	02708098	11,70
1" F - 3/4" M	1	02708110	18,17

Threads: G (UNI EN ISO 228-1)

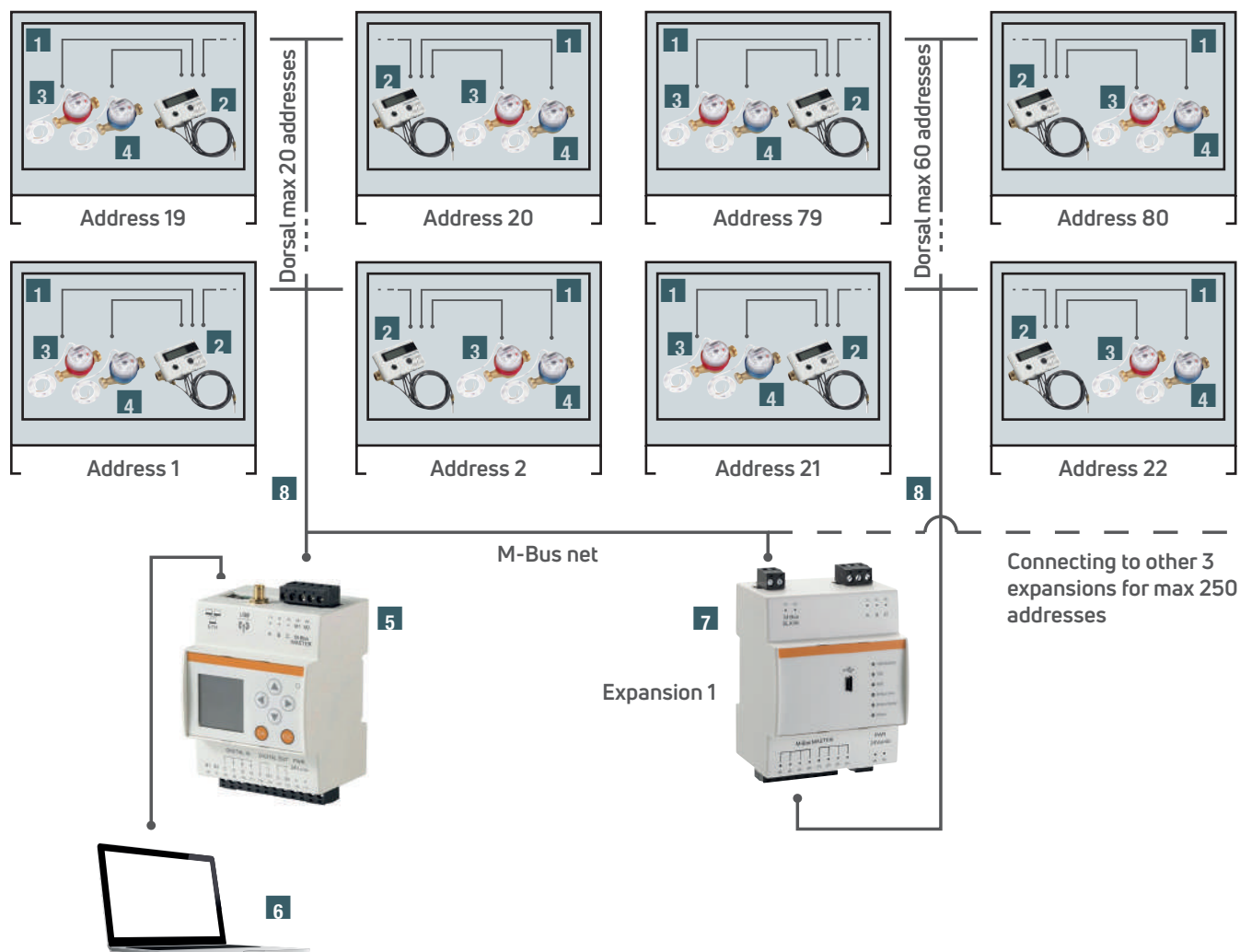
Body made of brass CW617N-DW (UNI EN 12164 and 12165)

The kit is not needed for the installation of the heat meter and water meters in the Emmeti modules singles or in boxes.

Energy consumption measuring instruments

Components and accessories for consumption measuring with data transmission

Installation scheme with energy meter with dual pulse input and concentrator



Note:

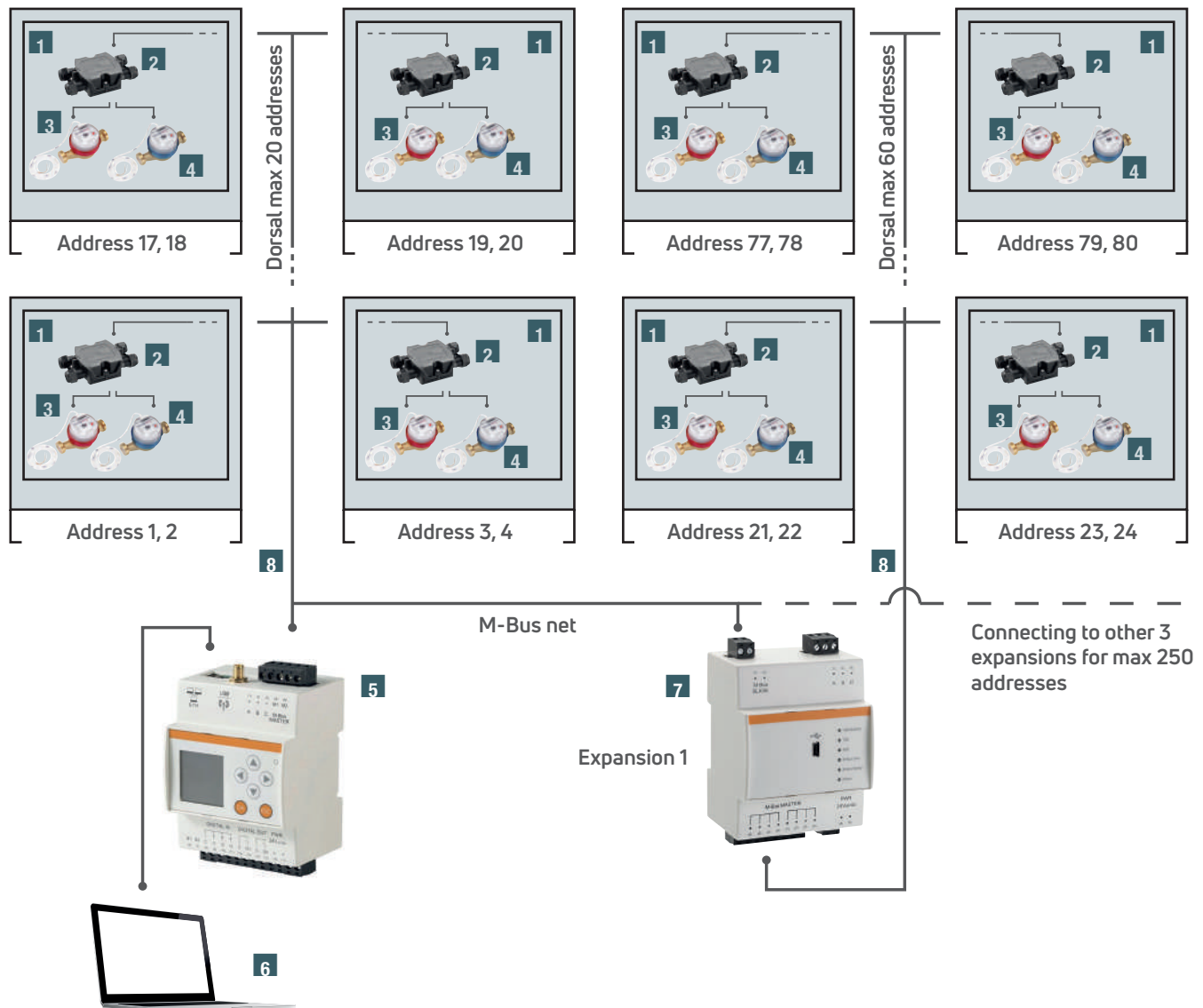
maximum no. of addresses that can be connected to a concentrator and relative expansions: 250 (concentrator can be combined up to 4 expansions to manage up to 250 addresses).

Construction

- 1 Accounting box (total no. of M-Bus addresses per box: 1)
- 2 Energy measuring device with data transmission double impulsive input
- 3 Hot water impulse launch volumetric counter
- 4 Cold water impulse launch volumetric counter
- 5 Concentrator up to 20 addresses
- 6 PC
- 7 Expansion up to 60 addresses
- 8 Unshielded 2-wire twisted cable for data transmission via M-Bus protocol

Energy consumption measuring instruments

Installation scheme with pulse adapters and concentrator



Note:
maximum no. of addresses that can be connected to a concentrator and relative expansions: 250 (concentrator combined up to 4 expansions to manage up to 250 addresses).

Construction

- 1 Accounting box (total no. of M-Bus addresses per box 1).
- 2 Impulse adaptor
- 3 Hot water impulse launch volumetric counter
- 4 Cold water impulse launch volumetric counter
- 5 Concentrator up to 20 addresses
- 6 PC
- 7 Expansion up to 60 addresses
- 8 Unshielded 2-wire twisted cable for data transmission via M-Bus protocol

Energy consumption measuring instruments



Hot/cold EVO energy meter with data transmission with 3 volumetric pulse-emitting meters

Accuracy class according to UNI EN 1434-3
 Environmental class according to UNI EN 1434-C
 Permanent flow rate: 0.6/1.5 m³/h (DN15 size), 2.5 m³/h (DN20 size)
 Maximum flow rate: 1.2/3 m³/h (DN15 size), 5 m³/h (DN20 size)
 Minimum flow rate DN15 size:
 Horizontal installation 12/30 l/h, vertical installation 24/60 l/h
 Minimum flow rate DN20 size:
 Horizontal installation 50 l/h, vertical installation 100 l/h
 Nominal pressure: 16 bar - Flow meter temperature range: 5÷90°C
 Electronic unit temperature range: 0÷150°C
 Flow-return temperature difference: 3÷100 K
 Type of probes: Pt1000 - Ø 5 mm - cable 1.5 m
 Battery-powered, maximum estimated life, not guaranteed, of the battery 10 years (battery life is affected by the installation and usage conditions).
 The battery is guaranteed for 4 years from the date of sale. The battery can be replaced.
 Set up for external power supply (230 Vac) with optional feeder.
 Protection rating: IP65.
 Configured for installation on the return pipe with possibility of installation on the flow pipe.
 Communication via M-Bus protocol in accordance with UNI EN 1434-3.
 The energy meter is recognised by an M-Bus concentrator as a single device with a single address, even if 3 impulse launch volumetric counters are connected to it. Use the "USB optical feeler kit" to configure the primary M-Bus address and the 3 impulsive inputs of the meter.
 Product compliant with UNI EN 1434 and certified in accordance with Leg.Dec. no. 84 of 19/05/2016 (implementation of the MID European Directive 2014/32/EU) only using water as a fluid.

Dimension	Type	Kv	Pcs. pack	Code	Price €
DN15 Conn. M 3/4" - 0,6/1,2 m ³ /h	H/C (*)	1,52	1	02709546	557,20
DN15 Conn. M 3/4" - 1,5/3,0 m ³ /h	H/C (*)	3,27	1	02709548	557,20
DN20 Conn. M 1" - 2,5/5,0 m ³ /h	H/C (*)	6,15	1	02709550	564,10

Threads G (UNI EN ISO 228-1)

(*) Hot/Cold

Dimensions: see section Technical Attachments



230 Vac power supply for EVO energy meter

Technical data

Input: 230 Vac (2.5 m cable);
 Output: 3 Vdc (1 m cable);
 Protection rating: IP65.
 In the event of a power cut, the backup battery (lithium, 3 Vdc) guarantees power for up to one year.

Dimension	Pcs. pack	Code	Price €
	1	02709580	453,70

Dimensions: see section Technical Attachments



Sensor-holder Tee assembly

Dimension	Pcs. pack	Code	Price €
1/2" x (M10x1) x 1/2"	1	02708188	19,73
3/4" x (M10x1) x 3/4"	1	02708190	22,94

Threads G (UNI EN ISO 228-1)

Complete with male plug M10x1 to perform the system test run, before installing the energy meter. The assemblies are not necessary for the installation of the energy meters in individual and cassette Emmeti modules.

Dimensions: see section Technical Attachments

Energy consumption measuring instruments



Hot water meter with pulse output SJ PLUS

Meter with single jet and dry dial with body made of brass CW617N-DW (UNI EN 12164 and 12165) - Length of counter: 110 mm
Horizontal or vertical installation
Minimum Q1 flow rate: 25 l/h (horizontal installation)
Minimum Q1 flow rate: 39,7 l/h (vertical installation)
Permanent Q3 flow rate: 2,5 m³/h - Maximum Q4 flow rate: 3,13 m³/h
MID metrological class: R (Q3/Q1) =100 H (horizontal installation), R (Q3/Q1) =63 V (vertical installation) - Kv = 3,15
Operating temperature: from 30 °C to 90 °C
Operating pressure (PN): 16 bar
Supplied with reed-switch pulse emitter 1 pulse/10 litres.
Note: the pulse emitters used to interface with the M-Bus network must be connected to an energy meter with a double pulse inlet or with a pulse adaptor.
Product certified in accordance with Leg. Dec. no. 84 of 19/05/2016 (implementation of the MID European Directive 2014/32/EU) and in confirm to Italian Ministerial Decree 174/2004.

Dimension	Kv	Pcs. pack	Code	Price €
DN15 Connection M 3/4"	3,15	1	02709712	110,60

Threads G (UNI EN ISO 228-1)

Dimensions: see section Technical Attachments



Hot water meter with pulse output SJ PLUS

Meter with single jet and dry dial with body made of brass CW617N-DW (UNI EN 12164 and 12165) - Length of counter: 130 mm
Horizontal or vertical installation
Minimum Q1 flow rate: 40 l/h (horizontal installation)
Minimum Q1 flow rate: 63,5 l/h (vertical installation)
Permanent Q3 flow rate: 4 m³/h
Maximum Q4 flow rate: 5 m³/h
MID metrological class: R (Q3/Q1) =100 H (horizontal installation), R (Q3/Q1) =63 V (vertical installation)
Operating temperature: from 30 °C to 90 °C - Operating pressure (PN): 16 bar
Kv=5,04 - Supplied with reed-switch pulse emitter 1 pulse/10 litres.
Note: the pulse emitters used to interface with the M-Bus network must be connected to an energy meter with a double pulse inlet or with a pulse adaptor.
Product certified in accordance with Leg. Dec. no. 84 of 19/05/2016 (implementation of the MID European Directive 2014/32/EU) and in confirm to Italian Ministerial Decree 174/2004.

Dimension	Kv	Pcs. pack	Code	Price €
DN20 Connection M 1"	5,04	1	02709720	128,40

Threads: G (UNI EN ISO 228-1)

Dimensions: see section Technical Attachments



Cold water meter with pulse output SJ PLUS

Meter with single jet and dry dial with body made of brass CW617N-DW (UNI EN 12164 and 12165)
Length of counter: 110 mm
Horizontal or vertical installation
Minimum Q1 flow rate: 25 l/h (horizontal installation) - Minimum Q1 flow rate: 39,7 l/h (vertical installation)
Permanent Q3 flow rate: 2.5 m³/h - Maximum Q4 flow rate: 3.13 m³/h
MID metrological class: R (Q3/Q1) = 100 H (horizontal installation), R (Q3/Q1) = 63 V (vertical installation) - Kw=3,15
Maximum operating temperature: 50 °C - Operating pressure (PN): 16 bar
Supplied with reed-switch pulse emitter 1 pulse/10 litres.
Note: the pulse emitters used to interface with the M-Bus network must be connected to an energy meter with a double pulse inlet or with a pulse adaptor.
Product certified in accordance with Leg. Dec. no. 84 of 19/05/2016 (implementation of the MID European Directive 2014/32/EU) and in confirm to Italian Ministerial Decree 174/2004.

Dimension	Kv	Pcs. pack	Code	Price €
DN15 Connection M 3/4"	3,15	1	02709710	107,80

Threads: G (UNI EN ISO 228-1)

Dimensions: see section Technical Attachments

Energy consumption measuring instruments



Cold water meter with pulse output SJ PLUS

Meter with single jet and dry dial with body made of brass CW617N-DW (UNI EN 12164 and 12165)

Length of counter: 130 mm

Horizontal or vertical installation

Minimum Q1 flow rate: 40 l/h (horizontal installation) - Minimum Q1 flow rate: 63,5 l/h (vertical installation)

Permanent Q3 flow rate: 4 m³/h - Maximum Q4 flow rate: 5 m³/h

MID metrological class: R (Q3/Q1) = 100 H (horizontal installation), R (Q3/Q1) = 63 V (vertical installation)

Maximum operating temperature: 50 °C - Operating pressure (PN): 16 bar

Kv=5,04 - Supplied with reed-switch pulse emitter 1 pulse/10 litres.

Note: the pulse emitters used to interface with the M-Bus network must be connected to an energy meter with a double pulse inlet or with a pulse adaptor.

Product certified in accordance with Leg. Dec. no. 84 of 19/05/2016 (implementation of the MID European Directive 2014/32/EU) and in confirm to Italian Ministerial Decree 174/2004.

Dimension	Kv	Pcs. pack	Code	Price €
DN20 Connection M 1"	5,04	1	02709718	125,10

Threads: G (UNI EN ISO 228-1)

Dimensions: see section Technical Attachments



Pipes

Dimension	Connections	Pcs. pack	Code	Price €
L=110 mm (*)	3/4"	1	01306354	6,19
L=130 mm (**)	1"	1	01306358	6,62

(*) Predisposition for installation of measuring instruments DN15

(**) Predisposition for installation of measuring instruments DN20

Threads: G (UNI EN ISO 228-1)

Complete with no. 2 gaskets



Pipe union connections kit

Dimension	Pcs. pack	Code	Price €
3/4" F - 1/2" M	1	02708098	11,70
1" F - 3/4" M	1	02708110	18,17

Threads: G (UNI EN ISO 228-1)

Body made of brass CW617N-DW (UNI EN 12164 and 12165)

The kit is not needed for the installation of the heat meter and water meters in the Emmeti modules singles or in boxes.

Energy consumption measuring instruments



Volumetric hot water lance volumetric meter for high flow rates

Dry dial multiple jet meter, magnetic transmission, for horizontal installation.
Brass case - Inlet filter - Rotatable totalizer for easy reading.
MID metrological class: R (Q3/Q1) = 80 H (horizontal installation).
Maximum operating temperature: 90 °C - Operating pressure PN: 16 bar
Supplied complete with reed-switch pulse emitter, 1 pulse/10 liter.
Note: Pulse-throwing meters to interface with the M-Bus network must be connected to an energy meter with pulse inputs or a pulse adapter.
Product certified according to Italian Dlgs No. 84 of 19/05/2016 (implementation of European MID Directive 2014/32/EU) and complies with D.M. 174/2004.

Dimension	Pcs. pack	Code	Price €
DN25 connections M 1"1/4, horizontal	1	02709736	789,40
DN32 connections M 1"1/2, horizontal	1	02709738	789,40
DN40 connections M 2", horizontal	1	02709740	1.206,00

Threads: G (UNI EN ISO 228-1)

Item available on request: 30 days from order confirm.

Dimensions: see section Technical Attachments

Technical data

Diameter DN		DN25	DN32	DN40
Permanent flow rate Q3	m³/h	6,3	10	16
Maximum flow rate Q4	m³/h	7,9	12,5	20
Minimum flow rate Q1	l/h	78,8	125	200
Length without pipe union	mm	260	260	300
Length with pipe union	mm	374	374	434
Weight	kg	2,6	2,7	5,1
Impulses (reed)	Liters/imp	10	10	10
Kv		9	12	20



Volumetric cold water lance volumetric meter for high flow rates

Multiple jet counter with protected rollers, for horizontal installation.
Mechanical transmission not affected by external magnetic fields.
Numbered rollers, characteristic inscriptions and serial number are located in the protected part.
MID metrological class: R (Q3/Q1) = 160 H (horizontal installation)
Maximum operating temperature: 50 °C - Operating pressure PN: 16 bar
Supplied complete with reed-switch pulse emitter, 1 pulse/10 litre.
Note: In order to interface with the M-Bus network, the pulse emitter meters must be connected to an energy meter with pulse inputs or to a pulse adapter.
Product certified according to Italian Dlgs n. 84 of 19/05/2016 (implementation of the European Directive MID 2014/32/EU) and compliant with D.M. 174/2004.

Dimension	Pcs. pack	Code	Price €
DN25 connections M 1"1/4, horizontal	1	02709172	243,00
DN32 connections M 1"1/2, horizontal	1	02709176	400,20
DN40 connections M 2", horizontal	1	02709188	514,50

Threads: G (UNI EN ISO 228-1)

Item available on request: 30 days from order confirm.

Dimensions: see section Technical Attachments

Technical data

Diameter DN		DN25	DN32	DN40
Permanent flow rate Q3	m³/h	6,3	10	16
Maximum flow rate Q4	m³/h	7,9	12,5	20
Minimum flow rate Q1	l/h	39,4	62,5	100
Length without pipe union	mm	260	260	300
Length with pipe union	mm	374	374	434
Weight	kg	2,3	2,4	7,7
Impulses (reed)	Liters/imp	10	10	10
Kv		7,9	12,6	20,2



Pipe union connections kit

Dimension	Pcs. pack	Code	Price €
1"1/4 F - 1" M	1	02708160	35,01
1"1/2 F - 1"1/4 M	1	02708162	57,04
2" F - 1"1/2 M	1	02708164	84,23

Threads: G (UNI EN ISO 228-1)

Energy consumption measuring instruments



Energy measurement device EVO hot/cold for high flow rates with threaded fitting and data transmission

Type

Multiple-jet counter with magnetic transmission.

EVO electronic unit technical data

Temperature range: 5÷55 °C - Temperature difference in heating phase: 3÷100 K

Temperature difference in cooling phase: -3÷-50 K - Storage temperature: 0÷55 °C

Minimum temperature difference in heating phase: 0.05 K

Minimum temperature difference in cooling phase: -0.05 K

Temperature measurement resolution: 0.01 °C

Measurement frequency: every 30 seconds (2 seconds with 230V power supply for EVO measurement device, optional). Impulses: 10 litres/impulse - Display: LCD with 8 digits + special characters - Energy measurement unit: MWh

Power supply: 3.6 V lithium battery, maximum estimated duration, not guaranteed, 6 years (the battery life is affected by installation and operating conditions). Battery It is guaranteed for 2 years from date of sale. On these models, the battery is replaceable.

Data storage EE-PROM / daily - Reading data: settable - Protection class: IP54 - Electromagnetic class: E2 - Mechanical class: M2 - Temperature probes: Pt500, Ø 5 mm (for measurement DN25), Ø 6 mm (for measurement DN32 and DN40), cable length: 3 m

Dimensions (Length x Width x Height): 150 x 130 x 35 mm

To be able to connect up to 3 meters for sanitary water with pulse outputs to the EVO electronic unit, install the optional module 3 pulse inputs for EVO meter.

Communication via M-bus protocol in compliance with standard UNI EN 1434-3.

Use "Kit USB optical head" to set the primary address of the measuring device.

The energy measuring device for high flow rates is compliant with UNI EN 1434 and certified in accordance with Leg. Dec. no. 84 of 19/05/2016 (implementation of the MID European Directive 2014/32/EU).

Dimension	Connection	Pcs. pack	Code	Price €
DN 25 Horizontal	M 1"1/4	1	02709664	1.303,00
DN 32 Horizontal	M 1"1/2	1	02709666	1.347,00
DN 40 Horizontal	M 2"	1	02709668	1.751,00
DN 25 Ascending vertical	M 1"1/4	1	02709670	1.410,00
DN 32 Ascending vertical	M 1"1/2	1	02709674	1.500,00
DN 40 Ascending vertical	M 2"	1	02709678	1.901,00
DN 25 Descending vertical	M 1"1/4	1	02709672	1.410,00
DN 32 Descending vertical	M 1"1/2	1	02709676	1.500,00
DN 40 Descending vertical	M 2"	1	02709680	1.901,00
3-input pulse module (optional) for Evo meter		1	02709576	43,96

Threads: G (UNI EN ISO 228-1). Item on request: 7 weeks from order confirmation.

Dimensions: see section Technical Attachments

Technical data of flow rate measurement device

Diameter DN		DN25 Horizontal/Ascending vertical/Descending vertical	DN32 Horizontal/Ascending vertical/Descending vertical	DN40 Horizontal/Ascending vertical/Descending vertical
Nominal flow rate	m³/h	3,5	6	10
Minimum flow rate	l/h	70	120	200
Maximum flow rate	m³/h	7	12	20
Max operating temperature	°C	90	90	90
Max operating pressure	bar	16	16	16
Weight	kg	2,7/2,3/3,5	2,8/2,3/3,7	5,2/5,7/7
Impulses (reed)	Litres/imp	10	10	10
Kv	(m³/h)/bar 0,5	10	13	21



Pipe union connections kit

Dimension	Pcs. pack	Code	Price €
1"1/4 F - 1" M	1	02708160	35,01
1"1/2 F - 1"1/4 M	1	02708162	57,04
2" F - 1"1/2 M	1	02708164	84,23

Threads: G (UNI EN ISO 228-1)



Kit sensor holder Tee group for measurement devices DN25

Dimension	Pcs. pack	Code	Price €
1" x 1" x 1"	1	02708196	153,20

Threads: G (UNI EN ISO 228-1)

Dimensions: see section Technical Attachments

Energy consumption measuring instruments



Probe holder kit for energy measurement devices DN32 and DN40

Dimension	Pcs. pack	Code	Price €
	1	02708296	109,60

Threads: G (UNI EN ISO 228-1)

Note: to be used in conjunction with energy measurement devices DN32 and DN40.

A kit is composed of:

- 2 sleeves to be welded for installation at right angles
- 2 wells of 1/2", L = 40 mm

Dimensions: see section Technical Attachments



Flanged energy measurement device EVO hot/cold for high flow rates with threaded fitting and data transmission

Typology

Woltmann mill counter for hot water up to 130 °C

EVO electronic unit technical data

Temperature range: 5÷55 °C

Temperature difference in heating phase: 3÷100 K

Temperature difference in cooling phase: -3÷-50 K

Storage temperature: 0÷55 °C

Minimum temperature difference in heating phase: 0.05 K

Minimum temperature difference in cooling phase: -0.05 K

Temperature measurement resolution: 0.01 °C

Measurement frequency: every 30 seconds (every 2 seconds with 230V power supply for EVO measurement device, optional)

Impulses: 100 litres/impulse (1000 litres/impulse for size DN150)

Display: LCD with 8 digits + special characters

Energy measurement unit: MWh

Power supply: battery 3 V lithium, estimated maximum battery life 6 years (battery life is influenced by the conditions of installation and use).

The battery is guaranteed for 2 years from date of sale.

On these models the battery is replaceable.

Data storage EE-PROM/daily

Reading data: settable - Protection class: IP54

Electromagnetic class: E2 - Mechanical class: M2

Temperature probes: Pt500, Ø 6 mm, cable length: 3 m

Dimensions (Length x Width x Height): 150 x 130 x 35 mm

To be able to connect up to 3 meters for sanitary water with pulse outputs to the EVO electronic unit, install the optional module 3 pulse inputs for EVO meter.

Communication via M-bus protocol in compliance with UNI EN 1434-3.

Use "kit USB optical head" to set the primary address of the measuring device.

The energy measuring device for high flow rates with flanged connections, the electronic unit and the temperature probes are compliant with Italian Leg. Dec. no. 84 of 19/05/2016 (implementation of the MID European Directive 2014/32/EU).

Dimension	Pcs. pack	Code	Price €
DN50	1	02709722	2.174,00
DN65	1	02709724	2.338,00
DN80	1	02709726	2.512,00
DN100	1	02709728	2.613,00
DN125	1	02709730	2.869,00
DN150	1	02709732	4.615,00
3-input pulse module (optional) for Evo meter	1	02709576	43,96

Item on request: 7 weeks from order confirmation.

Dimensions: see section Technical Attachments

Technical data of flow measurement device

Diameter DN	mm	50	65	80	100	125	150
Nominal flow rate	m³/h	15	25	40	60	100	150
Minimum flow rate	m³/h	0,6	1,0	1,4	2,0	4,0	6,0
Maximum flow rate	m³/h	30	50	80	120	200	300
Operating pressure	bar	16	16	16	16	16	16
Maximum operating temperature	°C	130	130	130	130	130	130
Maximum reading	m³	1000000	1000000	1000000	1000000	1000000	1000000
Minimum reading	l	0,5	0,5	0,5	0,5	0,5	0,5
Weight	kg	6,3	8,6	11,0	15,0	17,5	30,0
Impulses	Litres/imp	100	100	100	100	100	1000
Kv [mc/h]		79	126	199	316	506	791

Energy consumption measuring instruments



Probe holder kit for energy measurement devices DN50 and DN65

Dimension	Pcs. pack	Code	Price €
	1	02708296	109,60

Threads: G (UNI EN ISO 228-1)

Note: to be used in conjunction with energy measurement devices DN5 and DN65

A kit is composed of:

- 2 sleeves to be welded for installation at right angles
- 2 wells of 1/2", L = 40 mm

Dimensions: see section Technical Attachments



Probe holder kit for energy measurement devices DN80, DN100 and DN125

Dimension	Pcs. pack	Code	Price €
	1	02708298	129,00

Threads: G (UNI EN ISO 228-1)

Note: to be used in conjunction with energy measurement devices DN 80, DN100 and DN125.

A kit is composed of:

- 2 sleeves to be welded for installation at 45°
- 2 wells of 1/2", L = 85 mm

Dimensions: see section Technical Attachments



Probe holder kit for energy measurement devices DN150

Dimension	Pcs. pack	Code	Price €
	1	02708294	148,70

Threads: G (UNI EN ISO 228-1)

Note: to be used in conjunction with energy measurement devices DN150.

A kit is composed of:

- 2 sleeves to be welded for installation at 45°
- 2 wells of 1/2", L = 120 mm

Dimensions: see section Technical Attachments



USB KMK116 optical feeler kit

Dimension	Pcs. pack	Code	Price €
	1	02709480	593,40

Complete with "Device Monitor" configuration software. To be used to configure the primary M-Bus address and the pulse inputs of the energy meters.



Micro-Master

Power supply via PC - USB interface - Dimensions: 30x54x100 mm

Dimension	Pcs. pack	Code	Price €
	1	02708214	1.070,00

Use the Micro-Master to configure the impulse adapter, using the supplied software.

Use the MBusTool software for the impulse adapter code 02708394, and the MBCONF software for the impulse adapter code 02708212.

Energy consumption measuring instruments



Pulse adapter

The impulse adapter allows connection of up to 2 volumetric impulse counters for ACS and AFS to the M-Bus network.
Power supply via M-Bus network or internal battery.
Battery life (estimated, but not guaranteed): 1 year, with M-Bus disconnected.
Battery life less than 1 month. Degree of protection: IP68.
Dimensions LxHxD: 108x65x28 mm.
For configuration, use the Micro-Master and the MBusTool software freely downloadable from emmeti.com.
The impulse adapter has a single primary address and a single secondary address, even if no. 2 impulse-throwing volumetric counters are connected to it.

Dimension	Pcs. pack	Code	Price €
	1	02708394	206,00



Cable for meter systems with data transmission via M-bus protocol

Telephone cable TRR + T with 2 unsheathed twisted wires, complete with ground conductor. Conductor: watertight copper wire (Cu-Sn) with diameter 0.6 mm
Insulation: PVC with minimum depth of 0.15 mm
Maximum resistance of the conductor in dc 20 °C: 67.9 ohm/km
Minimum insulation resistance: 500 Mohm/km
Maximum mutual capacity at 800 Hz: 120 nF/km

Dimension	Mt. pack	Code	Price €
	250 m	02708262	222,70



Energy Manager EVO Concentrator 20

Central unit of the M-Bus network (Concentrator / Master) for the connection of up to 20 addresses.

Characteristics:

- Graphic, bright (colour), multilingual display.
- 6-key tactile membrane keyboard
- Memory capable of recording 1 year of readings (in the case of 250 instruments, read every 15 minutes).

Interfaces:

- M-Bus, wired connection for up to 20 addresses.
- Nr. 1 Ethernet port.
- Multilingual and secure webserver (SSL) for configuration and data consultation, with the possibility of local connection via Ethernet cable, or remotely via an optional external UMTS modem (no software required).
- Export of data to PC, also by sending e-mail.

Technical data:

- Power supply: 24 Vdc +/- 10%, 24 Vac (min 20 Vac, max 40 Vac).
- Maximum Consumption: 14.5W
- Degree of protection: IP20.
- Dimensions HxWxD: 90x71x62 mm.

Dimension	Pcs. pack	Code	Price €
Up to 20 M-Bus addresses	1	02709760	2.570,00



Energy Manager Expansion 60

Power supply: 24Vdc +/- 10%, 24Vac (min 20Vac, max 40Vac) – Maximum consumption: 12 W – M-BUS Master connection for connecting up to 60 addresses – M-BUS Slave for connection as expansion - Dimensions: 90x71x62 mm (HxLxW) – DIN (4 modules)

The number of addresses that each expansion can manage must be added to the number of addresses managed by the concentrator (max 20 addresses). Therefore, if, for example, a concentrator is combined with an expansion module of 60 addresses, a total of 60 + 20 = 80 M-Bus addresses can be managed.

Up to 4 expansions with 60 addresses can be combined with an M-Bus concentrator (20+60+60+60+60=260 total addresses considering, however, that the maximum limit of manageable M-Bus addresses is 250).

Dimension	Pcs. pack	Code	Price €
Up to 60 M-Bus addresses	1	02708290	1.213,00

Energy consumption measuring instruments



USB/Ethernet adaptor cable

With a USB 3.0 to Gigabit adaptor you can add a single RJ45 Ethernet port to a computer system with only USB ports
Connectors: Female RJ-45, USB Type-A 3.0 Male
Supports standard USB 1.1, 2.0 and 3.0
CD with installation Driver included
Compatible with Windows XP/Vista/7/8/8.1/10, Mac OS and Linux.

Dimension	Pcs. pack	Code	Price €
	1	02708376	150,40



Transformer 230/24V 10 VA

230/24V, P=10VA, f=50/60Hz

Dimension	Pcs. pack	Code	Price €
2 DIN modules	1	28139130	44,50

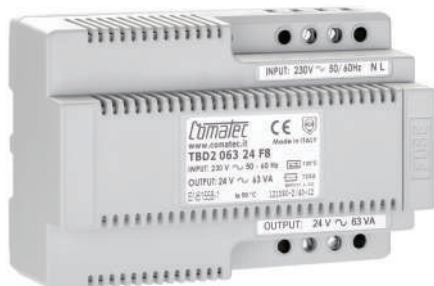
To be used to power 0-10V servomotors at 24 Vac (the number of servomotors that can be powered is dependent on the load required).



Transformer 230/24 V 35 VA

Dimension	Pcs. pack	Code	Price €
5 DIN modules (*)	1	28153410	95,79

(*) Items to be out of stock

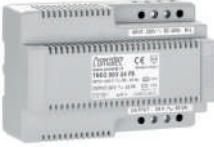


Transformer 230/24V 63 VA

Dimension	Pcs. pack	Code	Price €
8 DIN modules	1	28153420	156,30

Energy consumption measuring instruments

Guide to choosing the Energy Manager system and transformers based on the number of addresses connected to the M-Bus network

Connected addresses to the M-BUS net	Energy Manager System	Transformer model		
		 Transformer 230/24V 10 VA (28139130)	 Transformer 230/24V 35 VA (28153410)	 Transformer 230/24V 63 VA (28153420)
1 ÷ 20	 1 Concentrator 20 (02709760)	1		
21 ÷ 80	 1 Concentrator 20 (02709760) + 1 Expansion 60 (02708290)		1	
81 ÷ 140	 1 Concentrator 20 (02709760) + 2 Expansions 60 (02708290)		1	
141 ÷ 200	 1 Concentrator 20 (02709760) + 3 Expansions 60 (02708290)			1
201 ÷ 250	 1 Concentrator 20 (02709760) + 4 Expansions 60 (02708290)			1

Note:

- 1 address corresponds to an energy meter;
- 2 addresses correspond to an impulse adaptor;
- no addresses correspond to a volumetric counter.



Connection and control of heating units





- > Full Manual, Thermostatizable, Thermostatic valves **307**



- > Full kit **313**



- > Full-D dynamic thermostatic valve and lockshield kit **314**



- > Poker Plus thermostatic valves **315**



- > Full lockshields **316**



- > Thermostatic heads and kit with valves **318**



- > Unisenza Plus electronic chronothermostatic actuator **323**



- > Radio frequency thermostatic actuator **324**



- > Radio frequency chronothermostat **325**



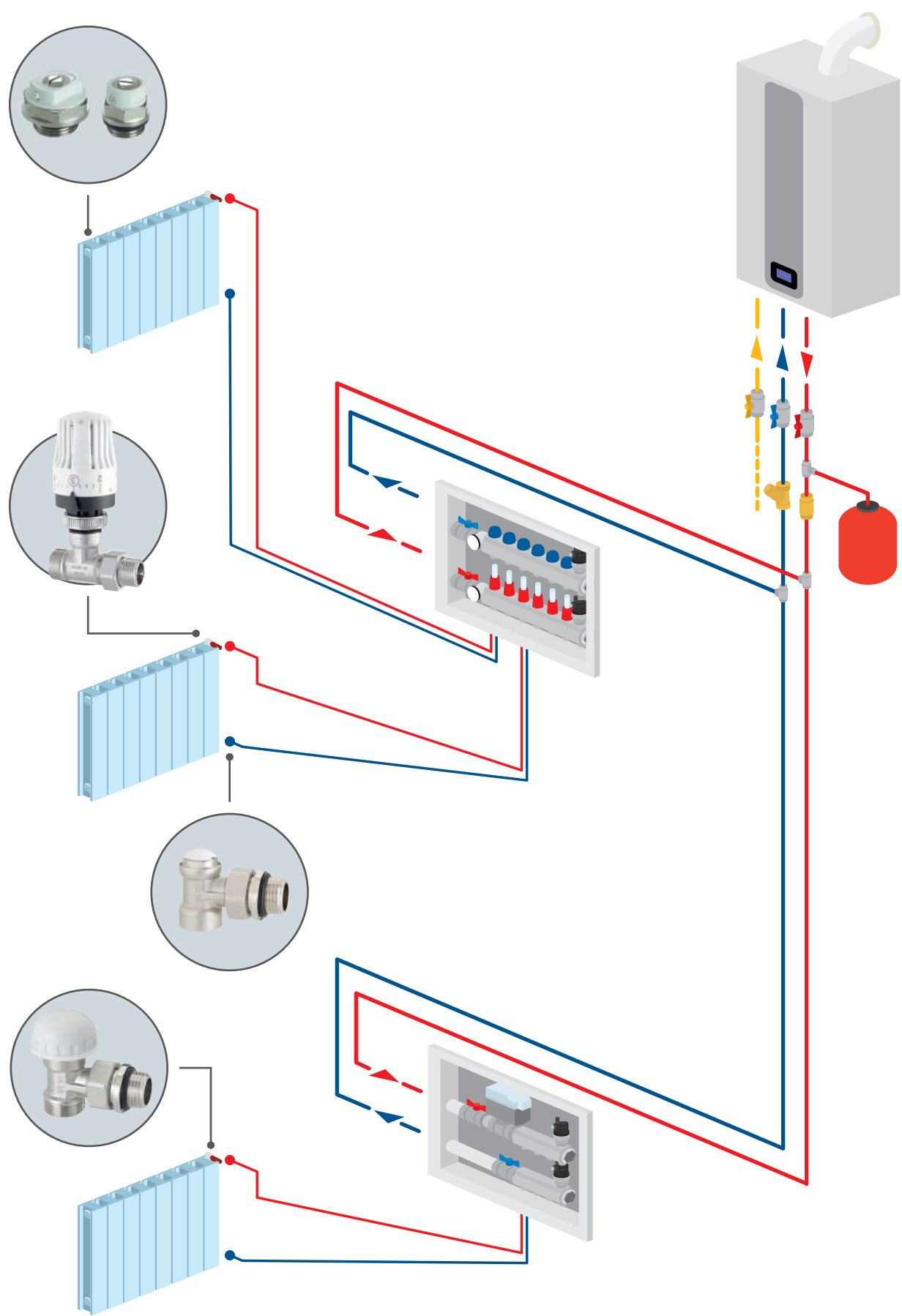
- > Valves H **326**



- > Bleed valves **327**

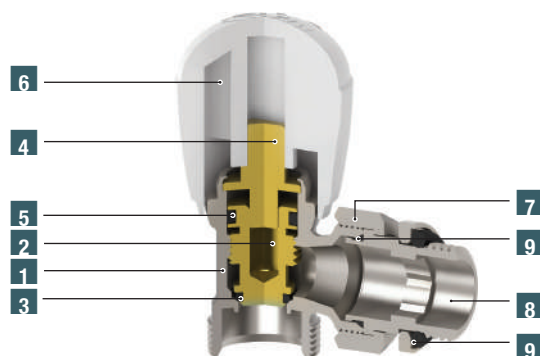


Example of installation



Full manual right-angle valve

Full manual valve



Construction

- 1 Body nickel-plated brass UNI EN 12165 CW617N
- 2 Shutter in brass UNI EN 12164 CW617N
- 3 Shutter seal O-ring in EPDM
- 4 Brass rod UNI EN 12164 CW617N
- 5 Shutter seal O-ring in EPDM
- 6 Knob in white ABS RAL 9003
- 7 Nut nickel-plated brass UNI EN 12165 CW617N
- 8 Tang nickel-plated brass UNI EN 12164 CW617N
- 9 O-ring for tang steadying in NBR

Technical data

Thread of nut and tang UNI EN ISO 228-1
 Thread of Male body valve: Gas 24x19 (of diameter 24 mm and 19 threads per inch)
 Thread fo Female body valve UNI EN ISO 228-1
 Maximum operating pressure: 10 bar
 Maximum differential pressure: 1 bar
 Maximum operating temperature: +100 °C
 Large capacity
 Fitting also available with O-ring (NBR)

Note: the tang with radiator seal is also available with NBR O-Ring



Full manual right-angle valve for copper pipe, PEX, multilayer, PP, PB

Dimension	Thread	Pcs. pack	Code	Price €/pc.
3/8"	24x19	10	01350920	10,15
1/2"	24x19	10	01350700	10,33
3/8" O-R	24x19	10	01350924	11,67
1/2" O-R	24x19	10	01350704	11,79
3/4" O-R	3/4" Eurocone	5	01350610	20,85

Emmeti seal: see section 8

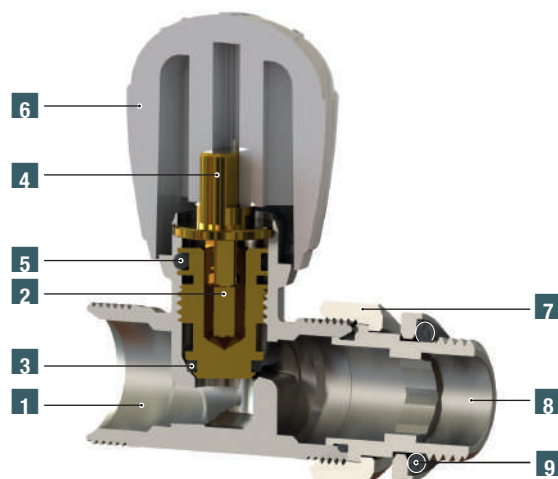


Full manual right-angle valve for steel pipe

Dimension	Pcs. pack	Code	Price €/pc.
3/8"	5	01350930	10,32
1/2"	5	01350720	10,74
3/8" O-R	5	01350934	11,44
1/2" O-R	5	01350724	12,02
3/4" O-R	5	01350614	21,17

Full manual straight valve

Full manual valve



Construction

- 1 Body nickel-plated brass UNI EN 12165 CW617N
- 2 Shutter in brass UNI EN 12164 CW617N
- 3 Shutter seal O-ring in EPDM
- 4 Brass rod UNI EN 12164 CW617N
- 5 Shutter seal O-ring in EPDM
- 6 Knob in white ABS RAL 9003
- 7 Nut nickel-plated brass UNI EN 12165 CW617N
- 8 Tang nickel-plated brass UNI EN 12164 CW617N
- 9 O-ring for tang steadying in NBR

Technical data

Thread of nut and tang UNI EN ISO 228-1
 Thread of Male body valve: Gas 24x19 (of diameter 24 mm and 19 threads per inch)
 Thread of Female body valve UNI EN ISO 228-1
 Maximum operating pressure: 10 bar
 Maximum differential pressure: 1 bar
 Maximum operating temperature: +100 °C
 Large capacity
 Fitting also available with O-ring (NBR)

Note: the tang with radiator seal is also available with NBR O-Ring



Full manual straight valve for copper pipe, PEX, multilayer, PP, PB

Dimension	Thread	Pcs. pack	Code	Price €/pc.
1/2"	24x19	5	01350850	14,19
1/2" O-R	24x19	5	01350854	15,89
3/8"	24x19	5	01350960	13,14
3/8" O-R	24x19	5	01350964	14,04

Emmeti seal 24x19: see section 8

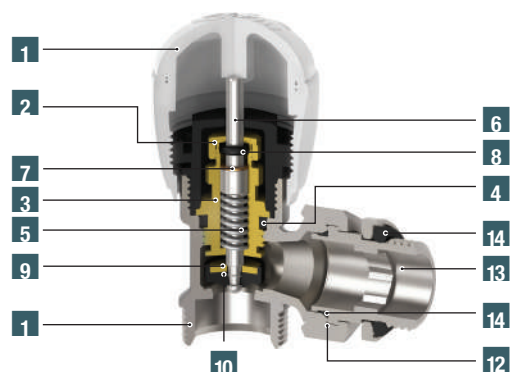


Full manual straight valve for steel pipe

Dimension	Pcs. pack	Code	Price €/pc.
1/2"	5	01350870	14,21
1/2" O-R	5	01350874	16,85

Full thermostatzable right-angle valve

Full thermostatzable valve



Construction

- 1 Body nickel-plated brass UNI EN 12165 CW617N
- 2 Collar in PA6 (30% FV)
- 3 Shutter in brass UNI EN 12164 CW617N
- 4 O-ring for shutter steadying in NBR
- 5 Spring in stainless steel AISI 302
- 6 Spindle in stainless steel AISI 304
- 7 Collar for body shutter in brass UNI EN 12164 CW617N
- 8 O-ring for shutter in EPDM
- 9 Washer of lock gasket in brass UNI EN 12164 CW617N
- 10 Shutter steadying in NBR
- 11 Knob in white ABS RAL 9003 in 2 pieces
- 12 Nut nickel-plated brass UNI EN 12165 CW617N
- 13 Tang nickel-plated brass UNI EN 12164 CW617N
- 14 O-ring for tang steadying in NBR

Technical data

Thread of nut and tang UNI EN ISO 228-1
 Thread of Male body valve: Gas 24x19 (of diameter 24 mm and 19 threads per inch)
 Thread of Female body valve UNI EN ISO 228-1
 Maximum operating pressure: 10 bar
 Maximum differential pressure: 1 bar
 Maximum operation temperature: +100 °C

Note: can be used in conjunction with thermostatic Sensor heads and thermo-electric heads after the following steps:

- unscrew the upper part 11
- unscrew 2
- extract the lower part 11
- screw back in 2 (for size 3/4" simply unscrew the lower part 11)
- install the head

Note: the tang with radiator seal is also available with NBR O-Ring



Full thermostatzable right-angle valve for copper pipe, PEX, multilayer, PP, PB

Dimension	Thread	Pcs. pack	Code	Price €/pc.
3/8"	24x19	10	01350944	13,74
1/2"	24x19	10	01350760	14,19
3/8" O-R	24x19	10	01350946	13,78
1/2" O-R	24x19	10	01350762	15,60
3/4" O-R (*)	3/4" Eurocone	1	01350634	27,36

(*) Thread UNI EN ISO 228-1

Emmeti seals: see section 8

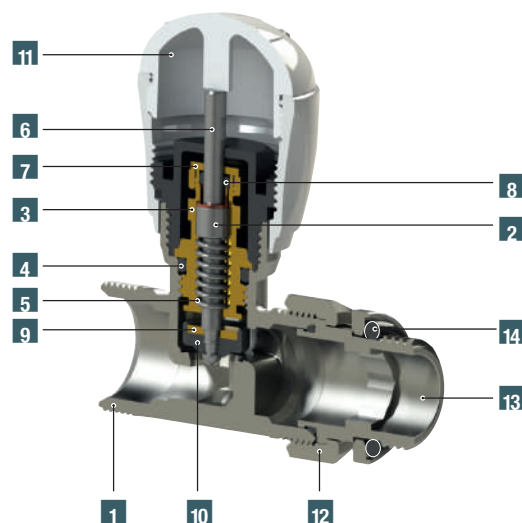


Full thermostatzable right-angle valve for steel pipe

Tail Dimension	Pcs. pack	Code	Price €/pc.
3/8"	5	01350954	13,56
1/2"	5	01350764	13,93
3/8" O-R	5	01350956	13,58
1/2" O-R	5	01350766	15,30
3/4" O-R	1	01350636	27,70

Full thermostatic straight valve

Full thermostatic valve



Construction

- 1 Body nickel-plated brass UNI EN 12165 CW617N
- 2 Collar in PA6 (30% FV)
- 3 Shutter in brass UNI EN 12164 CW617N
- 4 O-ring for shutter steadying in NBR
- 5 Spring in stainless steel AISI 302
- 6 Spindle in stainless steel AISI 304
- 7 Collar for body shutter in brass UNI EN 12164 CW617N
- 8 O-ring for shutter in EPDM
- 9 Washer of lock gasket in brass UNI EN 12164 CW617N
- 10 Shutter steadying in NBR
- 11 Knob in white ABS RAL 9003 in 2 pieces
- 12 Nut nickel-plated brass UNI EN 12165 CW617N
- 13 Tang nickel-plated brass UNI EN 12164 CW617N
- 14 O-ring for tang steadying in NBR

Technical data

Thread of nut and tang UNI EN ISO 228-1
 Thread of Male body valve: Gas 24x19 (of diameter 24 mm and 19 threads per inch)
 Thread of Female body valve UNI EN ISO 228-1
 Max operating pressure: 10 bar - Max differential pressure: 1 bar
 Maximum operation temperature: +100 °C

Note: can be used in conjunction with thermostatic Sensor heads and thermo-electric heads after the following steps:

- unscrew the upper part 11
- unscrew 2
- extract the lower part 11
- screw back in 2
- install the head



Full thermostatic straight valve for copper pipe, PEX, multilayer, PP, PB

Dimension	Thread	Pcs. pack	Code	Price €/pc.
1/2"	24x19	5	01350880	17,79
1/2" O-R	24x19	5	01350882	19,05
3/8"	24x19	5	01350974	16,35
3/8" O-R	24x19	5	01350976	17,39

Emmeti seal 24x19: see section 8

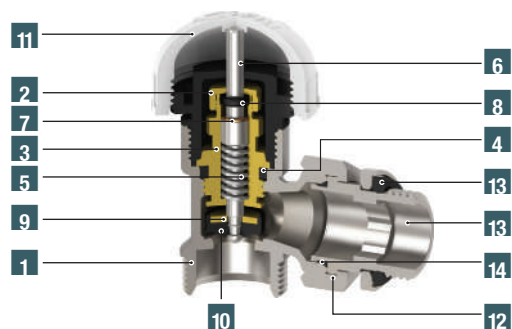


Full thermostatic straight valve for steel pipe

Dimension	Pcs. pack	Code	Price €/pc.
1/2"	5	01350888	18,64
1/2" O-R	5	01350890	19,95

Full thermostatic right-angle valve

Full thermostatic valve



Construction

- 1 Body nickel-plated brass UNI EN 12165 CW617N
- 2 Collar in PA6 (30% FV)
- 3 Shutter body in brass UNI EN 12164 CW617N
- 4 O-ring for shutter body steadying in NBR
- 5 Spring in stainless steel AISI 302
- 6 Spindle in stainless steel AISI 304
- 7 Collar in brass UNI EN 12164 CW617N
- 8 O-ring for shutter in EPDM
- 9 Washer of lock gasket in brass UNI EN 12164 CW617N
- 10 Shutter steadying in NBR
- 11 Cap in white ABS RAL 9003
- 12 Nut nickel-plated brass UNI EN 12165 CW617N
- 13 Tang nickel-plated brass UNI EN 12164 CW617N
- 14 O-ring for tang steadying in NBR

Technical data

Thread of nut and tang UNI EN ISO 228-1
 Thread of Male body valve: Gas 24x19 (of diameter 24 mm and 19 threads per inch)
 Thread fo Female body valve UNI EN ISO 228-1
 Maximum operating pressure: 10 bar
 Maximum differential pressure: 1 bar
 Maximum operation temperature: +100 °C

Note: the tang with radiator seal is also available with NBR O-Ring

Note: can be used in conjunction with thermostatic Sensor heads and thermo-electric heads



Full thermostatic right-angle valve for copper pipe, PEX, multilayer, PP, PB

Dimension	Thread	Pcs. pack	Code	Price €/pc.
3/8"	24x19	10	01350940	13,48
1/2"	24x19	10	01350740	13,61
3/8" O-R	24x19	10	01350942	13,53
1/2" O-R	24x19	10	01350742	15,03
3/4" O-R (*)	3/4" Eurocone	1	01350630	23,67

(*) Thread UNI EN ISO 228-1

Emmeti seals: see section 8

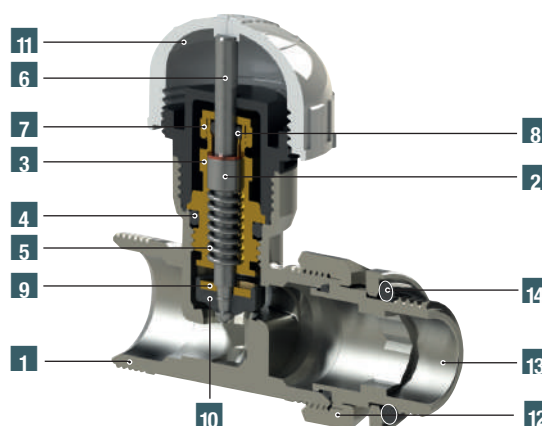


Full thermostatic right-angle valve for steel pipe

Dimension	Pcs. pack	Code	Price €/pc.
3/8"	5	01350950	13,31
1/2"	5	01350744	13,36
3/8" O-R	5	01350952	13,37
1/2" O-R	5	01350746	14,77
3/4" O-R	1	01350632	24,01

Full thermostatic straight valve

Full thermostatic valve



Construction

- 1 Body nickel-plated brass UNI EN 12165 CW617N
- 2 Collar in PA6 (30% FV)
- 3 Shutter body in brass UNI EN 12164 CW617N
- 4 O-ring for shutter body steadying in NBR
- 5 Spring in stainless steel AISI 302
- 6 Spindle in stainless steel AISI 304
- 7 Collar in brass UNI EN 12164 CW617N
- 8 O-ring for shutter in EPDM
- 9 Washer of lock gasket in brass UNI EN 12164 CW617N
- 10 Shutter steadying in NBR
- 11 Cap in white ABS RAL 9003
- 12 Nut nickel-plated brass UNI EN 12165 CW617N
- 13 Tang nickel-plated brass UNI EN 12164 CW617N
- 14 O-ring for tang steadying in NBR

Technical data

Thread of nut and tang UNI EN ISO 228-1
 Thread of Male body valve: Gas 24x19 (of diameter 24 mm and 19 threads per inch)
 Thread fo Female body valve UNI EN ISO 228-1
 Maximum operating pressure: 10 bar
 Maximum differential pressure: 1 bar
 Maximum operation temperature: +100 °C

Note: the tang with radiator seal is also available with NBR O-Ring

Note: can be used in conjunction with thermostatic Sensor heads and thermo-electric heads



Full thermostatic straight valve for copper pipe, PEX, multilayer, PP, PB

Dimension	Pcs. pack	Code	Price €/pc.
1/2"	5	01350900	14,96
1/2" O-R	5	01350902	16,09
3/8"	5	01350970	14,71
3/8" O-R	5	01350972	15,81

Emmeti seal 24x19: see section 8



Full thermostatic straight valve for steel pipe

Dimension	Pcs. pack	Code	Price €/pc.
1/2"	5	01350908	17,27
1/2" O-R	5	01350910	18,47

Full Kit



Full kit manual right-angle valve + lockshield 1/2" and connection for multi-layer pipe

Dimension	Pcs. pack	Code	Price €
Full manual right angle valve 1/2" + lockshield 1/2" + 2 monoblocco seals for multilayer pipe Ø 16	1	01306282	33,10

Supplied in sachet + box
Available on request



Full kit manual right-angle valve + lockshield 1/2" with O-R and connection for multilayer pipe

Dimension	Pcs. pack	Code	Price €
Full manual right angle valve 1/2" O-R + lockshield 1/2" O-R + 2 monoblocco seals for multilayer pipe Ø 16	1	01306278	35,02

Supplied in sachet + box
Available on request

Kit dynamic thermostatic valve and lockshield

Full-D dynamic thermostatic valve, thanks to the special insert inside, guarantees automatic dynamic balancing of the system, keeping the flow rate feeding the individual heating body constant (equal to the design value), regardless of the differential pressure. Even with strongly fluctuating differential pressures, which can occur when sections of the system are opened or closed, the flow rate is kept constant within the control range. The device, in combination with a thermostatic head, combines several functions in a single component: it allows the room temperature of the room in which it is installed to be kept constant, guaranteeing effective energy savings.

The design flow rate is set by turning the numbered ring nut mounted on the handwheel, which will protect the setting from unauthorised tampering.

The valve is continuously adjustable; the setting can be changed while the system is running.



Technical data dynamic thermostatic valve

Maximum operating temperature: 110 °C

Minimum operating temperature: 2 °C

Fluid: water or ethylene/propylene glycol mixture (max. glycol proportion 50%, pH value 6.5-10)

Not suitable for steam, oily, polluted and aggressive fluids.

Regulation range Dynamic thermostatic valve

Flow rate: 10÷170 l/h (value relative to coupling with thermostatic head, deviation -2 K)

Δp max: 1.5 bar

Δp min (10÷130 l/h): 0.1 bar

Δp min (>130÷170 l/h): 0.15 bar

Below the Δp min, the normal operation of a thermostatic valve is guaranteed: in this situation, the flow rate is reduced from the nominal value in proportion to the Δp available.

Note:

can be combined with Sensor, Sensor R, SensorEV02 thermostatic heads



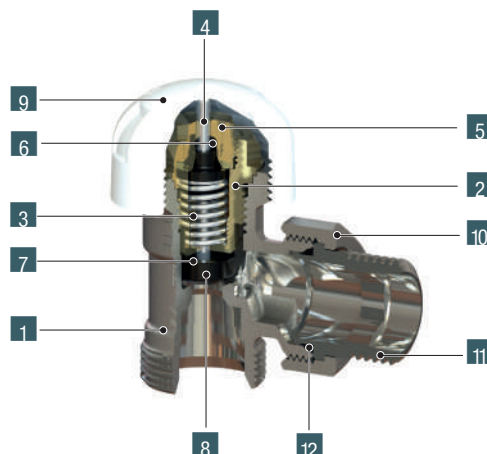
Full-D Dynamic thermostatic valve and lockshield kit for copper, PEX, multilayer, PP, PB pipe

Model	Pcs. pack	Code	Price €
1/2"	1	01360046	92,66

Dimensions and setting curve: see section Technical Attachments

Poker Plus

Thermostatic valves



Construction

- 1 Brass body UNI EN 12165 CW617N nickel-plated
- 2 Brass shutter body UNI EN 12164 CW617N
- 3 AISI 301 steel spring
- 4 AISI 304 stainless steel push rod
- 5 Nickel-plated EN 12164 CW617N brass shutter ring
- 6 O-ring seal EPDM rod
- 7 Washer block gasket brass UNI EN 12164 CW614N
- 8 Shutter seal in NBR
- 9 Cap in white ABS RAL 9003
- 10 UNI EN 12165 CW617N nickel-plated brass nut
- 11 UNI EN 12164 CW617N nickel-plated brass tang
- 12 O-ring shank seal in NBR

Technical data

Nut and tang threading: UNI EN ISO 228-1
 Male valve body thread: gas 24x19 (24 mm diameter and 19 threads per inch)
 Maximum operating pressure: 10 bar
 Maximum differential pressure: 0,6 bar
 Maximum operating temperature: +95 °C

Dimensions: see section Technical Attachments

Note: Can be combined with SensorEVO2 thermostatic heads (NOT combinable with Sensor, Sensor R and SensorEVO).



Poker Plus thermostatic angle valve for copper pipe, PE-X, multilayer, PP, PB

Dimension	Seal Emmeti	Pcs. pack	Code	Price €/pc.
1/2"	24x19	10	01360040	15,20

Emmeti seals: see section 8



Poker Plus straight thermostatic valve for copper pipe, PE-X, multilayer, PP, PB

Dimension	Seal Emmeti	Pcs. pack	Code	Price €/pc.
1/2"	24x19	5	01360044	15,36

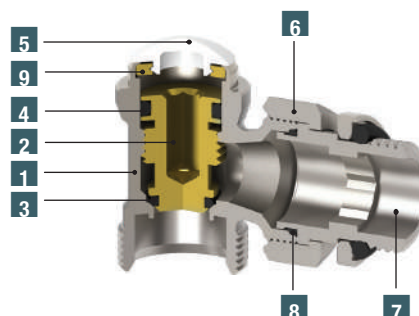
Emmeti seals: see section 8

CEN certified product according to EN 215 in the following configurations

Valve	Code	Thermostatic Head	Code
Poker Plus	01360040	+	SensorEVO2 01213012
Poker Plus	01360044	+	SensorEVO2 01213012

Full right-angle lockshields

Full lockshields



Construction

- 1 Body nickel-plated brass UNI EN 12165 CW617N
- 2 Shutter in brass UNI EN 12164 CW617N
- 3 O-ring for shutter body steadying in NBR
- 4 Upper O-ring for shutter steadying in EPDM
- 5 Cap in white ABS RAL 9003
- 6 Nut nickel-plated brass UNI EN 12165 CW617N
- 7 Tang nickel-plated brass UNI EN 12164 CW617N
- 8 O-ring for tang steadying in NBR
- 9 Collar in brass UNI EN 12164 CW617N

Note: the tang with radiator seal is also available with NBR O-Ring

Technical data

Thread of nut and tang UNI EN ISO 228-1
 Thread of Male body valve: Gas 24x19 (of diameter 24 mm and 19 threads per inch)
 Thread fo Female body valve UNI EN ISO 228-1
 Maximum operating pressure: 10 bar
 Maximum differential pressure: 1 bar
 Maximum operating pressure: +100 °C



Manual right-angle lockshield for copper pipe, PEX, multilayer, PP, PB

Dimension	Thread	Pcs. Pack	Code	Price €/pc.
3/8"	24x19	10	01350922	9,65
1/2"	24x19	10	01350702	9,68
3/8" O-R	24x19	10	01350926	10,37
1/2" O-R	24x19	10	01350706	11,27
3/4" O-R (*)	3/4" Eurocone	5	01350612	19,71

(*) Thread UNI EN ISO 228-1
 Emmeti seals: see section 8

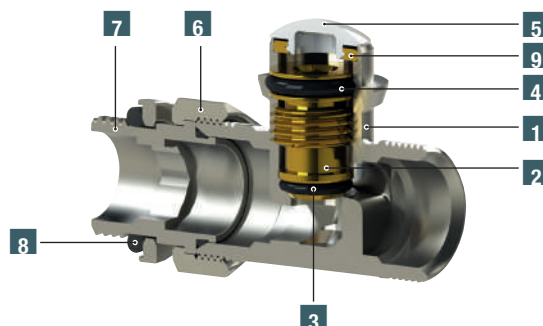


Manual right-angle lockshield for steel pipe

Dimension	Pcs. pack	Code	Price €/pc.
3/8"	5	01350932	9,49
1/2"	5	01350722	9,83
3/8" O-R	5	01350936	10,22
1/2" O-R	5	01350726	10,87
3/4" O-R	5	01350616	20,05

Full straight lockshields

Full lockshields



Construction

- 1 Body nickel-plated brass UNI EN 12165 CW617N
- 2 Shutter in brass UNI EN 12164 CW617N
- 3 O-ring for shutter body steadying in NBR
- 4 Upper O-ring for shutter steadying in EPDM
- 5 Cap in white ABS RAL 9003
- 6 Nut nickel-plated brass UNI EN 12165 CW617N
- 7 Tang nickel-plated brass UNI EN 12164 CW617N
- 8 O-ring for tang steadying in NBR
- 9 Collar in brass UNI EN 12164 CW617N

Note: the tang with radiator seal is also available with NBR O-Ring

Technical data

Thread of nut and tang UNI EN ISO 228-1
 Thread of Male body valve: Gas 24x19 (of diameter 24 mm and 19 threads per inch)
 Thread of Female body valve UNI EN ISO 228-1
 Maximum operating pressure: 10 bar
 Maximum differential pressure: 1 bar
 Maximum operating pressure: +100 °C



Manual straight lockshield for copper pipe, PEX, multilayer, PP, PB

Dimension	Thread	Pcs. Pack	Code	Price €/pc.
1/2"	24x19	5	01350852	13,05
1/2" O-R	24x19	5	01350856	14,39
3/8"	24x19	5	01350962	11,25
3/8" O-R	24x19	5	01350966	13,19

Emmeti seal 24x19: see section 8



Manual straight lockshield for steel pipe

Dimension	Pcs. Pack	Code	Price €/pc.
1/2"	5	01350872	12,98
1/2" O-R	5	01350876	14,19

SensorEV02

Thermostatic control head



Technical data on the coupling between the thermostatic head SensorEV02 and Poker Plus thermostatic valves

Max. operating pressure: 10 bar
Max. differential pressure: 0.6 bar
Differential pressure influence: 0.7 K
Maximum ambient temperature: 30 °C
Maximum system water temperature: 95 °C
Storage temperature: -40 to +50 °C
Adjustment range: 8 to 28 °C
Nominal lift: 0.22 mm/K
Hysteresis: 0.3 K
Antifreeze intervention: 8 °C
Nominal flow rate Poker Plus straight and angle valves: 160 l/h
Authority: 0.8
Water temperature influence: 0.55 K
Response time: 25 minutes
Control Accuracy (CA): 0.2 K
Liquid expansion thermostatic sensor

Note:

can be combined with Poker Plus thermostatic valves, and Full thermostatic valves.

Dimensions: see section Technical Attachments

CEN certified product according to EN 215 in the following configurations

Valve	Code		Thermostatic head	Code
Poker Plus	01360040	+	SensorEV02	01213012
Poker Plus	01360044	+	SensorEV02	01213012



SensorEV02 thermostatic control head

Model	Pcs. pack	Code	Price €/pc.
	10	01213012	19,68

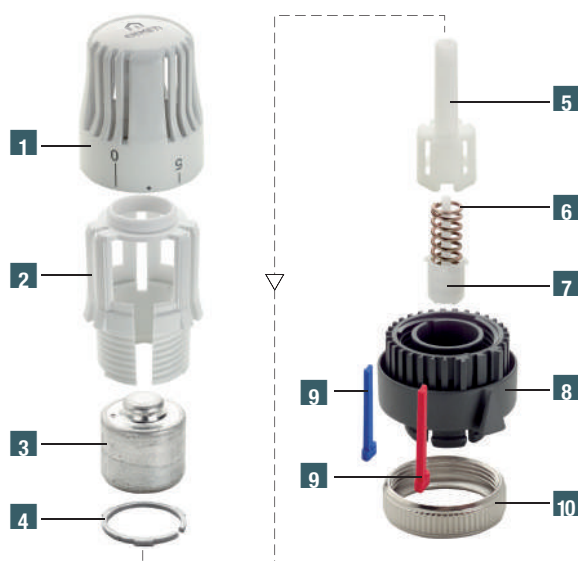


Key for temperature limitation

Dimension	Pcs. pack	Code	Price €/pc.
	5	01213010	1,20

Sensor

Thermostatic head Sensor



Construction

- 1 ABS control knob white RAL 9003
- 2 Basket in reinforced PA 6.6
- 3 Thermostatic sensor with fluid expansion
- 4 Ring in spring steel
- 5 Spindle in natural acetalyc resin
- 6 Spring in nickel steel class D UNI 3823
- 7 Rod in natural acetalyc resin
- 8 Base in reinforced PA 6.6
- 9 Pin for limiting temperature blue and red in acetalyc resin
- 10 Fastening ring nut M30x1,5 made of brass TN UNI EN 12164 CW614N nickel finish

Technical data of connection between Sensor Thermostatic head and Full thermostatisable and thermostatic valves

Maximum operating pressure: 10 bar
 Maximum differential pressure: 1 bar
 Maximum ambient temperature: 40 °C
 Maximum system water temperature: 100 °C
 Maximum storage temperature: -10 ÷ +50 °C
 Range of regulation: 7 ÷ 28 °C
 Nominal climb: 0,22 mm/K
 Antifreeze action: 7 °C
 Nominal rating straight and right-angle Full valves: 175 l/h
 Time of reaction: 25 minutes

Note: can be used in conjunction with: Poker thermostatisable valves, Poker thermostatic valves, Tris 3 and Tris 2 valves (using adapter code 90001716 supplied separately), Full thermostatic valves and Full thermostatisable valves.

Setting of the room temperature

0	*	1	2	③	4	5
Closed	7 °C (*)	12 °C	16 °C	20 °C	24 °C	28 °C

(*) Antifreeze

Numbers from 0 to 5 are marked on the rotating knob. Each one of these numbers corresponds to an established temperature. The distances between the single numbers correspond to intermediate temperatures. With the help of the table that is provided ahead, you will find an approximate correspondence between the scale on the knob and the respective temperatures.



Thermostatic head with sensor

Dimension	Pcs. pack	Code	Price €/pc.
	6	01213190	18,44



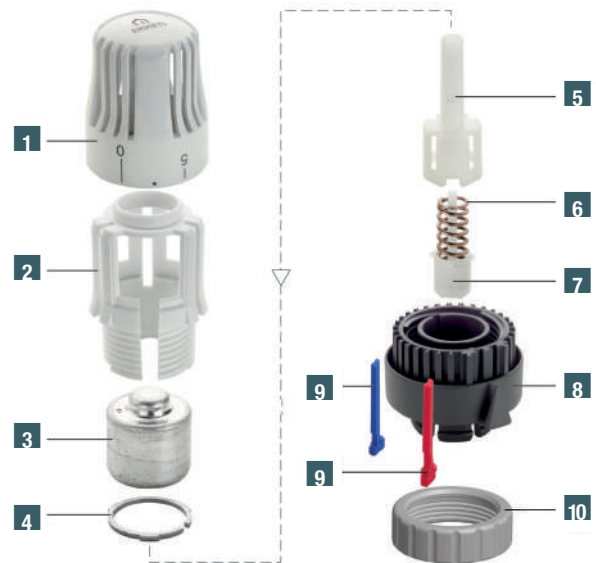
Safety band for thermostatic heads

Dimension	Pcs. pack	Code	Price €/pc.
	6	90023720	2,67

Can only be used in combination with the thermostatic head code 01213190

Sensor Eco

Thermostatic head Sensor Eco



Construction

- 1 ABS control knob white RAL 9003
- 2 Basket in reinforced PA 6.6
- 3 Thermostatic sensor with fluid expansion
- 4 Ring in spring steel
- 5 Spindle in natural acetalyc resin (POM)
- 6 Spring in nickel steel class D UNI 3823
- 7 Rod in natural acetalyc resin (POM)
- 8 Base in reinforced PA 6.6
- 9 Pin for limiting temperature blue and red in acetalyc resin (POM)
- 10 Fastening ring nut M30x1,5 made of PA 6.6 (50%FV)

Technical data of connection between Sensor Eco Thermostatic head and Full thermostatisable and thermostatic valves

Maximum operating pressure: 10 bar
Maximum differential pressure: 1 bar
Maximum ambient temperature: 40 °C
Maximum water temperature: 100 °C
Maximum storage temperature: -10 ÷ +50 °C
Range of regulation: 7 ÷ 28 °C
Nominal climb: 0,22 mm/K
Antifreeze action: 7 °C
Nominal rating right-angle Full valves: 180 l/h
Time of reaction: 25 minutes

Setting of the room temperature

0	*	1	2	③	4	5
Closed	7 °C(*)	12 °C	16 °C	20 °C	24 °C	28 °C

(*) Antifreeze

Numbers from 0 to 5 are marked on the rotating knob.

Each one of these numbers corresponds to an established temperature. The distances between the single numbers correspond to intermediate temperatures.

With the help of the table that is provided ahead, you will find an approximate correspondence between the scale on the knob and the respective temperatures.



Thermostatic head with sensor

Dimension	Pcs. pack	Code	Price €/pc.
	12	01213068	15,68

Sensor R

Thermostatic head with remote sensor

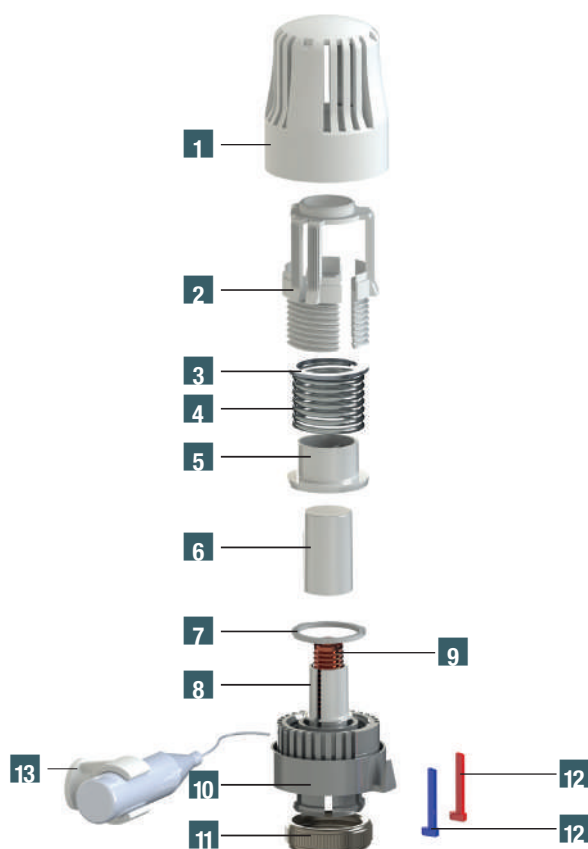


Construction

- 1 Adjustment knob in ABS white RAL 9003
- 2 Basket in reinforced PA 6.6
- 3 Washer aluminum
- 4 Steel spring 172 SGB
- 5 Cup acetal natural
- 6 Stem acetal natural
- 7 Ring spring steel
- 8 Pusher acetal natural
- 9 Thermostat sensor liquid expansion
- 10 Base in reinforced PA 6.6
- 11 Fastening ring nut M30x1,5 brass TN UNI EN 12164 CW614N nickel
- 12 Limiters adjustment blue and red acetal
- 13 Clip for wall polyethylene

Technical data

Maximum operating pressure: 10 bar
 Maximum differential pressure: 1 bar
 Maximum ambient temperature: 40 °C
 Maximum water temperature: 100 °C
 Maximum storage temperature: -10 ÷ +50 °C
 Range of regulation: 7 ÷ 28 °C
 Nominal climb: 0,22 mm/K
 Antifreeze action: 7 °C
 Capillary length: 2 m



Setting of the room temperature

0	*	1	2	③	4	5
Closed	7 °C (*)	12 °C	16 °C	20 °C	24 °C	28 °C

(*) Antifreeze

Numbers from 0 to 5 are marked on the rotating knob.

Each one of these numbers corresponds to an established temperature. The distances between the single numbers correspond to intermediate temperatures.

With the help of the table that is provided ahead, you will find an approximate correspondence between the scale on the knob and the respective temperatures.



Thermostatic head with sensor

Dimension	Pcs. pack	Code	Price €/pc.
	4	01213072	40,46

Sensor kit

Sensor kit with Full thermostatic valves



Sensor kit with Full thermostatic right-angle valve and lockshield for steel pipe

Dimension	Pcs. pack	Code	Price €
Thermostatic head + 1/2" right-angle valve and lockshield for steel pipe	1	01216000	40,84

Items available on request



Sensor kit with Full thermostatic right-angle valve and lockshield for steel pipe

Dimension	Pcs. pack	Code	Price €
Thermostatic head + 1/2" O-R right-angle valve and lockshield for steel pipe	1	01216002	47,13

Items available on request



Sensor kit with Full thermostatic right-angle valve, lockshield and Monoblocco fittings for Multilayer pipe

Dimension	Pcs. pack	Code	Price €
Thermostatic head + 1/2" O-R right-angle valve and lockshield 24x19 + 2 pcs Monoblocco seal 16x2 for multilayer pipe	1	01216004	56,53

Items available on request

SensorEV02 kit

SensorEV02 kit with Poker Plus thermostatic valve



SensorEV02 kit with Poker Plus thermostatic right-angle valve and lockshield for Multilayer or copper pipe

Dimension	Pcs. pack	Code	Price €
Thermostatic head + 1/2" O-R right-angle valve and lockshield 24x19	1	01216008	40,55

Items available on request

Unisenza Plus Chronothermostatic actuator

Electronic chronothermostatic actuator

NEW



Electronic chronothermostatic actuator suitable for installation on thermostatic and thermostatisable radiator valves for room temperature control.

The actuator can operate independently (stand-alone) using the on-board buttons, but is also equipped with a ZigBee 3.0 wireless communication interface, through which:

- It can receive activation commands from a Thempra chronothermostat via the Gateway. In this case, the actuator receives the setpoint from the associated chronothermostat; commands can come directly from the thermostat or via the Unisenza Plus app. Up to 6 chronothermostatic actuators can be connected to a Thempra thermostat.
- It can send activation commands for the heat generator (without using thermostats) directly to the receiver via the gateway.

The hourly programming of the chronothermostatic actuator can only be carried out using the Unisenza Plus app; weekly programming can be set, with 6 time slots for each day.

This item can be combined with the following Emmeti valves: Fully thermostatic and thermostatic; Poker Plus thermostatic; Full-D thermostatic; 3/4" and 1" thermostatic valves.

For pairing with Gateway, Receiver and Thempra devices, please refer to the Unisenza Plus chapter.

Features

- Dual integrated temperature sensor.
- Backlit LCD display.
- Buttons for quick setpoint adjustment (stand-alone mode).
- Modulating control algorithm for optimised comfort and energy efficiency.
- Temporary manual setpoint override function.
- Open window function.
- Anti-freeze function.
- Valve anti-seizing function.

Technical data

- Power supply: 2 x 1.5 V batteries (type AA), included
- Temperature scale: °C or °F
- Displayed temperature range: 0÷40 °C (32÷104 °F)
- Displayed temperature resolution: 0.5 °C (1 °F)
- Settable temperature range: 5÷35 °C (41÷95 °F)
- Settable temperature resolution: 0.5 °C (1 °F)
- Measured temperature accuracy: ±1 °C @15-25 °C, ±1.5 °C at other temperatures
- Valve connection: M30x1.5
- Actuator stroke: 4 mm
- Firmware update: via internet (OTA, over the air)
- Wireless communication: ZigBee 3.0, 2.4 GHz (max. distance between each device 300 m in open space)
- Installation environment: indoor
- Operating temperature: 0÷50 °C
- Storage temperature: -10÷60 °C
- Relative humidity: 10-95% non-condensing
- Dimensions ØxH: 58x95 mm
- Protection rating: IP20
- CE compliance: RED 2014/53/EU, RoHS 2011/65/EU, REACH (EC 1907/2006) directives

Unisenza Plus Chronothermostatic actuator

NEW

Model	Pcs. pack	Code	Price €
Unisenza Plus Chronothermostatic actuator	1	02018240	159,90

For pairing with Gateway, Receiver and Thempra devices, please refer to the Unisenza Plus chapter.

Radio frequency thermostatic actuator

Electronic radio frequency programmable thermostatic actuator for radiator valves



Electronic radio frequency programmable thermostatic actuator which receives the operating parameters directly from the Emmeti radio frequency programmable thermostat, operating like a normal remote actuator.

It is installed directly on the thermostatic radiator valve, opening it partially in function of the difference between the set temperature and the temperature detected.

In required, the device can also operate independently since it can be programmed using the keyboard.

1 Programming display

2 Function keys:

- MENU (MENU) (to access the main menu)

- OK (OK) (to confirm the settings)

- CLOCK (CLOCK) (to access the clock functions)

3 Selection wheel

4 Battery compartment

5 Integrated radio frequency module

Technical data

Power supply: 2 batteries 1.5 V (type AA)

Autonomy: 5 years (with low battery indication; estimated but not guaranteed)

Operation:

- radiofrequency

- manual, with temperature set using the wheel

- automatic, with two temperature levels (comfort and economy), weekly programming

Maximum number of daily switching (automatic operation): 4 in comfort and 4 in economy

holiday function, which adjusts to a temperature (or valve closure) for a set period

Window function, with valve closure in case the window is open

Keylock function

Size: 52 x 83 x 65 mm

Maximum distance between radio frequency thermostat and actuator: 50 meters in free field

Degree of protection: IP30

Operating temperature: 0 ÷ 50 °C

Storage temperature: -20 °C ÷ +70 °C

Valve connection: M30x1.5

Delegated Regulation (EU) n. 811/2013; annex IV-3:

- Class of the temperature control device: Class 4: Class IV

- Contribution of the temperature control device to the seasonal energy efficiency of environment heating in %: 2%



Electronic radio frequency programmable thermostatic actuator for radiator valves

Description	Pcs. pack	Code	Price €
Electronic radio frequency programmable thermostatic actuator for radiator valves (*)	1	02018094	161,00

Can be combined with: Tris 3 thermostatic valves, Full and Poker thermostatic and manual valves, 3/4" and 1" thermostatic valves.

(*) Item to be out of stock

Radio frequency programmable thermostat

Radio frequency touch screen weekly programmable thermostat



Radio frequency touch screen weekly programmable thermostat to be combined with the radio frequency programmable thermostat actuators for radiator valves; this allows to control one or more radiators.

- 1 Plastic base for wall-mounting or covering the box 503
- 2 Wide backlit touch screen display to view the operating status, time, day and temperature measured
- 3 Touch screen keyboard to program the device

General features

Power supply: 2 x 1,5 V (type AAA)
 Power reserve (to change batteries): 1 minute
 Autonomy: 12 months (with low battery indication, estimated but not guaranteed).
 Summer/Winter mode
 Automatic programming with:
 - 7 programs for winter operation (changeable)
 - 7 programs for summer operation (changeable)
 Temperature adjustment ON/OFF or proportional
 5 settable temperatures:
 T1, T2, T3 in automatic mode; Tm in manual mode; Toff in off mode (anti-freeze temperature, excludable) - Min adjustment interval: 1 hour
 Communication delay settable between 15, 30 or 45 minutes (independent for each hour) - Open window detection function
 Keylock with password - Summer/winter time change automatic
 Display with blue backlight (active at the touch of a button)

Technical data

Battery powered: 2x1,5 V battery (type AAA) (not supplied)
 Fixing: wall mounting
 Weekly programming
 Operating mode: summer / winter / off
 Type of control: ON / OFF or proportional or setpoint sending for autonomous management of the radiofrequency actuator
 Differential: $0,1 \div 1^\circ\text{C}$ - Temperature settings: 3 + manual + antifreeze
 Setting setpoint: $2 \div 35^\circ\text{C}$
 Measured temperature resolution: $0,1^\circ\text{C}$
 Measurement precision: $0,5^\circ\text{C}$
 Antifreeze temperature (excluded): $1 \div 10^\circ\text{C}$
 programming resolution: 1 hour
 Ignition delay: 15, 30 or 45 minutes
 Watch accuracy: ± 1 / day
 Operating temperature: $0 \div 50^\circ\text{C}$
 Storage temperature: $-10 \div 65^\circ\text{C}$
 Operating humidity: 20% to 90% RH non-condensing
 Degree of protection: IP40
 Delegated Regulation (EU) No. 811/2013; annex IV-3:
 - Class of the temperature control device: Class 4; class IV
 - Contribution of the temperature control device to the energy efficiency of ambient heating season in%: 2%

Dimensions: see section Technical Attachments



Radio frequency programmable thermostat

Description	Pcs. pack	Code	Price €
Radio frequency programmable thermostat (*)	1	02018144	201,00

(*) Item to be out of stock

For more information on products and examples of radio frequency configuration, see the relevant paragraph in Section 5 "Adjustment and Control".

Example of configuration

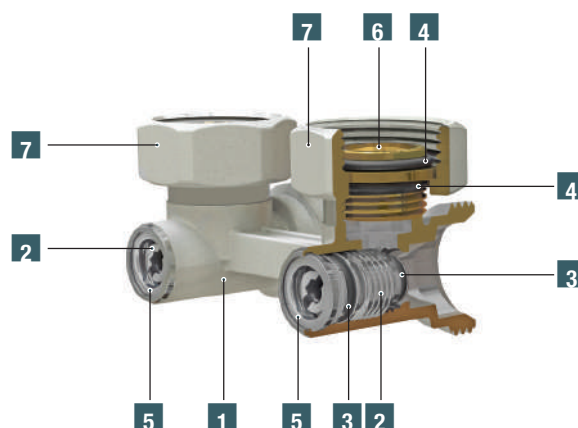
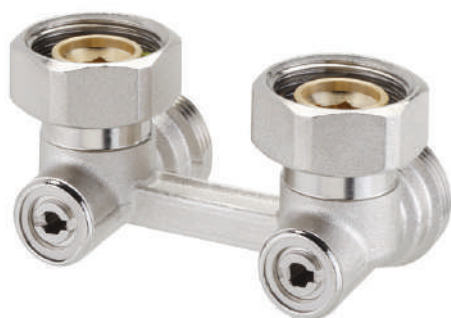
Radio frequency programmable thermostat + Electronic radio frequency programmable thermostatic actuators



Use on centralized radiator system

H valves

Manually H valves



Application

These valves can be used to connect the radiator to the heating water system.

The connection has a standard distance of 50 mm between flow and return. The radiator isolation is possible using the shut-off mechanism incorporated. Are available the straight version and the 90 ° version.

Technical data

Takeoffs: 50 mm

Max operating pressure: 10 bar - Max differential pressure: 6 bar

Max operating temperature: 100 °C - Connections to the plant: 3/4" Ek

Construction

- 1 Body made brass UNI EN 12165 CW617N with nickel finish
- 2 Shutter in brass UNI EN 12164 CW614N with nickel finish
- 3 O-Ring for shutter steadying in EPDM
- 4 O-Ring in EPDM
- 5 Brass ring UNI EN 12164 CW614N with nickel finish
- 6 Flanged brass ring UNI EN 12164 CW614N
- 7 Nut in brass UNI EN 12165 CW617N with nickel finish

Dimensions: see section Technical Attachments



Straight manually H valves, with adapter

Dimension	Pcs. pack	Code	Price €/pc.
3/4" x 1/2"	2	01306954	19,05



Straight manually H valves

Dimension	Pcs. pack	Code	Price €/pc.
3/4" x 3/4"	2	01306956	15,14



Right-angle manually H valves, with adapter

Dimension	Pcs. pack	Code	Price €/pc.
3/4" x 1/2"	2	01308230	22,68



Right-angle manually H valves

Dimension	Pcs. pack	Code	Price €/pc.
3/4" x 3/4"	2	01308240	18,48



Pair of adapters 3/4" Eurocone x 1/2" Male

Dimension	Pcs. pack	Code	Price €/pair
3/4" M x 1/2" M	2	01306626	6,18

Bleed valves



Bleed valves

Dimension	Pcs. pack	Code	Price €/pc.
3/8"	10	00410019	1,85
1/2"	10	00410021	1,61
1/4"	10	00410017	1,76
1/2"	1	00410121	2,57



Key for operating bleed valves

Dimension	Pcs. pack	Code	Price €/pc.
	1	00408330	1,15

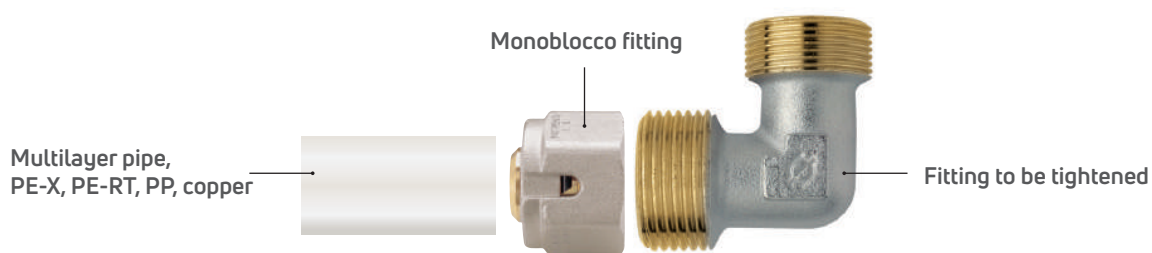
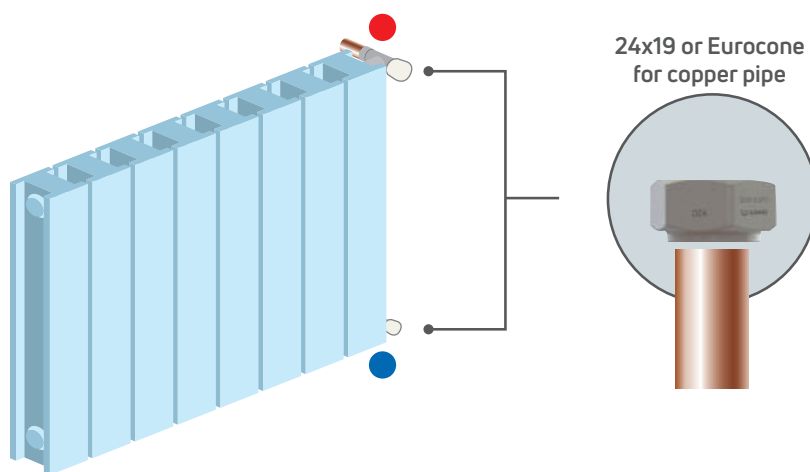
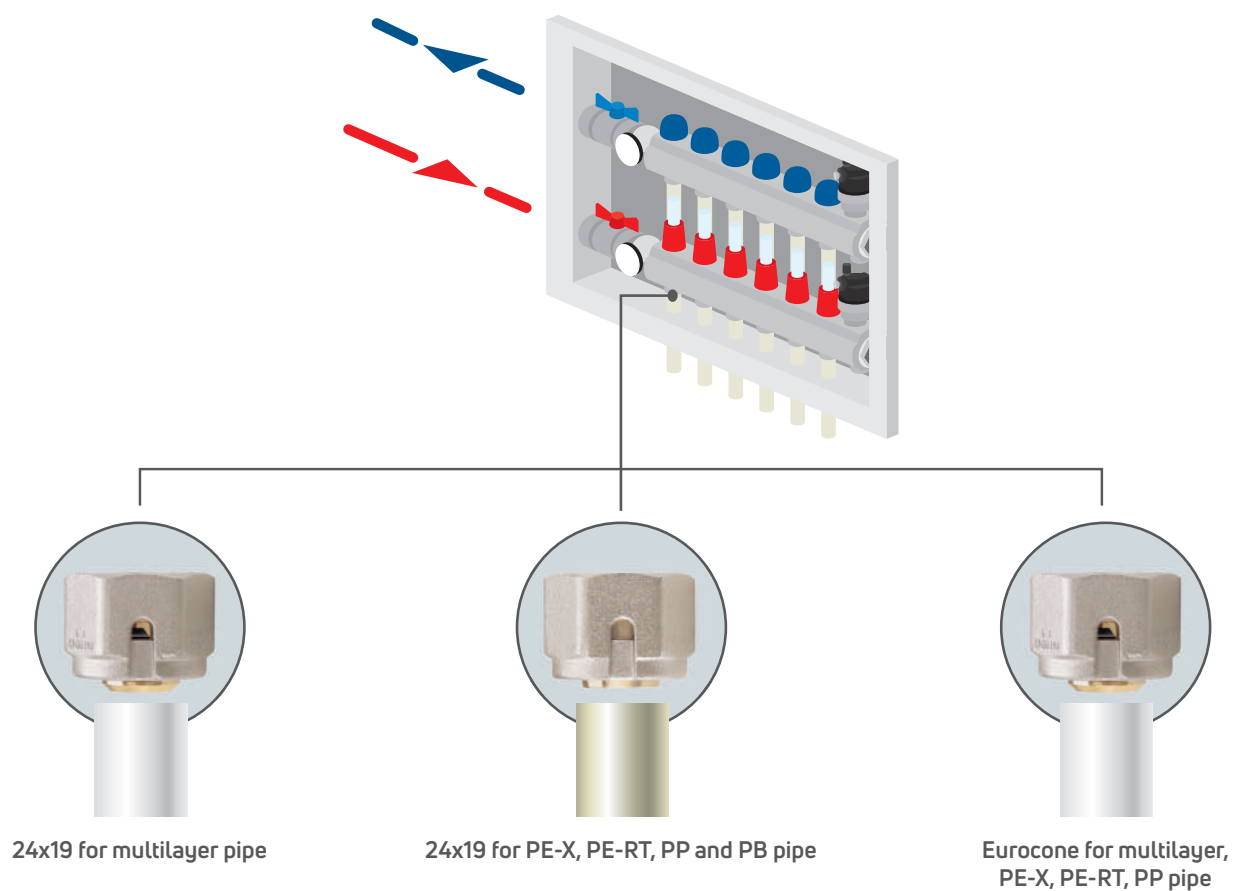
Seales and screw fittings



- > Monoblocco 2.0 fitting 24x19 for copper pipe, for water    **331**
- > Fitting to be tightened 3/4" Eurocone for copper pipes for water    **331**
- > Monoblocco 2.0 fitting 24x19 for copper pipe, for gas   **332**
- > Monoblocco fitting 24x19 for Multilayer pipe    **333**
- > Monoblocco fitting 3/4" Eurocone for Multilayer pipe    **334**
- > Monoblocco fitting 24x19 for PE-X, PE-RT, PP and PB    **335**
- > Monoblocco fitting 3/4" Eurocone for PE-X and PE-RT    **335**
- > 3-pieces fitting for PE-X, PE-RT and Multilayer    **337**
- > Accessories for Monoblocco    **338**
- > Fittings to be tightened    **339**
- > Eco - screw compression fittings    **342**

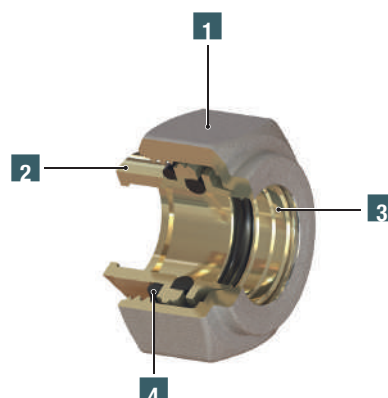


Example of installation



Monoblocco 2.0 fittings for copper pipe for water

Monoblocco 2.0 fitting 24x19 for copper pipe, for water



Construction

- 1 Nut in nickel-plated brass UNI EN 12165 CW617N
- 2 Adapter with limit switch in brass UNI EN 12164 CW617N-DW
- 3 Brass hose clamp ring UNI EN 12164 CW617N
- 4 O-ring seals in NBR Sh 70 EN 681

Operating conditions (UNI EN 1254-2)

Maximum operating pressures as a function of temperatures:

- p_{max} for operating T up to 30 °C: 25 bar (for diameters from 10 to 15 mm), 16 bar (for diameter 16 mm)
- p_{max} for operating T from 31 °C to 65 °C: 25 bar (for diameters from 10 to 15 mm), 13 bar (for diameter 16 mm)
- p_{max} for operating T from 66 °C to 95 °C: 16 bar (for diameters from 10 to 15 mm), 10 bar (for diameter 16 mm)

PATENT PENDING

Monoblocco 2.0 fitting 24x19 for copper pipe, for water



PATENT PENDING

Monoblocco 2.0 fitting for copper pipe, nickel-plated, for water

Dimension	Thread	Tightening torque (Nm)	Pcs. pack	Code	Price €/pc.
10	24x19	40	20	01321810	4,73
12	24x19	40	20	01321812	3,84
14	24x19	40	20	01321814	4,54
15	24x19	40	20	01321815	3,30
16	24x19	40	20	01321816	3,44
18 standard fitting	24x19	50÷55	20	01321320	3,16
Monoblocco blind fitting (plug)	24x19	30÷35	20	01321462	3,38

Fitting 3/4" Eurocone for copper pipes, for water



Fitting 3/4" Eurocone for copper pipes, for water

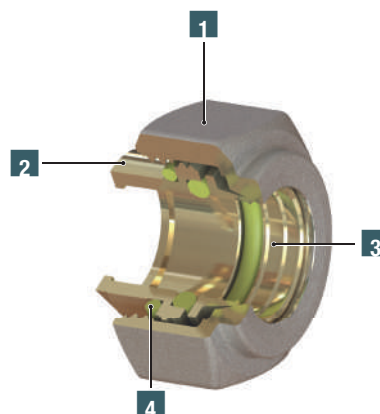
Nut in nickel-plated brass UNI EN 12165 CW617N -
Adaptor UNI EN 12164 CW614N - Hose-clamp in EPDM peroxide
Maximum pressure: 10 bar - Maximum temperature: 120°C

Dimension	Thread	Tightening torque (Nm)	Pcs. pack	Code	Price €/pc.
12	3/4" Eurocone	35÷45 (*) / 60÷80 (**)	2	01321512	5,46
14	3/4" Eurocone	35÷45 (*) / 60÷80 (**)	2	01321514	5,46
15	3/4" Eurocone	35÷45 (*) / 60÷80 (**)	2	01321515	5,22
16	3/4" Eurocone	35÷45 (*) / 60÷80 (**)	2	01321516	4,54

(*) Annealed copper tube
(**) Semi-hard copper tube

Monoblocco 2.0 fittings for copper pipe for gas

Monoblocco 2.0 fitting 24x19 for copper pipe, for gas



Construction

- 1 Nut in nickel-plated brass UNI EN 12165 CW617N
- 2 Adapter with limit switch in brass UNI EN 12164 CW617N-DW
- 3 Brass hose clamp ring UNI EN 12164 CW617N
- 4 O-ring seals in HNBR yellow Sh 70 EN 682 - EN 549

Operating conditions (UNI EN 1254-2)

Operating temperature: $-20 \div 70^{\circ}\text{C}$
Operating pressure: GT 5 / MOP 5

PATENT PENDING

Note

Monoblocco fittings must only be used with screw fittings or gas-use manifolds manufactured by Emmeti, with 24x19 thread, verifying applicability in compliance with national regulations.



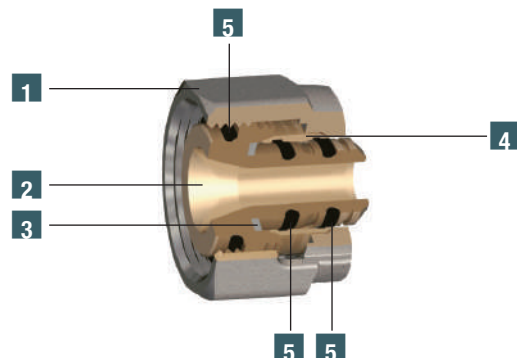
Monoblocco 2.0 fitting 24x19 for copper pipe, for gas

Dimension	Maximum torque (Nm)	Pcs. pack	Code	Price €/pc.
14	40	20	01321914	5,43
15	40	20	01321915	4,48
16	40	20	01321916	4,56
Blind Monoblocco 24x19 with O-ring		20	01321460	3,29

PATENT PENDING

Monoblocco fittings for multilayer pipe

Monoblocco fitting 24x19 and Eurocone for multilayer pipe



Construction

- 1 Nut in nickel-plated brass UNI EN 12165 CW617N
- 2 Adapter in brass UNI EN 12164 CW614N-DW
- 3 Washer in PTFE, dielectric
- 4 Serrated hose-clamp, cut brass UNI EN 12164 CW614N
- 5 O-ring seals in EPDM

Maximum torque:

- Ø 12 - Ø 20 with nut 24x19 CH27: 30÷35 Nm
- Ø 12 - Ø 16 with nut 3/4" EK: 30÷35 Nm
- Ø 20 with nut 3/4" EK: 40÷45 Nm
- Ø 26x3: 55÷60 Nm
- Ø 32x3: 40÷50 Nm

For the conditions of use of the seal (pressure and temperature), refer to the application classes of the pipe combined with it (ref. UNI EN ISO 21003-1).

PATENT PENDING



PATENT PENDING

24x19 fitting for multilayer pipe, nickel-plated

Dimension	Thread	Pcs. pack	Code	Price €/pc.
12 x 1,6	24x19	20	28100355	7,56
14 x 2	24x19	20	28100356	5,33
16 x 2	24x19	50	28100358	4,89
16 x 2,25	24x19	20	28100360	4,98
18 x 2	24x19	50	28100364	4,98
20 x 2	24x19	50	28100366	4,89
20 x 2,5	24x19	20	28110218	7,53
26 x 3	M32x1,5	8	28100368	10,03

Pair of clamp fittings for multilayer pipe

Construction characteristics:

- body in nickel-plated brass UNI EN 12165 CW617N
- thread G (UNI EN ISO 228-1)
- 46 mm nut spanner



Dimension	Thread	Pcs. pack	Code	Price €/pair
32 x 3	1" M with O-ring	1	27180620	61,66
32 x 3	1" F	1	27180622	66,09

Monoblocco fittings for multilayer pipes



Fitting Female 24x19 - Male M32x1,5

Dimension	Pcs. pack	Code	Price €/pc.
24x19 - M32x1,5	10	01306252	13,08

Complete with O-Ring and adapter female side



Straight Male fitting 1/2" - M32x1,5

Dimension	Pcs. pack	Code	Price €/pc.
1/2" - M32x1,5	10	01306250	8,69

Complete with O-Ring

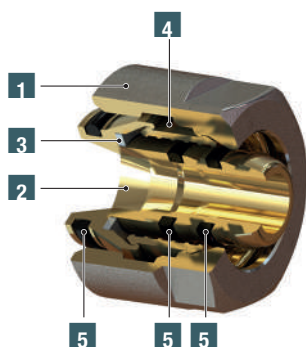


Monoblocco 2.0 fitting 3/4" Eurocone

Construction

- 1 Nut in nickel-plated brass UNI EN 12165 CW617N
- 2 Adapter in brass UNI EN 12164 CW617N
- 3 Washer in PTFE, dielectric
- 4 Serrated hose-clamp in brass UNI EN 12164 CW614N
- 5 O-ring seals EPDM

Dimension	Thread	Pcs. pack	Code	Price €/pc.
16 x 2 (with o-ring)	3/4" Eurocone	10	28110606	5,28



PATENT PENDING



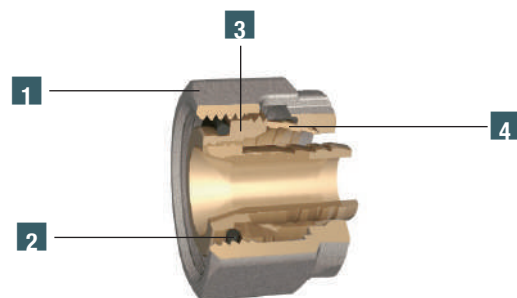
Monoblocco fitting 3/4" Eurocone

Dimension	Thread	Pcs. pack	Code	Price €/pc.
20 x 2	3/4" Eurocone	10	28100798	7,29

PATENT PENDING

Monoblocco fittings for plastic pipe

Monoblocco fitting 24x19 and Eurocone for plastic pipe PE-X, PE-RT, PP, PB



Construction

- 1 Nut in nickel-plated brass UNI EN 12165 CW617N
- 2 O-ring seals in EPDM
- 3 Adapter in brass UNI EN 12164 CW617N-DW
- 4 Serrated hose-clamp in brass UNI EN 12164 CW614N

Maximum torque:

- Ø 12 - Ø 20 with nut 24x19: 30÷35 Nm
- Ø 12 - Ø 16 with nut 3/4" EK: 30÷35 Nm
- Ø 17 - Ø 20 with nut 3/4": 35÷40 Nm
- Ø 25x2,3: 55÷60 Nm

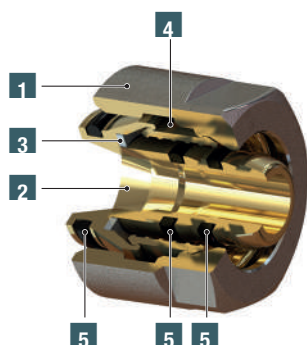
For the conditions of use of the seal (pressure and temperature), refer to the application classes of the pipe combined with it (ref. UNI EN ISO 21003-1 for pipes type PE-Xc PENTA; UNI EN ISO 15875-1 for pipes type PE-Xc and PE-Xa; UNI EN ISO 22391-1 for pipes type PE-RT).



PATENT PENDING

Monoblocco fitting 24x19 for plastic pipe PE-X, PE-RT, PP

Dimension	Thread	Pcs. pack	Code	Price €/pc.
12 x 1	24x19	20	28110100	6,26
12 x 2	24x19	20	28110106	6,26
15 x 1,7	24x19	20	28110112	6,09
16 x 1,5	24x19	20	28110116	6,19
16 x 2	24x19	20	28110118	5,78
16 x 2,2	24x19	20	28110120	5,80
17 x 2	24x19	20	28110122	5,80
20 x 2	24x19	20	28110446	6,07
25 x 2,3	M32 x 1,5	8	28100382	11,44



Monoblocco 2.0 3/4" Eurocone fitting for plastic PE-X and PE-RT pipe

Construction

- 1 Nut in nickel-plated brass UNI EN 12165 CW617N
- 2 Adapter in brass UNI EN 12164 CW617N
- 3 Washer in PTFE, dielectric
- 4 Serrated hose-clamp in brass UNI EN 12164 CW614N
- 5 O-ring seals EPDM

Dimension	Thread	Pcs. pack	Code	Price €/pc.
16 x 2 (with o-ring)	3/4" Eurocone	10	28110606	5,28
17 x 2 (with o-ring)	3/4" Eurocone	10	28110608	5,23

PATENT PENDING

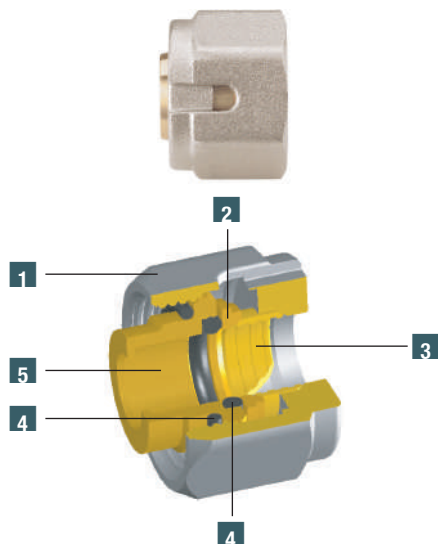
Monoblocco fittings for plastic pipe



PATENT PENDING

Monoblocco 3/4" Eurocone fitting for plastic, PE-X and PE-RT pipe

Dimension	Thread	Pcs. pack	Code	Price €/pc.
12 x 2 (with o-ring)	3/4" Eurocone	10	28100788	8,43
20 x 2 (with o-ring)	3/4" Eurocone	10	28100798	7,29



PATENT PENDING

Monoblocco fitting 24x19 for plastic pipe PB

Construction

- 1 Nut in nickel-plated brass UNI EN 12165 CW617N
- 2 Collar in brass UNI EN 12164 CW614N
- 3 Serrate hose-clamp, cut, in brass UNI EN12164 CW614N
- 4 O-ring seal in EPDM
- 5 Adapter in brass UNI EN 12164 CW617N

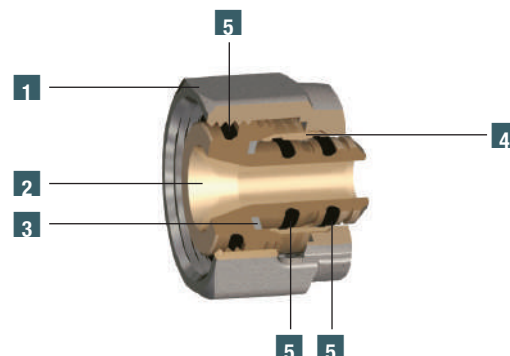
Dimension	Pcs. pack	Code	Price €/pc.
Ø 15 (*)	50	28100330	4,63

(*) Polybutylene

When using Emmeti compression fittings for Polybutylene pipe, please ensure you use the plastic pipe insert provided for by the manufacturer of the pipe you are using.

3-pieces fitting

3-pieces fittings for PE-X and Multilayer pipe



Construction

- 1 Nut in nickel-plated brass UNI EN 12165 CW617N
- 2 Adapter in brass UNI EN 12164 CW617N
- 3 Washer in PTFE, dielectric
- 4 Serrated hose-clamp in brass UNI EN 12164 CW614N
- 5 O-ring seals EPDM

Maximum torque:
Ø 12 - Ø 17: 30÷35 Nm

For the conditions of use of the seal (pressure and temperature), refer to the application classes of the pipe combined with it (ref. UNI EN ISO 21003-1 for pipes type Multilayer and PE-Xc PENTA; UNI EN ISO 15875-1 for pipes type PE-Xa; UNI EN ISO 22391-1 for pipes type PE-RT).



3-piece fittings 24x19 for PE-X, PE-RT and Multilayer pipe

Dimension	Thread	Pcs. pack	Code	Price €/pc.
12 x 2	24x19	20	28110502	7,93
14 x 2	24x19	20	28110504	5,67
16 x 2 (*)	24x19	20	28110506	4,93
17 x 2 (*)	24x19	20	28110508	4,40

(*) Items to be out of stock



3-pieces fittings 3/4" Eurocone for PE-X, PE-RT and Multilayer pipe

Dimension	Thread	Pcs. pack	Code	Price €/pc.
12 x 2	3/4" Eurocone	10	28110788	8,00
14 x 2	3/4" Eurocone	10	28110790	6,08
17 x 2 (*)	3/4" Eurocone	10	28110794	5,55

(*) Item to be out of stock

Accessories for Monoblocco



Polygonal spanner, open type CH 27 - 30

Dimension	Pcs. pack	Code	Price €
CH 27-30	1	01306058	119,50



Spanner for tightening derivations CH 27 usable for pipes up to DN 18

Dimension	Pcs. pack	Code	Price €
CH 27	1	01306051	12,47



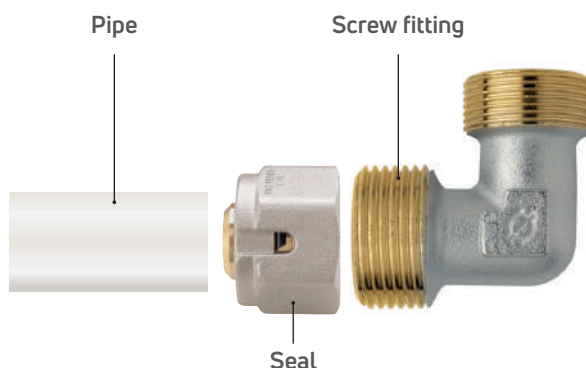
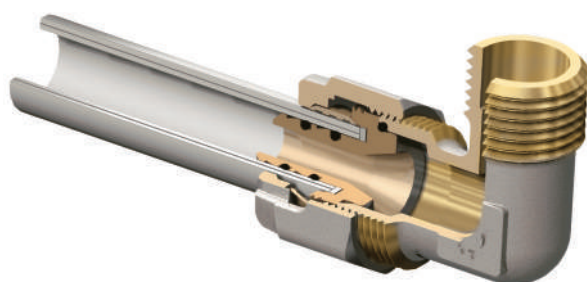
CH 38 spanner for multilayer Monoblocco fittings 26x3

Dimension	Pcs. pack	Code	Price €
	1	28171002	191,30

To be used for the tightening of the single-piece fittings for multilayer pipe 26x3 on the branches of manifolds with interval of 50 mm

Fittings to be tightened

Screw fittings for copper, plastic or multilayer pipes



PATENT PENDING

Uses

The use of the screw pipe fittings makes installing the pipe very easy, and moreover it requires very few tools.

The 24x19 and M32x1,5 threading allows for a single type of fitting which can be matched with Emmeti seals 24x19 and M32x1,5 Emmeti, for copper pipe, multilayer pipe or PE-X, PE-RT, PP, PB, rationalizing the warehouse.

Construction

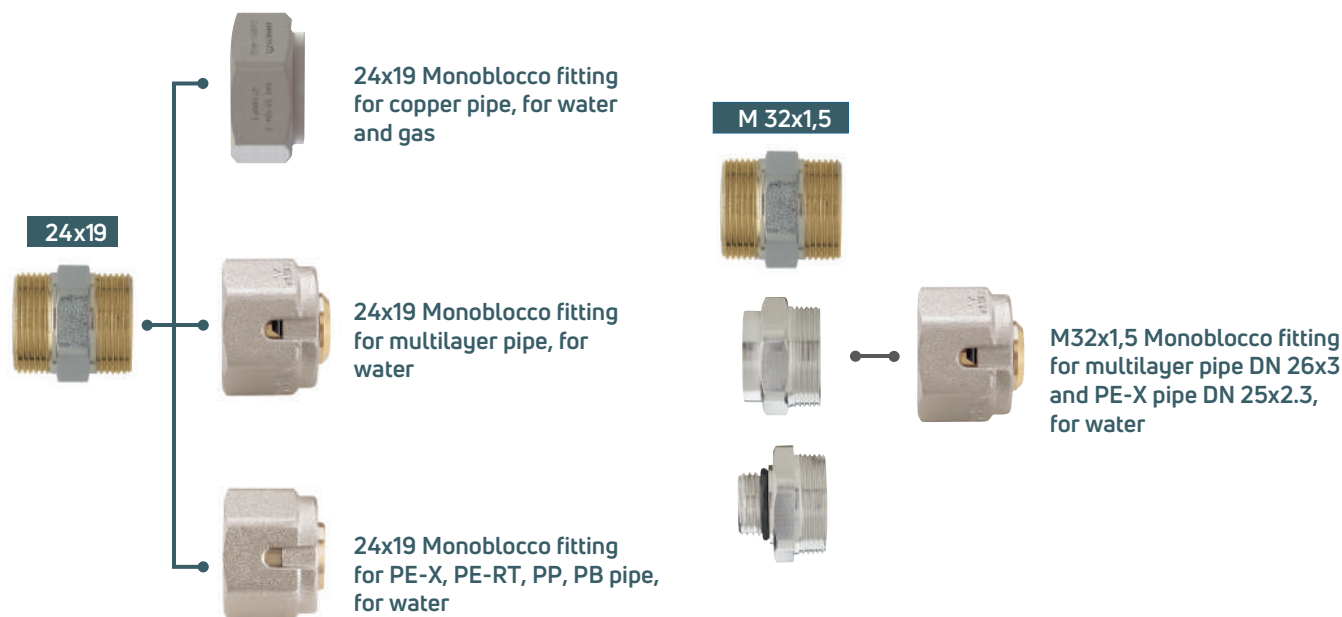
Body UNI EN 12165 CW617N**

Female - Male connection

Thread gas ISO 228/1 (DIN 259)

** Nickel-plated only on surface non in contact with fluides.

24x19 and M32x1,5 thread connect copper pipe, plastic or multilayer, using a standard fitting that is mated to the specific seal for the pipe being used.



The seals for multilayer pipes, PE-X, PP, PB are equipped with an opening on the nut to check the correct insertion of the pipe up to the stop point.



PATENT PENDING

Straight female joint, nickel -plated

Dimension	Thread	Pcs. pack	Code	Price €/pc.
1/2"	24x19	20	28103000	2,61
3/4"	24x19	14	28103010	4,02
3/4"	M32x1,5	10	28103020	4,46
1"	M32x1,5	8	28103030	5,12



PATENT PENDING

Straight male joint, nickel-plated

Dimension	Thread	Pcs. pack	Code	Price €/pc.
1/2"	24x19	20	28103040	2,69
3/4"	24x19	14	28103050	3,87
3/4"	M32x1,5	10	28103060	4,46
1"	M32x1,5	10	28103070	4,79

Screw fittings



Straight joint double jointed nickel-plated

Dimension	Pcs. pack	Code	Price €/pc.
24 x 19	20	28103080	2,71
M32 x 1,5	10	28103090	4,65

PATENT PENDING



Fitting Female 24x19 - Male M32x1,5

Dimension	Pcs. pack	Code	Price €/pc.
24x19 - M32x1,5	10	01306252	13,08

Complete with O-Ring and adapter female side



Straight Male fitting 1/2" - M32x1,5

Dimension	Pcs. pack	Code	Price €/pc.
1/2" - M32x1,5	10	01306250	8,69

Complete with O-Ring



Female elbow joint nickel-plated

Dimension	Thread	Pcs. pack	Code	Price €/pc.
1/2"	24x19	10	28103100	4,64
3/4"	24x19	8	28103110	5,76
3/4"	M32x1,5	6	28103120	7,12
1"	M32x1,5	4	28103130	8,96

PATENT PENDING



Male elbow joint nickel-plated

Dimension	Thread	Pcs. pack	Code	Price €/pc.
1/2"	24x19	10	28103140	4,31
3/4"	24x19	10	28103150	5,11
3/4"	M32x1,5	8	28103160	6,27
1"	M32x1,5	5	28103170	8,31

PATENT PENDING



Double-jointed elbow nickel-plated

Dimension	Pcs. pack	Code	Price €/pc.
24 x 19	10	28103180	4,38
M32 x 1,5	6	28103190	6,60

PATENT PENDING

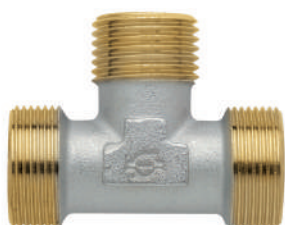
Screw fittings



PATENT PENDING

TEE joint female nickel-plated

Dimension	Thread	Pcs. pack	Code	Price €/pc.
1/2"	24x19	8	28103200	5,47
3/4"	24x19	5	28103210	7,21



PATENT PENDING

TEE-joint male nickel-plated

Dimension	Thread	Pcs. pack	Code	Price €/pc.
1/2"	24x19	8	28103240	5,32
3/4"	24x19	6	28103250	6,69



PATENT PENDING

TEE-joint three-piece nickel-plated

Dimension	Pcs. pack	Code	Price €/pc.
24x19	8	28103280	5,03

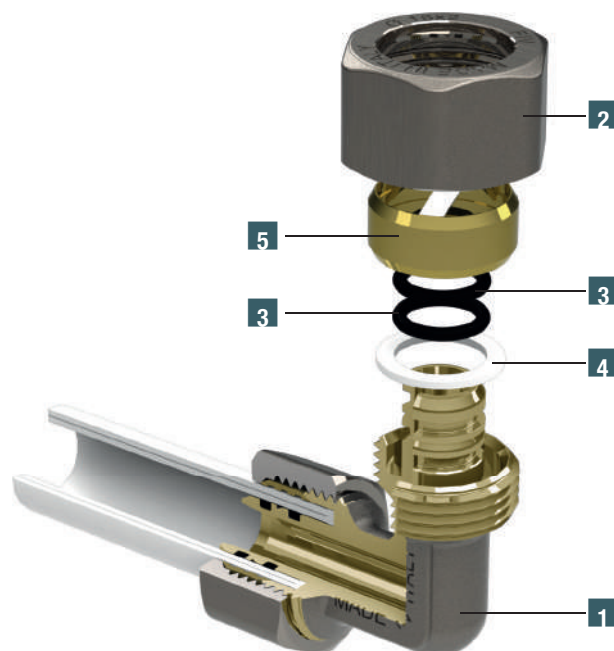


PATENT PENDING

Elbow joint female with flange nickel-plated

Dimension	Thread	Pcs. pack	Code	Price €/pc.
1/2"	24x19	6	28103300	6,47

Screw compression fittings for multilayer pipe



Construction

- 1 CW617N (UNI EN 12165) and CW614N (UNI EN 12164) brass body*
- 2 Nut in nickel plated brass UNI EN 12165 CW617N
- 3 EPDM peroxide 70 SH double o-ring
- 4 Washer PTFE
- 5 Ogive

* Nickel-plating only on surfaces non in contact with transported fluids.

Technical data

"Eco" fittings allow quick, safe installation with less equipment. The items are equipped with two o-rings in EPDM that ensure the seal along with the sawtooth profile on the hose connection itself, plus a ring in PTFE to eliminate any stray currents.

Suitability for potable water

"Eco" screw compression fittings comply with Italian Ministry of Health Decree no. 174 dated 06/04/2004.



Straight female joint, nickel-plated

Dimension	Pcs. pack	Code	Price €/pc.
1/2" x 16	150	27180500	4,52
1/2" x 20	100	27180502	6,72
3/4" x 20	60	27180504	7,25
3/4" x 26	50	27180570	13,84
1" x 26	50	27180572	14,62



Straight male joint, nickel-plated

Dimension	Pcs. pack	Code	Price €/pc.
1/2" x 16	150	27180506	4,35
1/2" x 20	100	27180508	6,76
3/4" x 20	100	27180510	6,60
3/4" x 26	50	27180578	13,65
1" x 26	50	27180580	13,70

Screw compression fittings for multilayer pipes



Elbow female joint, nickel-plated

Dimension	Pcs. pack	Code	Price €/pc.
1/2" x 16	100	27180512	5,63
1/2" x 20	60	27180514	9,13
3/4" x 20	60	27180516	10,93
3/4" x 26	40	27180582	17,40



Elbow male joint, nickel-plated

Dimension	Pcs. pack	Code	Price €/pc.
1/2" x 16	100	27180518	5,22
1/2" x 20	60	27180520	8,11
3/4" x 20	60	27180522	10,80
3/4" x 26	40	27180584	15,82



Female elbow joint with flange, nickel-plated

Dimension	Pcs. pack	Code	Price €/pc.
1/2" x 16	50	27180524	8,20
1/2" x 20	30	27180526	9,59



Intermediate Tee joint with female branching, nickel-plated

Dimension	Pcs. pack	Code	Price €/pc.
16 x 1/2" x 16	50	27180530	9,00
20 x 1/2" x 20	30	27180532	14,19
20 x 3/4" x 20	30	27180534	13,19
26 x 3/4" x 26	20	27180588	24,18



Straight intermediate joint, nickel-plated

Dimension	Pcs. pack	Code	Price €/pc.
16 x 16	100	27180536	7,20
20 x 20	50	27180538	10,85
26 x 26	30	27180574	19,93



Straight intermediate reduced joint, nickel-plated

Dimension	Pcs. pack	Code	Price €/pc.
16 x 20	70	27180540	10,19
20 x 26	50	27180576	17,10

Screw compression fittings for multilayer pipes



Intermediate elbow joint, nickel-plated

Dimension	Pcs. pack	Code	Price €/pc.
16 x 16	100	27180542	7,47
20 x 20	60	27180544	12,21
26 x 26	30	27180586	23,08



Intermediate Tee joint, nickel-plated

Dimension	Pcs. pack	Code	Price €/pc.
16 x 16 x 16	50	27180546	10,73
20 x 20 x 20	30	27180548	17,54
26 x 26 x 26	20	27180590	30,05



Intermediate reduced Tee joint, nickel-plated

Dimension	Pcs. pack	Code	Price €/pc.
16 x 20 x 16	30	27180550	15,81
16 x 20 x 20	30	27180552	16,29
26 x 20 x 26	20	27180592	30,11



Intermediate Tee joint with male branching, nickel-plated

Dimension	Pcs. pack	Code	Price €/pc.
16 x 1/2" x 16	50	27180554	8,85
20 x 1/2" x 20	30	27180556	13,85
20 x 3/4" x 20	30	27180558	13,45



105° female joint, nickel-plated

Dimension	Pcs. pack	Code	Price €/pc.
1/2" x 16 (*)	50	27180560	8,94

(*) Item to be out of stock



105° long female joint, nickel-plated

Dimension	Pcs. pack	Code	Price €/pc.
1/2" x 16 (*)	50	27180562	13,52

(*) Item to be out of stock

Screw compression fittings for multilayer pipes

Spare parts for screw compression fittings Eco



Nut with 1/2" connection, nickel-plated

Dimension	Pcs. pack	Code	Price €/pc.
16	5	27180600	1,14
20	10	27180602	1,51
26	5	27180603	3,23



Ogive

Dimension	Pcs. pack	Code	Price €/pc.
16	20	27180604	0,50
20	10	27180606	0,76
26	5	27180607	1,18

Valves, bibcocks, detectors and accessories for gas



> Ball valves for gas



349

> Futurgas
interception valve
with first inlet manifold for gas



352

> Futurgas
ball valves for gas
with safety lock



353

> Gaslock
recessed ball valve for gas



354

> Controlgas 4
gas leak detector



358

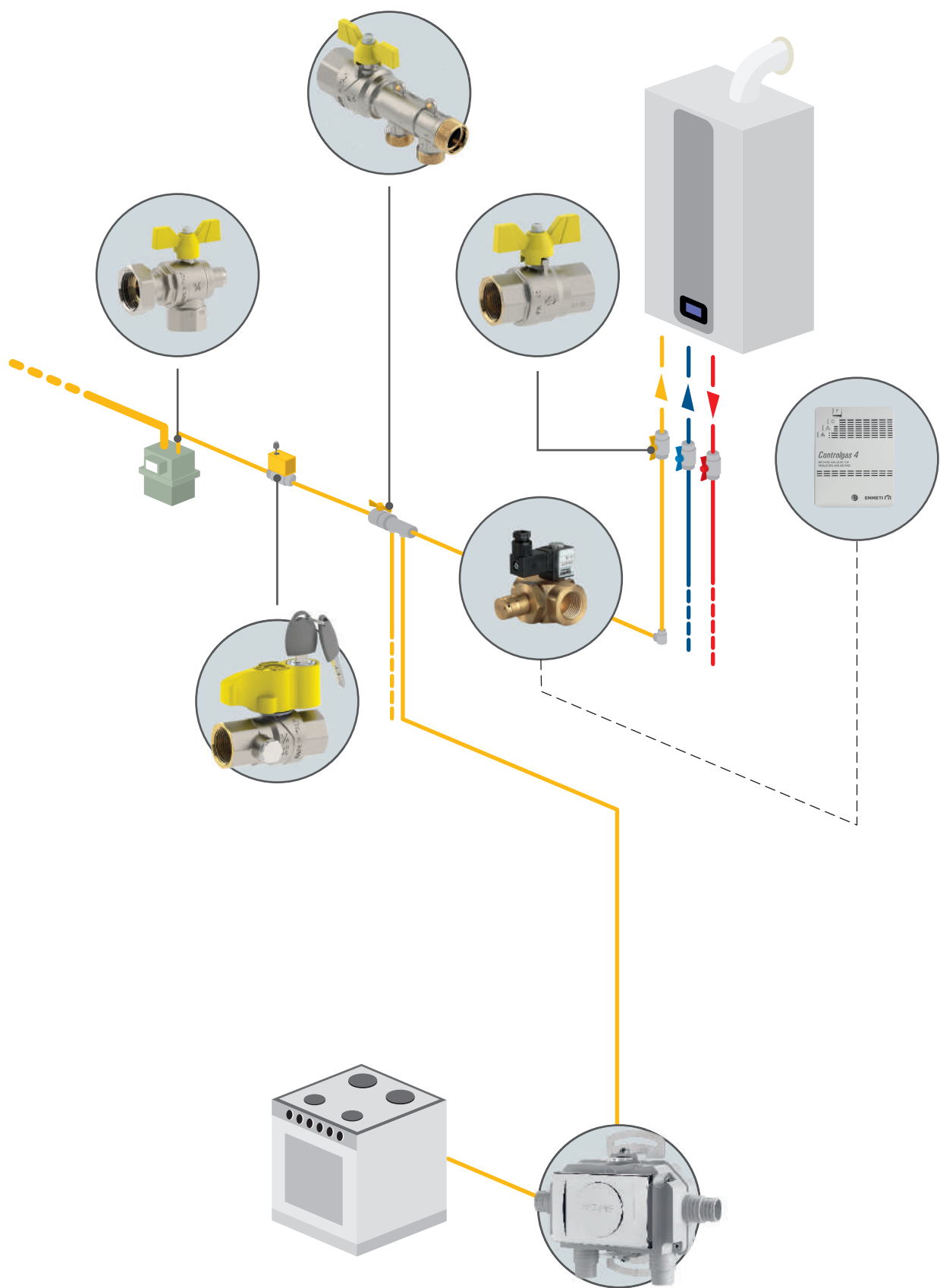
> Solenoid valves for gas



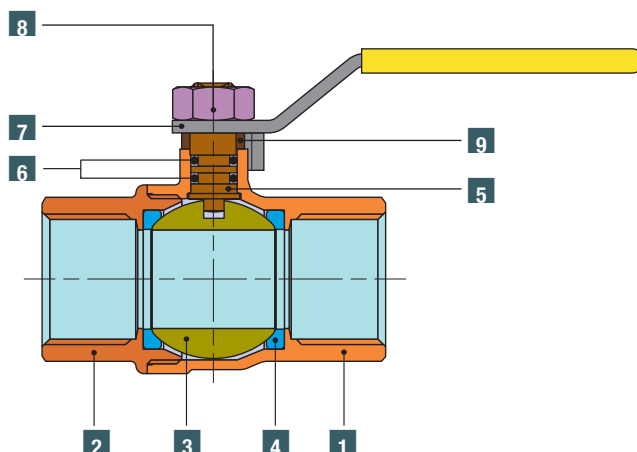
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Example of installation



Ball valves for gas



Construction

- 1 Valve body made brass UNI EN 12165 CW617N nickel finish
- 2 End connection nickel-plated brass UNI EN 12165 CW617N
- 3 Ball hard chromed brass UNI EN 12165 CW617N
- 4 Ball seal in pure P.T.F.E.
- 5 Stem brass UNI EN 12164 CW617N
- 6 Rod seal o-ring NBR 70 Sh A (AS™D 2240)
- 7 Handle zinc-plated steel, plastified
- 8 Nut zinc-plated steel
- 9 Anti-friction ring P.T.F.E.

Technical data

Male - Female thread UNI EN 10226-1 (ISO 7/1:1994)
 Nut, tang and pressure connection thread UNI EN ISO 228-1
 Max operating pressure MOP 5
 Class of resistance to high temperatures: B0,1
 Temperature range: from -20 to +60 °C
 Ball valves must be used in fully open or fully close position.



Futurgas Female-Female lever handle

Dimension	Pcs. pack	Code	Price €/pc.
1/2"	16	09813500	10,25
3/4"	12	09813502	15,22
1"	6	09813504	24,77
1"1/4	4	09813506	37,73
1"1/2	1	09813508	60,06
2"	3	09813510	88,39



[UNI EN 331]



Futurgas Male-Female lever handle

Dimension	Pcs. pack	Code	Price €/pc.
1/2"	16	09813512	11,05
3/4"	12	09813514	15,92
1"	6	09813516	27,25
1"1/4	4	09813518	39,29
1"1/2	1	09813520	60,06
2"	3	09813522	95,87



[UNI EN 331]



Futurgas Female-Female butterfly handle

Dimension	Pcs. pack	Code	Price €/pc.
1/2"	16	09813524	9,88
3/4"	12	09813526	14,43
1"	6	09813528	23,98
1"1/4	4	09813530	37,73



[UNI EN 331]

Futurgas - Ball valves for gas



[UNI EN 331]

Futurgas Male-Female butterfly handle

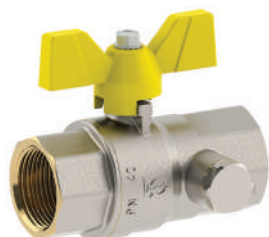
Dimension	Pcs. pack	Code	Price €/pc.
1/2"	16	09813532	10,36
3/4"	12	09813534	15,12
1"	6	09813536	24,77
1 1/4"	4	09813538	39,29



[UNI EN 331]

Futurgas Female-Revolving nut butterfly handle

Dimension	Pcs. pack	Code	Price €/pc.
1/2" F x 3/4" G	16	09813540	15,82
3/4" F x 3/4" G	12	09813542	21,20



[UNI EN 331]

Futurgas Female-Female with pressure connection G 1/4 and butterfly handle

Dimension	Pcs. pack	Code	Price €/pc.
1/2"	6	09813544	17,60
3/4"	5	09813546	22,82
1"	6	09813548	32,95



[UNI EN 331]

Futurgas Female-Revolving nut with pressure connection G 1/4 and butterfly handle

Dimension	Pcs. pack	Code	Price €/pc.
3/4" F x 1" G	2	09813550	29,67
1" F x 1 1/4" G	1	09813552	41,45



[UNI EN 331]

Right-angle Futurgas Female Female butterfly handle

Dimension	Pcs. pack	Code	Price €/pc.
1/2"	18	09813000	13,85
3/4"	12	09813002	20,04
1"	6	09813004	30,96

Futurgas - Ball valves for gas



Right-angle Futurgas Female Male butterfly handle

Dimension	Pcs. pack	Code	Price €/pc.
1/2"	18	09813006	13,77
3/4"	12	09813008	20,04
1"	6	09813010	31,38



[UNI EN 331]



Right-angle Futurgas Male Male butterfly handle

Dimension	Pcs. pack	Code	Price €/pc.
1/2"	18	09813012	13,81
3/4"	12	09813014	20,04



[UNI EN 331]



Right-angle Futurgas Female Swivel union butterfly handle

Dimension	Pcs. pack	Code	Price €/pc.
1/2" F x 3/4" G	14	09813016	17,60
3/4" F x 3/4" G	10	09813018	23,54



[UNI EN 331]



Right-angle Futurgas Male Swivel union butterfly handle

Dimension	Pcs. pack	Code	Price €/pc.
1/2" M x 3/4" G	14	09813020	18,52
3/4" M x 1" G	8	09813022	23,98
1" M x 1 1/4" G	4	09813024	37,73



[UNI EN 331]



Right-angle Futurgas Female-Female with pressure connection G 1/4 and butterfly handle

Dimension	Pcs. pack	Code	Price €/pc.
3/4"	2	09813026	27,25
1"	1	09813028	36,83



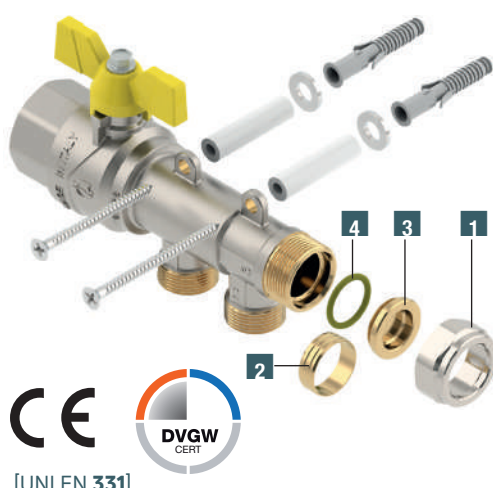
[UNI EN 331]

Futurgas - Ball valves for gas



Right-angle Futurgas Female-Revolving nut with pressure connection G 1/4 and butterfly handle

Dimension	Pcs. pack	Code	Price €/pc.
3/4" F x 1" G	2	09813030	31,98
1" F x 1" 1/4 G	1	09813032	43,77



Valve with manifold first inlet

Collector with integrated shut-off valve with 1" F inlet / two 24x 19M branches / one M28x1.5 branch, suited for creating joints inside the rooms, which can be exposed and have a shut-off, in compliance with UNI 7129.

The pack includes:

- Screws, plugs and spacers for wall-mounted installation.
- Nut M28x1.5 (1) that can be used with the brass ogive (2) supplied for connection to copper piping Ø22 mm, or with the blind adapter D22 (3) and relative o-ring in HNBR 18x2.5 (4) provided in order to seal the outlet if not used.

Note: fitting seals, see gas monobloc section

Dimension	Pcs. pack	Code	Price €/pc.
1" F	1	09812566	67,27

Lateral branches: 24x19 Male
Head branch: M28 x 1.5

Threads 1": Rp (UNI EN 10226-1)



Straight with female swivel nut, o-ring fitting

Dimension	Profile	Pcs. pack	Code	Price €/pc.
Ø 26 - M 28 x 1,5	B (KSP1) / TH (KSP11)	2	28125250	22,91

Fitting accessory for derivation M28x1,5 alve with manifold first inlet



Female cap 24x19 for gas

Dimension	Pcs. pack	Code	Price €/pc.
Female cap 24x19	20	01321460	3,29

Fitting to be used to plug the 24x19 male branches of the valve with first inlet manifold.



Built-in box for valve with gas manifold first inlet

Dimension	Pcs. pack	Code	Price €/pc.
264x164x110	1	13010000	33,96

Items inside the package:

- 4 adjustable extension cables for DN16 - DN18 - DN20 - DN26 - DN32 pipes
- 2 M4x50 screws with relative washers and nuts

Dimensions: see section Technical Attachments



UNI 10284

Dielectric joints Male - Female for gas

Electrical resistance in dry air > 5 MOhm - Insulation voltage in dry air > 3000 V - Operating pressure 10 bar - Operating temperature -10÷70 °C - Certified for operating at 15 bar

Dimension	Pcs. pack	Code	Price €/pc.
1/2"	5	02460012	39,66
3/4"	6	02460020	39,66
1"	3	02460025	45,76
1"1/4	2	02460032	68,76
1"1/2	1	02460040	74,44
2"	1	02460050	95,44

Futurgas - Ball valves for gas

Ball valves for gas with safety locks

These valves, normally usable for the application to the counter, are equipped with a safety lock with keys for the exclusive use of the user as required by UNI 7129-1:2015 Paragraph 4.1, and a key (sold separately) for use by the manager/administrator. In case of emergency, it's possible to close the gas flow without the use of the key ensuring a locking in closing. It's possible, with the key to the manager/administrator, to prevent any action by the user.



Futurgas Female-Female with safety lock and pressure connection G 1/4

Dimension	Pcs. pack	Code	Price €
3/4"	1	09813554	45,36
1"	1	09813556	54,26

Dimensions: see section Technical Attachments



[UNI EN 331]



Right-angle Futurgas Female-Female with safety lock and pressure connection G 1/4

Dimension	Pcs. pack	Code	Price €
3/4"	1	09813042	47,51
1"	1	09813036	56,51

Dimensions: see section Technical Attachments



[UNI EN 331]



Right-angle Futurgas Female-Revolving nut with safety lock and pressure connection G 1/4

Dimension	Pcs. pack	Code	Price €
3/4" F x 1" G	1	09813038	52,46
1" F x 1" 1/4 G	1	09813040	63,33

Dimensions: see section Technical Attachments



[UNI EN 331]



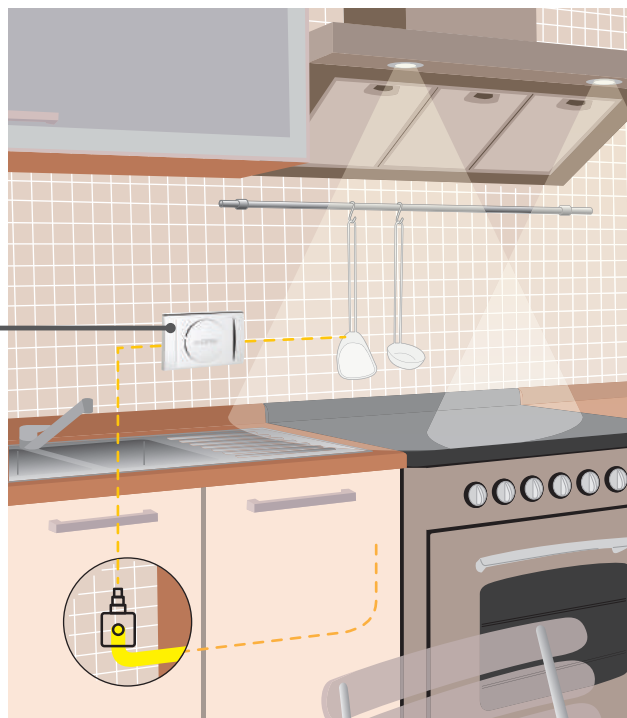
Master key

Dimension	Pcs. pack	Code	Price €
	1	09008680	9,55

Dimensions: see section Technical Attachments

Gaslock

Built-in gas ball valve with retractable knob



[UNI EN 331]



Uses

Gaslock is suitable for use with gases from the three families (natural gas, town gas, LPG), for low and medium pressure networks and distribution systems.

Compliance

Article included in CE marking, as per Art. 4 Paragraph 3 of Directive 2014/68/EU.
CE marking (according to UNI EN 331) and DVGW certificate refer to the ball valve.

Suitability of employment

UNI 7129-1.

General features

1/2" gas valve (DN15 passage) with 3/4" male flat-ended connections. Prepared for installation with multilayer pipes and press fittings (sizes 16x2 and 20x2 mm), or with copper pipes and solder fittings (sizes Ø12, 14, 16, 18 mm) suitable for capillary soldering or brazing in accordance with UNI EN 1254-1.

Operating conditions

Working pressure: MOP 5
High temperature resistance class: B0.1
Operating temperature: -20 to +60 °C

Applications

To intercept the supply to the cooktop.
To shut off the supply to gas boilers or kettles.
As a general gas shut-off valve, in an easily accessible position.

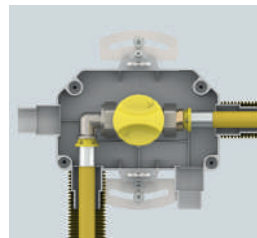
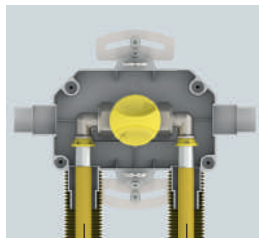
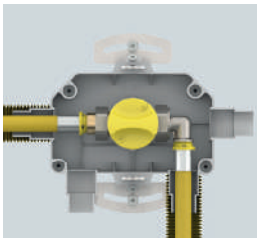
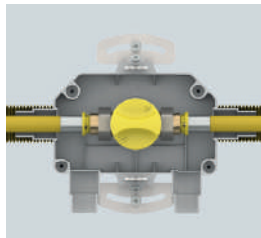
Dimensions: see section Technical Attachments

Built-in gas ball valve with retractable knob

So many good reasons to choose Gaslock

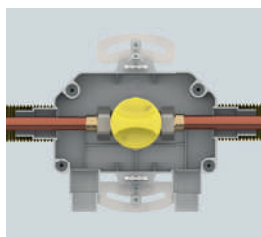
1 ONE VALVE, MULTIPLE INSTALLATION TYPES

Gaspex system: four possible connections



100 mm

Copper pipe and solder fittings, straight connection



2 QUICK AND EASY INSTALLATION



Hydraulic connections outside the box



Placement inside the box



Fixing upper shell



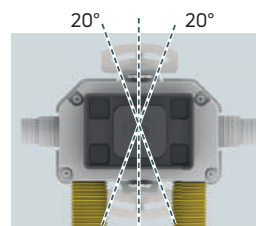
Mounting cover protection

3 VERSATILE ADJUSTMENT



Min 82 mm

Max 123 mm



Depth and tilt adjustment

4 INNOVATIVE DESIGN WITH TRENDY FINISHES

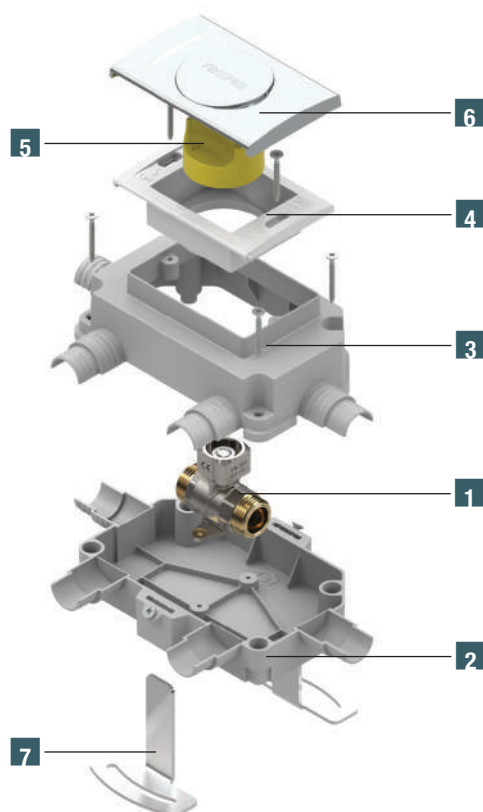


Standard with chrome finish door.



Available on request: White, Anthracite.

Built-in gas ball valve with retractable knob



Built-in ball valve for gas with retractable knob

Construction

- 1 Valve body made of brass UNI EN 12165 CW617N sandblasted nickel-plated, G 3/4" male flat stop
- 2 Grey ABS lower shell
- 3 Grey ABS upper shell
- 4 Shockproof PS stand
- 5 Yellow shockproof PS knob
- 6 ABS door (chrome plated as standard)
- 7 DD11 EN 10111 steel fixing and adjusting brackets

	Pcs. pack	Code	Price €
Gaslock	1	09812630	63,71

Dimensions: see section Technical Attachments

Accessories for Gaslock



Press fitting for multilayer pipe, short elbow With swivel nut and NBR flat seal

Dimensions	Profile	Pcs. pack	Code	Price €
16 x 3/4"	B (KSP1) / TH (KSP11)	1	28125500	12,02
20 x 3/4"	B (KSP1) / TH (KSP11)	1	28125502	12,29



Press fitting for multilayer pipe, straight with swivel nut and NBR flat seal

Dimensions	Profile	Pcs. pack	Code	Price €
16 x 3/4"	B (KSP1) / TH (KSP11)	1	28125402	9,07
20 x 3/4"	B (KSP1) / TH (KSP11)	1	28125406	9,05
26 x 3/4"	B (KSP1) / TH (KSP11)	1	28125408	9,48



Brass nut/cod and gasket kit, for copper pipe with solder joint

Dimensions	Pcs. pack	Code	Price €/pc.
Ø 12 x 3/4"	10	90031050	6,93
Ø 14 x 3/4"	10	90031060	6,93
Ø 16 x 3/4"	10	90031070	6,21
Ø 18 x 3/4"	10	90031080	8,69

Composed of: nickel-plated nut + brass shank + aluminum gasket.
Terminals suitable for welding or capillary brazing conform to UNI EN 1254-1.

Built-in gas ball valve with retractable knob



White door kit for Gaslock

Dimension	Pcs. pack	Code	Price €
	1	90033770	8,23

Composed of: white door + white stand + yellow knob



Anthracite door kit for Gaslock

Dimension	Pcs. pack	Code	Price €
	1	90033790	9,78

Composed of: anthracite door + white holder + yellow knob



Spare Chrome Door Kit for Gaslock

Dimension	Pcs. pack	Code	Price €
	1	90033780	9,78

Composed of: chrome door + white stand + yellow knob

Controlgas 4

Gas leak detection systems



Methane gas leak detector for domestic use with the possibility of directly controlling a 230 Vac solenoid valve.
Equipped with test button.

[CEI UNI EN 50194]

Compliance with CEI UNI EN 50194 standard
Compliance Directive 2014/30/EU (electromagnetic compatibility)
Compliance Directive 2014/35/EU (low voltage)

Technical data

Power supply: 230 Vac -15/+10% 50/60Hz
Sensor type: SnO₂ Semiconductor
Tripping threshold: 10% L.E.L.
Output (relay): 5(2)A 250 Vac SPDT
Sensor useful life: 5 years
Green LED signalling: Detector active
Yellow LED indication: Detector faulty
Red LED signalling: Alarm
Degree of protection: IP42
Dimension (LxHxP): 85x107x38 mm

Note:
before starting to use Controlgas 4, please refer to the regulations
in force in your specific Country to check the effective applicability.

Controlgas 4 gas leak detector

Model	Pcs. pack	Code	Price €
Methane	1	02204138	190,50

Wiring diagrams for connection with 230 Vac gas solenoid valve:
see Complete Technical Attachments.



Solenoid valves for gas

Solenoid valves

Technical data

Supply voltage 230 Vac / 50-60 Hz
Thread connection in according to UNI EN 10226
Maximum operating pressure: 500 mbar
Ambient temperature: -15 ÷ 60 °C
Maximum surface temperature 80 °C
Closing time: < 1 s
Degree of protection: IP65



Manually-reset solenoid gas valve Normally Closed

Dimension	Type	Pcs. pack	Code	Price €
F-F 1/2"	N.C. OT	1	00309050	136,60
F-F 3/4"	N.C. OT	1	00309052	136,60
F-F 1"	N.C. OT	1	00309057	149,90
F-F 1"	N.C. AL	1	00309056	177,10
F-F 1 1/4"	N.C. AL	1	00309058	217,30
F-F 1 1/2"	N.C. AL	1	00309060	217,30
F-F 2"	N.C. AL	1	00309062	306,40

N.C. = normally closed - OT = brass - AL = aluminium / Power absorbed: 9 W
CE homologation according to UNI EN 161
Conforms Gas Directive 2009/142/CE
Conforms Low Voltage Directive 2014/35/UE
Conforms Electromagnetic Compatibility Directive 2014/30/UE



Manually-reset solenoid gas valve Normally Opened

Dimension	Type	Pcs. pack	Code	Price €
F-F 1/2"	N.A. OT	1	00308500	91,82
F-F 3/4"	N.A. OT	1	00308502	100,70
F-F 1"	N.A. OT	1	00308504	120,50
F-F 3/4"	N.A. AL	1	00308034	135,90
F-F 1"	N.A. AL	1	00308100	135,90
F-F 1 1/4"	N.A. AL	1	00308114	186,80
F-F 1 1/2"	N.A. AL	1	00308112	186,80
F-F 2"	N.A. AL	1	00308200	287,10

N.A. = normally opened - OT = brass - AL = aluminium / Power absorbed: 24 W
Conforms Gas Directive 2009/142/CE
Conforms Low Voltage Directive 2014/35/UE
Conforms Electromagnetic Compatibility Directive 2014/30/UE



Manually-reset solenoid gas valve with flange Normally Closed

Dimension	Type	Pcs. pack	Code	Price €
2 1/2 DN 65	N.C. AL	1	00309064	738,40
3" DN 80	N.C. AL	1	00309066	849,10
4" DN 100	N.C. AL	1	00309068	1.631,00

N.C. = normally closed - OT = brass - AL = aluminium / Power absorbed: 18 W
Thread connection in according to ISO 7005
CE homologation according to UNI EN 161
Conforms Gas Directive 2009/142/CE
Conforms Low Voltage Directive 2014/35/UE
Conforms Electromagnetic Compatibility Directive 2014/30/UE



Manually-reset solenoid gas valve with flange Normally Opened

Dimension	Type	Pcs. pack	Code	Price €
2 1/2 DN 65	N.A. AL	1	00308212	572,00
3" DN 80	N.A. AL	1	00308300	738,40
4" DN 100	N.A. AL	1	00308400	1.302,00

N.A. = normally opened - OT = brass - AL = aluminium / Power absorbed: 23 W
Thread connection in according to ISO 7005
Conforms Gas Directive 2009/142/CE
Conforms Low Voltage Directive 2014/35/UE
Conforms Electromagnetic Compatibility Directive 2014/30/UE



Tanks, solar panels and accessories for solar systems



- > Tanks for DHW and technical water



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- > EBN-EB - Heating water storage for integrated systems



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- > Accessories for tanks



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- > Boguard electronic anode



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- > Thermostatic mixers



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- > HEVSN - Solar kit



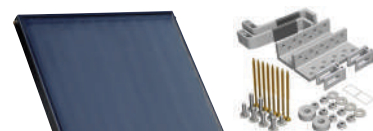
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- > Rapid domestic hot water production module



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- > Arcobaleno solar collectors and accessories



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- > NVSN - Natural circulation solar kit



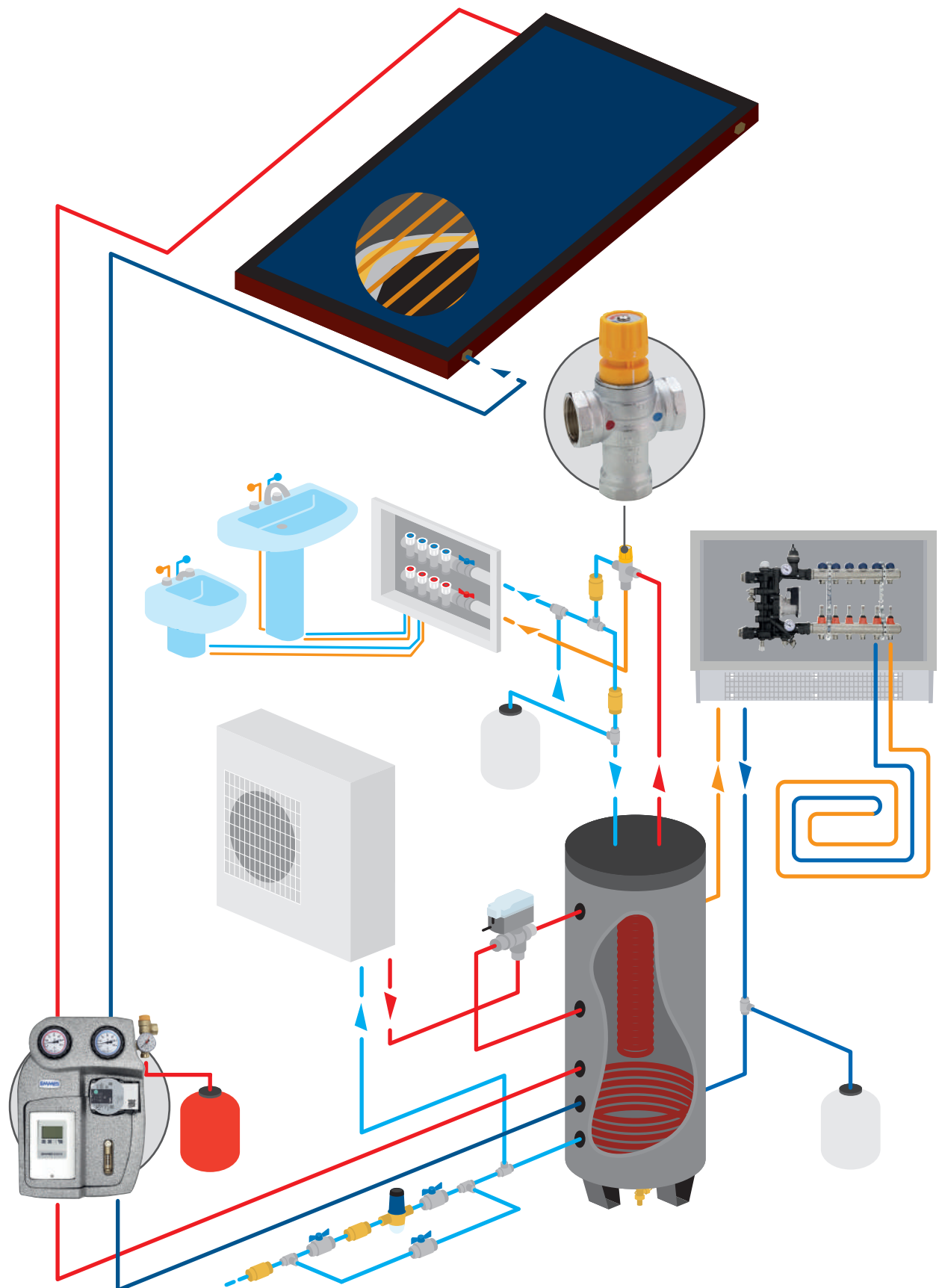
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- > Solar stations and groups, accessories, pipes and fittings for solar systems



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Example of installation



Tanks

Tanks for domestic and technical water



Technical data

Enamelled tanks (organic enamelling):

- Maximum operating pressure: 6 bar
- Maximum continuous operating temperature: 70 °C (95 °C peak for max 20 hours per year)

Vitrified tanks (inorganic enamelling):

- Maximum operating pressure: 10 bar (8 bar for models from 1500, 2000 and 3000)
- Maximum continuous operating temperature: 95 °C

For ETW Inox tanks:

- maximum working pressure: 5 bar
- maximum accumulation temperature in continuous operation: 95 °C

Conformity

Emmeti tanks and coils satisfy the requirements requested by the directive 2014/68/UE "Pressure equipment" in appliance to art. 4 codicil 3 of the above mentioned directive, to be used with warm or cool water.

Fire reaction class

- For foamed tanks: class F (UNI EN 13501-1)
- For tanks with polyester insulation: class B-s2, d0 (UNI EN 13501-1)

Threads

G (ISO 228-1)

Dimensions and technical datas and diagrams: see section technical attachments

Resistance to corrosion

The corrosion protection and suitability for drinking water are obtained by:

- glazed tanks: inorganic enamelling (glazing) in accordance with current regulations (DIN 4753-3 and UNI 10025);
- enamel tanks: organic enamelling (treatment with thermosetting resins).

The insertion of the anode electronic Boguard (1/2" M) provides further protection of the metal surfaces.

To prevent the perforation of the tank, avoid the presence of stray currents from external parts.

In this sense, connect with suitable dielectric joints and in the case of a tank equipped with a magnesium anode, prepare the ground circuit effectively and make sure that it does not determine parasitic currents from entering the metal mass of the tank.

The warranty of the domestic tanks is bound by the value of the electrical conductivity of the water should not be less than 150 μ S or above 1000 μ S.

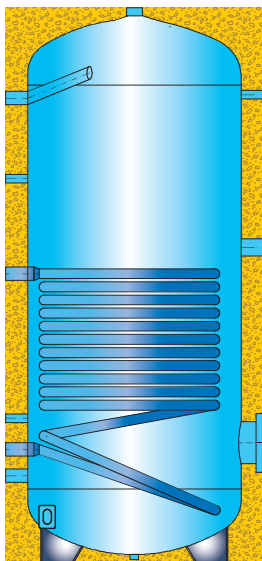
The failure to comply with the requirements will result in the invalidation of the warranty

Potable suitability

The products used for the vitrification and enamelling surface treatment of the internal surfaces of Emmeti tanks and storage tanks do not contain lead compounds in their formulation, pursuant to the Italian Ministerial Decree 174 of 6 April 2004 "Regulation concerning the materials and objects that can be used in fixed systems for the collection, treatment, adduction and distribution of water intended for human consumption".

Dimensions and technical data: see section Technical Attachments

Tanks



Potable suitability



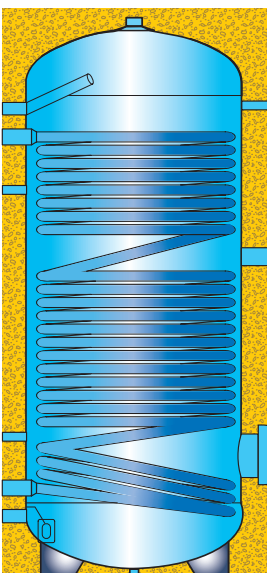
Warranty

Euro V vitrified tanks for domestic hot water with fixed coil

Models	Class of energy efficiency	Pcs. pack	Code	Price €
150	B (min F / max A+)	1	02769110	1.562,00
200	C (min F / max A+)	1	02769120	1.767,00
300	C (min F / max A+)	1	02769130	2.054,00
500	C (min F / max A+)	1	02769141	2.768,00

Euro V tanks are supplied with closing flange DN180 installed, thermal insulation and an electronic anode.

Dimensions and technical data: see section Technical Attachments



Potable suitability



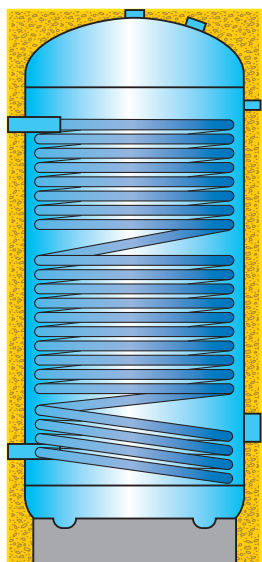
Warranty

Euro HPV vitrified tanks for sanitary hot water production, with fixed coil, suitable for the use with heat pumps

Models	Class of energy efficiency	Pcs. pack	Code	Price €
200	C (min F / max A+)	1	02769230	2.256,00
1000	-	1	02769542	5.759,00

Euro HPV tanks are supplied with closing flange DN180 installed and equipped with thermal insulation and electronic anode.

Dimensions and technical data: see section Technical Attachments



Potable suitability



Warranty

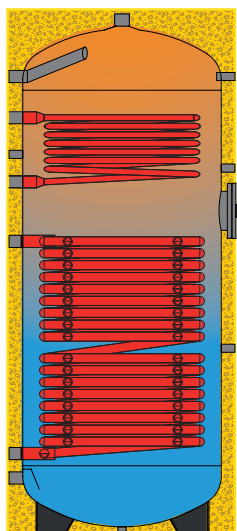
Euro HPVE vitrified storage tank for the production of hot water with fixed coil, suitable for use with heat pump

Models	Class of energy efficiency	Pcs. pack	Code	Price €
300	B (min F / max A+)	1	02769242	2.935,00
500	C (min F / max A+)	1	02769252	4.004,00

Euro HPVE tanks are supplied with thermal insulation and electronic anode.

Dimensions and technical data: see section Technical Attachments

Tanks



Potable suitability



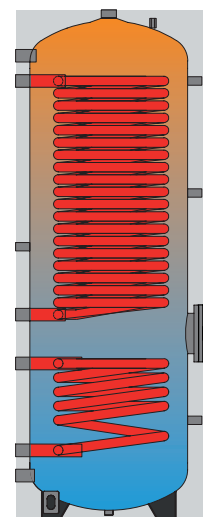
5 Years
Warranty

HP2V for domestic hot water production using heat pump and boiler

Models	Class of energy efficiency	Pcs. pack	Code	Price €
HP2V 300	C (min F/max A+)	1	02763990	3.611,00
HP2V 500	C (min F/max A+)	1	02763992	4.389,00
HP2V 750	-	1	02763994	5.804,00
HP2V 1000	-	1	02763996	6.995,00

HP2V tanks are supplied with closing flange DN180 installed and equipped with thermal insulation and electronic anode.

Dimensions and technical data: see section Technical Attachments



Potable suitability



5 Years
Warranty

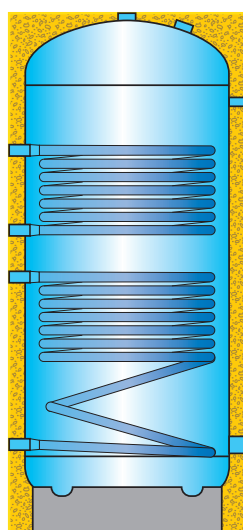
HP2V-S for domestic hot water production using solar thermal energy and heat pumps

NEW

Models	Class of energy efficiency	Pcs. pack	Code	Price €
HP2V-S 300	C (min F/max A+)	1	02764000	3.268,00
HP2V-S 500	C (min F/max A+)	1	02764002	4.165,00

The price includes thermal insulation and an electronic anode.

Dimensions and technical data: see section Technical Attachments



Models 200 ÷ 1000



Models 1500 ÷ 2000



Potable suitability



5 Years
Warranty

HE2VE vitrified tanks for domestic hot water

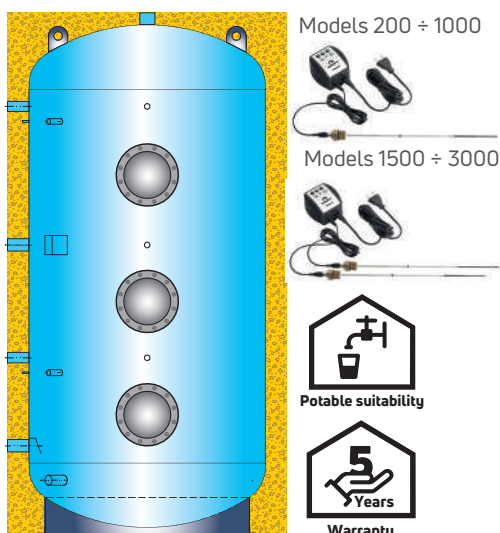
Models	Class of energy efficiency	Pcs. pack	Code	Price €
200	B (min F / max A+)	1	02763170	2.100,00
300	B (min F / max A+)	1	02763172	2.301,00
500	C (min F / max A+)	1	02763174	3.316,00
750	-	1	02763176	4.876,00
1000	-	1	02763178	5.028,00
1500 (*)	-	1	02763180	8.500,00
2000 (*)	-	1	02763182	10.151,00

Equipped with thermal insulation and electronic anode.

(*) Items on request

Dimensions and technical data: see section Technical Attachments

Tanks



Comfort V vitrified tanks for domestic hot water (without coils)

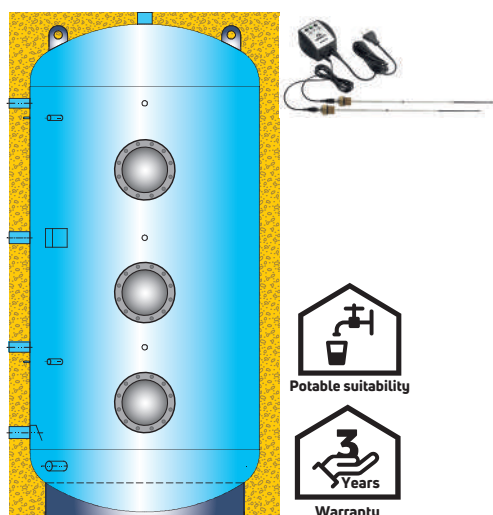
Models	Nr. flanges	Class of energy efficiency	Pcs. pack	Code	Price €
200	2	C (min F / max A+)	1	02769508	1.706,00
300	2	C (min F / max A+)	1	02769510	1.812,00
500	2	C (min F / max A+)	1	02769512	2.726,00
750	3	-	1	02769514	3.302,00
1000	3	-	1	02769516	3.584,00
1500	3	-	1	02769518	7.399,00
2000	3	-	1	02769520	8.426,00
3000	3	-	1	02769522	11.162,00

Comfort V tanks are supplied with closing flanges DN290 installed and equipped with thermal insulation and electronic anodes (*). To complete the tank, the coil must be ordered.

COILS ARE NOT INCLUDED.

(*) single for models from 200 to 1000; double for models from 1500 to 3000.

Dimensions and technical data: see section Technical Attachments



Comfort S enamelled tanks for domestic hot water (without coils)

Models	Nr. flanges	Pcs. pack	Code	Price €
1500 (*)	3	1	02769536	4.562,00
2000 (*)	3	1	02769538	5.409,00
3000 (*)	3	1	02769540	6.462,00

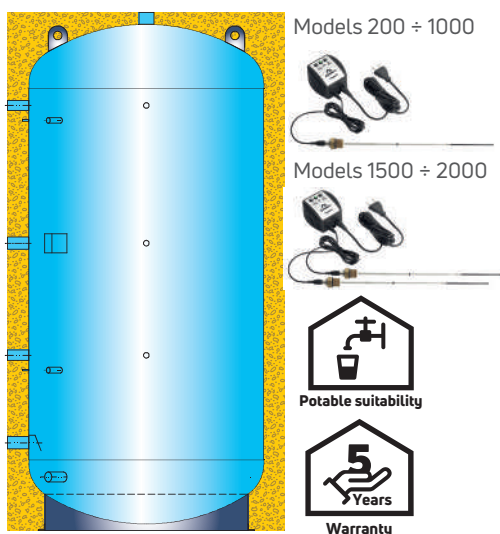
The Comfort S tanks are supplied with closing flanges DN290 installed and equipped with thermal insulation and double electronic anode.

Their completion requires the insertion of the coil chosen. **COILS ARE NOT INCLUDED**

Tank not suitable for solar collectors.

(*) Item available on request. 30 days from order confirmation

Dimensions and technical data: see section Technical Attachments



Vitrified tanks for domestic hot water (without coils)

Models	Nr. Flanges	Class of energy efficiency	Pcs. pack	Code	Price €
300 (*)	-	C (min F/max A+)	1	02769524	1.792,00
500 (*)	-	C (min F/max A+)	1	02769526	2.319,00
750 (*)	-	-	1	02769528	2.980,00
1000 (*)	-	-	1	02769530	3.294,00
1500 (*)	-	-	1	02769532	6.824,00
2000 (*)	1	-	1	02769534	7.455,00

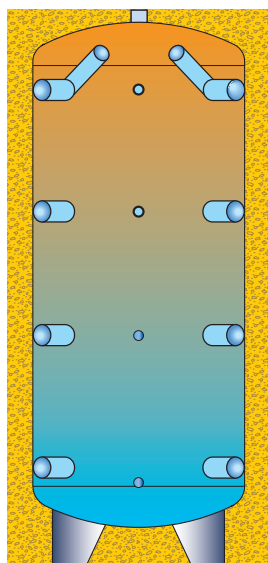
Vitrified tanks are supplied with thermal insulation and electronic anode (single for models from 300 to 1000 and double for models from 1500 to 2000).

Only on the model 2000 is supplied with DN290 flange with sealing flange mounted.

(*) Item available on request. 30 days from order confirmation

Dimensions and technical data: see section Technical Attachments

Tanks



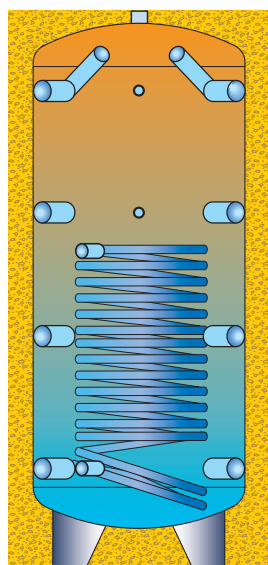
Puffer for heating water

Liters	Class of energy efficiency	Pcs. pack	Code	Price €
300 N (*)	C (min F/max A+)	1	02704603	1.478,00
500 N (*)	C (min F/max A+)	1	02704623	1.621,00
1000 N (*)	-	1	02704643	2.256,00
1500 N (*)	-	1	02704663	2.658,00
2000 N (*)	-	1	02704673	4.239,00

Supplied with thermal insulation.

(*) Item available on request. 30 days from order confirmation

Dimensions and technical data: see section Technical Attachments



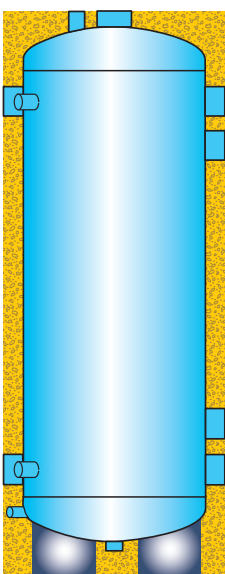
Puffer for heating water with coil

Liters	Class of energy efficiency	Pcs. pack	Code	Price €
300 N 1S (*)	C (min F/max A+)	1	02704803	1.621,00
500 N 1S (*)	C (min F/max A+)	1	02704823	1.840,00
1000 N 1S (*)	-	1	02704843	2.690,00
1500 N 1S (*)	-	1	02704863	4.239,00
2000 N 1S (*)	-	1	02704873	4.632,00

Supplied with thermal insulation.

(*) Item available on request. 30 days from order confirmation

Dimensions and technical data: see section Technical Attachments

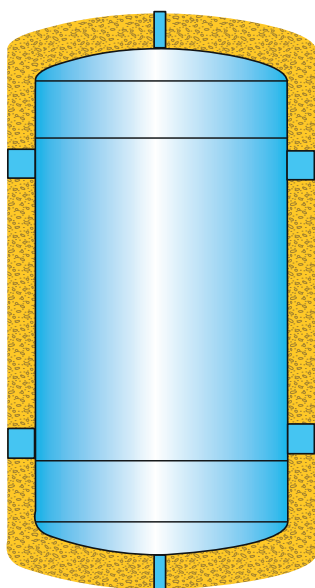


ETW tanks for hot and cold technical water

Models	Class of energy efficiency	Pcs. pack	Code	Price €
ETW 25	A (min F/max A+)	1	02704240	683,60
ETW 60	B (min F/max A+)	1	02704250	806,60
ETW 120	B (min F/max A+)	1	02704260	932,90
ETW 200	C (min F/max A+)	1	02704270	1.206,00
ETW 280	C (min F/max A+)	1	02704274	1.375,00
ETW 500	C (min F / max A+)	1	02704230	1.641,00
ETW 750	-	1	02704232	2.521,00
ETW 1000	-	1	02704234	2.812,00

Supplied with thermal insulation.

Dimensions and technical data: see section Technical Attachments



ETW Inox storage tank for hot and cold technical water

Model	Class of energy efficiency	Pcs. pack	Code	Price €
ETW 26	C (min F/max A+)	1	02705240	809,00
ETW 51	C (min F/max A+)	1	02705250	951,30

Supplied with thermal insulation.

Dimensions and technical data: see section Technical Attachments

Heating water tank for integrated systems

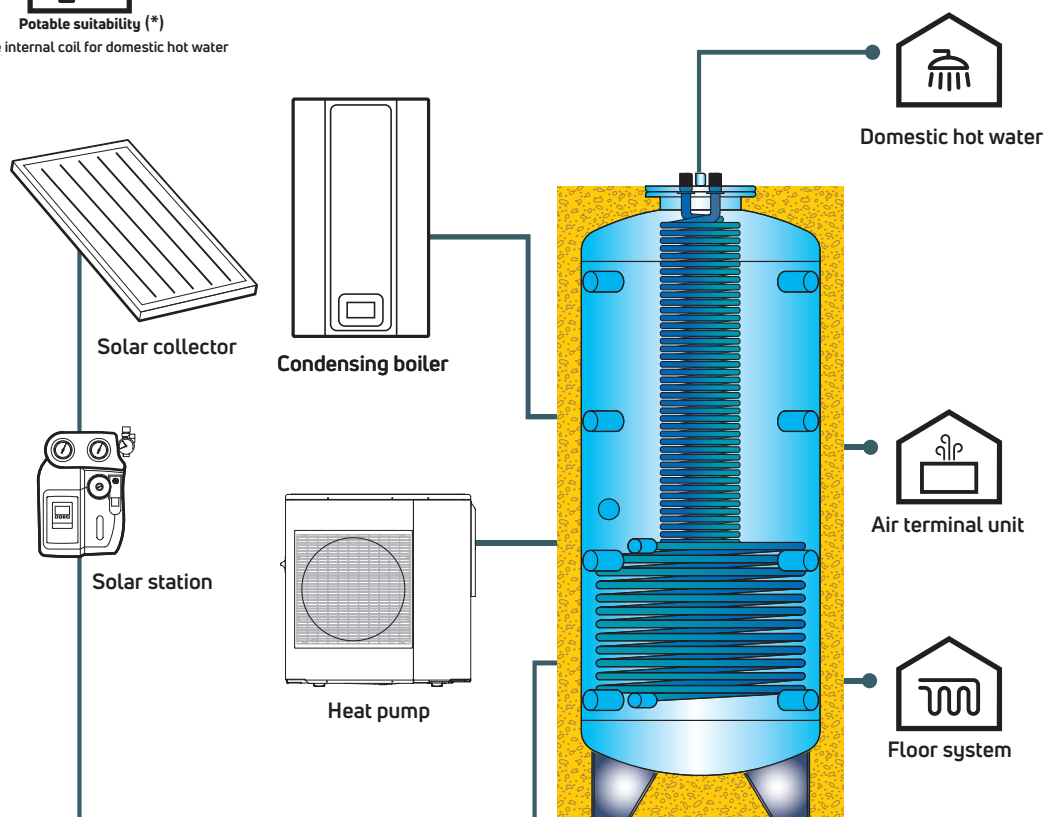


Warranty



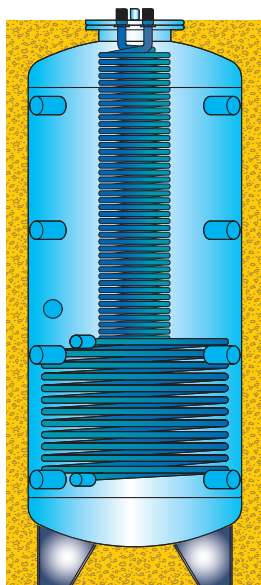
Potable suitability (*)

(*) Valid only for the internal coil for domestic hot water



EBN-EB tanks have been designed to integrate more energy sources existing in the heating system, for example: heat pumps, solar collectors, gas boiler, thermo fireplaces, etc.

Tank

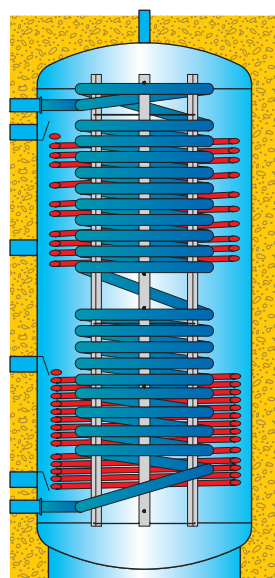


Tank of water heating EBN300 and EBN500

Models	Class of energy efficiency	Pcs. pack	Code	Price €
EBN300	B (min F/max A+)	1	02704331	3.785,00
EBN500	C (min F/max A+)	1	02704333	4.216,00

The price includes thermal insulation.

Dimensions and technical data: see section Technical Attachments



Tank of water heating EB1000-S30-AS76 AUX20 and EB1500-S35-AS50-AUX30

Models	Pcs. pack	Code	Price €
EB1000-S30-AS76-AUX20 (*)	1	02704304	5.263,00
EB1500-S35-AS89-AUX30 (*)	1	02704306	6.677,00

The price includes thermal insulation.

(*) Items available on request. 30 days from order confirmation

Dimensions and technical data: see section Technical Attachments

Accessories for tanks



LS coil kit in tinned finned copper for HEVSN, Euro V, Euro HPV, HP2V, HP2V-S tanks

Dimension	Pcs. pack	Code	Price €
LS 08 (*)	1	02792030	785,90
LS 12 (**)	1	02792040	986,00

Including flange DN180 and gasket, flange cover and washers and dielectric joints.

(*) LS 08 - Can be used on Euro V 150 - 200 - 300 - 500, Euro HPV 200 - 1000, HP2V 300 - 500 - 750 - 1000, HP2V-S 300 - 500, HEVSN 300 - 500.

(**) LS 12 - Can be used on Euro V 500, Euro HPV 1000, HP2V 500 - 750 - 1000, HP2V-S 500, HEVSN 500.

Dimensions: see section Technical Attachments



Coils kit LN in finned copper suitable for Comfort V, Comfort S and vitrified accumulation 2000

Dimension	Capacity (l)	Pcs. pack	Code	Price €
LN 12	200÷3000	1	02790580	609,80
LN 18	200÷3000	1	02790585	857,90
LN 26	500÷3000	1	02790590	1.035,00
LN 32	750÷3000	1	02790595	1.377,00
LN 45	750÷3000	1	02790600	2.053,00
LN 63	1500÷3000	1	02790605	2.337,00

Including flange DN290 and gasket, flange cover, washers and dielectric joints.

Dimensions: see section Technical Attachments



Electric resistance for tanks

Model	Power (kW)	Length (mm)	Pcs. pack	Code	Price €
SH-1,5 (*)	1,50	320	1	02702900	575,70
SH-2,0 (**)	2,00	320	1	02702902	575,70
SH-2,5 (**)	2,50	390	1	02702904	577,50
SH-3,0 (**)	3,00	390	1	02702906	590,00
SH-3,8 (***)	3,75	430	1	02702908	604,40
SH-4,5 (***)	4,50	470	1	02702910	633,40
SH-6,0 (***)	6,00	620	1	02702912	664,60
SH-7,5 (***)	7,50	720	1	02702914	669,40
SH-9,0 (***)	9,00	780	1	02702916	701,20

Heating surface electrically isolated by threaded connection.

Suitable for horizontal installation on tanks having manifolds not longer than 100 mm.

Connection: 1" 1/2 M (UNI EN ISO 228-1)

Voltage (V): (*) ~ 230 - (**) ~ 230 / 3 ~ 400 - (***) 3 ~ 400.

Degree of protection: IP44

Range of thermostat regulation: 30 ÷ 75 °C

Safety thermostat: 98 °C (- 10°)

Unheated zone (from threaded fitting): 120 mm

Available on request: 21 days to order confirm

Compatibility: see section Technical Attachments

Accessories



Predisposition kit for electric resistance 1"1/2 for tanks

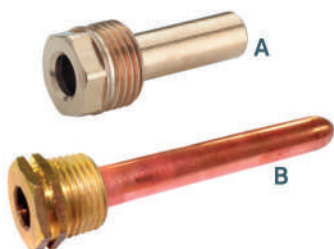
Dimension	Pcs. pack	Code	Price €
KRE 180 (*)	1	02792020	134,20
KRE 180A (**)	1	02792018	131,60
KRE 290 (***)	1	02792022	206,60

Including flange DN 180/290 with sleeve F 1"1/2, gasket and flange cover (resistance not included).

(*) KRE 180 - Can be used on Euro V 150 - 200 - 300 - 500, Euro HPV 200, HP2V 300 - 500 (only as spare part), HP2V-S 300 - 500 (only as spare part), HEVSN 300 - 500.

(**) KRE 180A - Can be used on Euro HPV 1000, HP2V 750 - 1000 (only as spare part).

(***) KRE 290 - Can be used on Comfort V 200 - 300 - 500 - 750 - 1000 - 2000 - 3000, Comfort S 1500 - 2000 - 3000, Storage tank V2000.



Immersion sleeves for thermometer in confirm to ISPESL norm, connection M 1/2"

Dimension	Pcs. pack	Code	Price €
Ø 7 L 50 mm (A)	1	00510682	8,20
Ø 9 L 50 mm (A)	20	00510012	4,67
Ø 10 L 50 mm (A)	12	00510684	8,53
Ø 10 L 100 mm (B) (*)	12	00510686	11,10
NEW Ø 7 L 100 mm (B)	12	00510687	11,67
NEW Ø 7 L 300 mm (B)	1	00510691	14,84
Ø 15 L 110 mm (B)	12	00510688	8,69

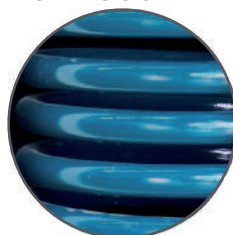
Thread: G (UNI EN ISO 228-1)

(*) Item to be out of stock

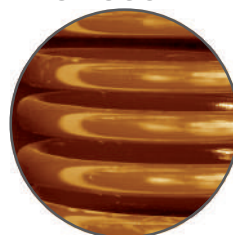
Electronic anode



OK BOGUARD



NO BOGUARD



The Boguard impressed-current electronic anodes, fitted with a system that automatically adjusts the protection potential, protect exposed surfaces from corrosion – as specified in DIN 4753 Part 3, para. 4.2.3, up to 100 cm² of the inner surface of tanks made of steel and enamelled with plastic resins or vitrified, within the 5000 liters of capacity. Unlike any other electronic anodes types on the market, Boguard contrasts any corrosion phenomena without producing a significant quantity of hydrogen into the tank; this gas besides being flammable, if in a not minimum quantity, might give rise to degradation of some types of internal covering of the tank.

Boguard has a series of new functions that make it a unique product on the market:

- 1) "Booster" function upon start-up that releases the maximum potential for a limited amount of time in order to accelerate the process to ensure protection for the tank.
- 2) Reports optimal operation.
- 3) Reports excessive tank absorption.
- 4) Reports when the tank absorption is under the threshold, indicates when there is a poor electric contact between the equipment and the activated titanium anode or water with extremely low electric conductivity.
- 5) Reports if the electric circuit is open, for instance a disconnected cable between the equipment and the activated titanium anode.
- 6) Reports a short-circuit between the positive pole and negative pole of the activated titanium anode.

7) Count of the anode's operating time under optimal conditions (no faults), expressed in years and months, it is shown upon start-up and cannot be changed.

8) Detection of electric leakage and stray currents (both direct current and alternated current) affecting the tank and that might significantly contribute to corroding the inside of the tank itself. These can be minor currents and therefore, although they do not trigger the system's electrical safety devices, they can cause considerable corrosive phenomena.

9) Reports installation faults, for instance exchangers with ineffective or missing dielectric joints.

Boguard is covered by a European patent application.

Technical data

Power supply: 230 Vac $\pm$ 10%, 50/60 Hz

Control voltage: 2,75 $\div$ 3,8 Vdc

Protection level: IP55

Ambient operating temperature: 0 $\div$ 45 °C

Electrode-holder cap threaded coupling: G 1/2" Male

Electrode with rod, diameter 3 mm and activated titanium prod

Maximum power consumption: 2,7 VA

Dimensions: see section Technical Attachments

Boguard electronic anode

Tank capacity	Nr. of equipments	Nr. of electrodes for system	Electrode length	Code	Price €
150-500	1	1	380 mm	02791201	180,30
750-1000	1	1	430 mm	02791206	172,80
1500-5000	1	2	430 mm	02791211	254,10

Supplied as standard with an RCA connection cable, 2 meters long.

Spare parts



RCA anode connection cable

Dimension	Pcs. pack	Code	Price €
2 m M/F	1	92797550	6,14

Thermostatic mixers



Thermostatic mixer for domestic hot water

Thread G (UNI EN ISO 228-1)
Body made of brass UNI EN 12165 CW617N
Shutter in brass UNI EN 12165 CW614N
Maximum operating pressure 10 bar
Maximum differential pressure 3 bar
Maximum temperature hot water 85 °C
Range of temperature from 30 °C to 65 °C

Dimension	Kv	Pcs. pack	Code	Price €
1/2" F	1,6	1	09089400	111,90
3/4" F	1,8	1	09089402	122,40
1" F	3,2	1	09089404	172,10

For connections with pipe unions, see the following codes:
90027800 for 1/2" F model, 90027810 for 3/4" F model, 90028290 for 1" F model



1"1/4 - 1"1/2 M

Thermostatic mixer for domestic hot water

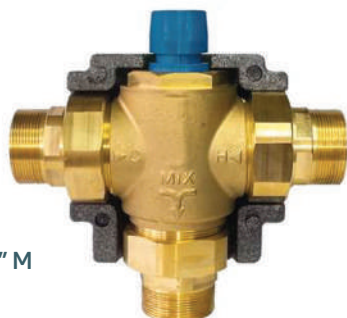
Thread G (UNI EN ISO 228-1)
Body made of brass UNI EN 12165 CW617N (chromed finish for sizes 1"1/4 and 1"1/2)
Shutter in UNI EN 12165 CW614N
Maximum operating pressure: 10 bar (up to size 1"1/2); 14 bar (model 2")
Maximum differential pressure: 3 bar (up to size 1"1/2); 5 bar (model 2")
Maximum temperature hot water: 85 °C (up to size 1"1/2); 110 °C (model 2")
Range of temperature: from 30 °C to 65 °C

Dimension	Kv	Pcs. pack	Code	Price €
1"1/4 M	7,4	1	09089414	578,50
1"1/2 M	7,6	1	09089416	945,80
2" M (*)	18	1	09089418	3.536,00

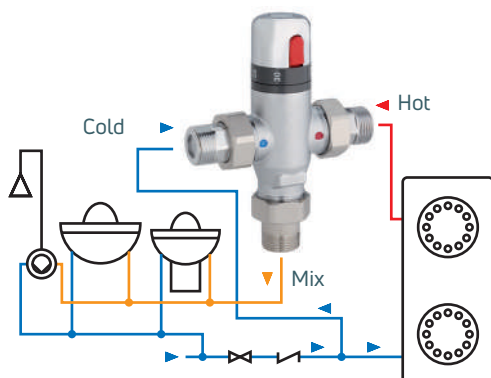
Items on request: 10 days from order confirmation

(*) size 2" is supplied complete with a shell for thermal insulation.

For connection with unions, use the following codes (3 pieces for each code):
1"1/4: 09208910, 4874R006, 4974G006;
1"1/2: 09208914, 4874R007, 4974G007.



2" M



Thermostatic mixer for domestic hot water with stop bottom and pipe union connection

Thread G (UNI EN ISO 228-1)
Body made of chromed brass UNI EN 12165 CW617N
Shutter UNI EN 12165 CW614N
Stop bottom at 38 °C
Supplied with tang 3/4" Male with check valves and nuts 1"
Maximum operating pressure 10 bar
Differential pressure 2 bar
Maximum temperature hot water 85 °C
Range of temperature from 20 °C to 65 °C
Range of knob from 20 °C to 50 °C

Dimension	Kv	Pcs. pack	Code	Price €
3/4"	1,70	1	09089406	255,60

Thermostatic mixers



Thermostatic mixer for domestic hot water for solar installation

Thread G (UNI EN ISO 228-1)
Body made of chromed brass UNI EN 12165 CW617N
Shutter UNI EN 12165 CW614N
Max pressure: 10 bar
Max input temperature: 100° C
Regulation range: 30-65 °C

Dimension	Kv	Pcs. pack	Code	Price €
1/2" F	1,7	1	09089412	136,70
3/4" F	1,8	1	09089410	152,50
1" F	3,2	1	09089408	183,10

For connections with pipe unions, see the following codes:
90027800 for 1/2" F model, 90027810 for 3/4" F model, 90028290 for 1" F model



Self-actuated thermostatic diverter valve for domestic hot water and solar systems

Thread: G (UNI EN ISO 228-1)
Body made of chromed brass UNI EN 12165 CW617N
Shutter in UNI EN 12165 CW614N
Diverting temp. T = 45°C (T > 45 °C, fluid outlet side 1; T > 45°C, fluid outlet side 2)
Max operating pressure 10 bar - Recommended operating pressure 1-5 bar
Max inlet water temperature 100 °C - ΔT for deviator changeover 4.5 °C

Dimension	Kv	Pcs. pack	Code	Price €
1" M	1,9	1	02710560	152,50

For connections with union connections, see code 90027810



Solar kit adjustable diverter valve + mixing valve (to connect a thermal solar circuit with the boiler)

Maximum static pressure: 10 bar
Maximum dynamic pressure: 5 bar
Maximum input temperature: 100 °C (short period 120 °C per 20 sec.)
Field of regulation of the temperature-diverter: 38÷54 °C
Field of regulation of the temperature-mixer: 35÷60 °C (accuracy ± 1 °C)
Kv: 1,7 (for utilities up to 49 l/min, 3 bar)
Connections 3/4" M (swivel tang)
With retainer valve on cold water inlet and ACS inlet from solar storage tank
Tekeoffs 163 mm (95 mm tank)
Material: brass CW617N-DW (UNI EN 12164 e 12165)
Insulation box in EPP (Dimensions: 255 x 125 x 100 mm)

Inlet:

- 1" M diverter thermostatic valve with adjustable diverting temperature setting 38 ÷ 54 °C through graduated knob. Kv: 3,5.
- Solar non-return valve and filter fitted in the connection tang of the solar tank.
- T-shaped swivel fitting to connect the boiler with tank.

Output:

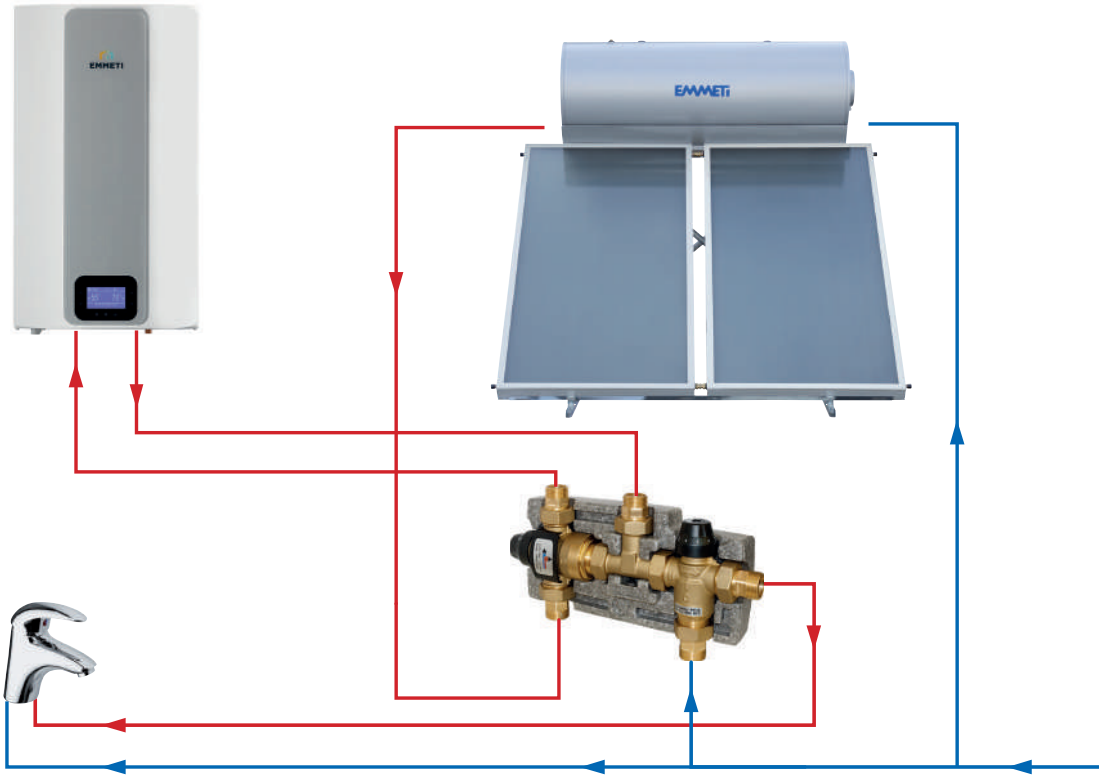
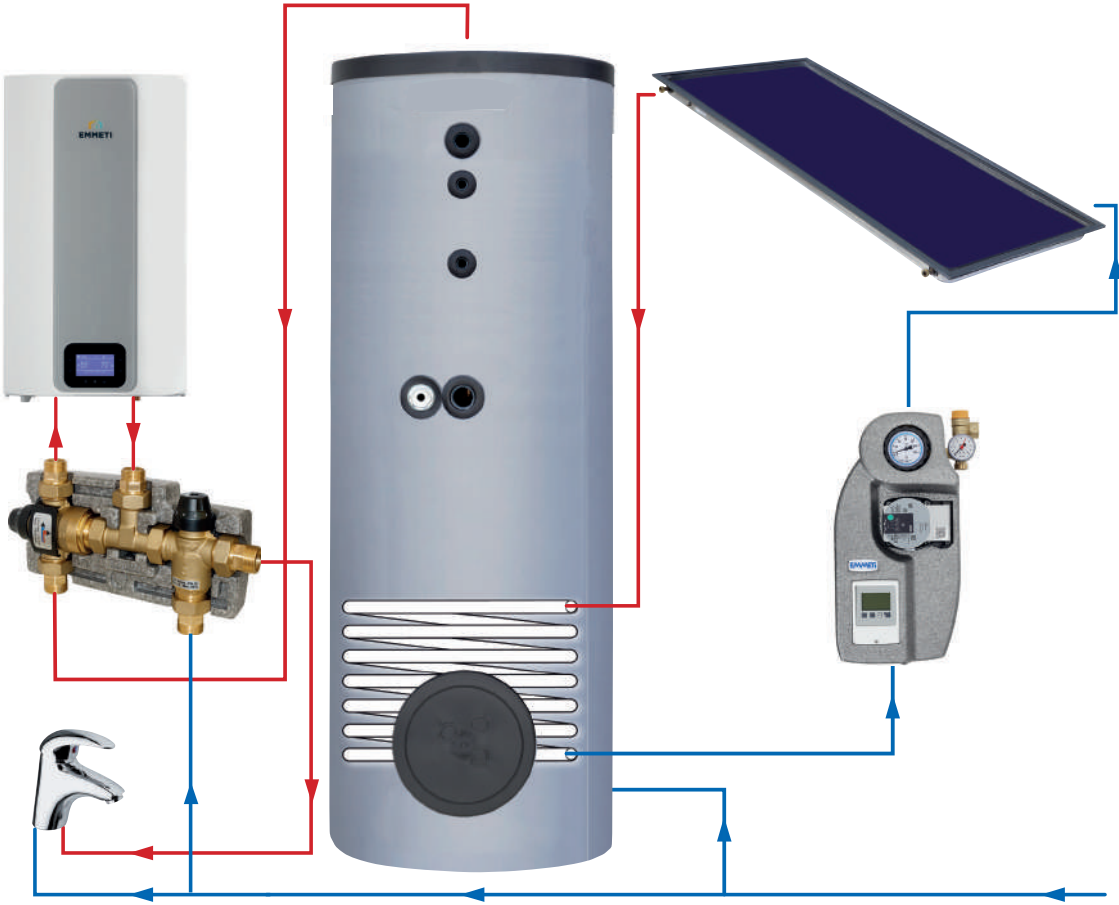
- 1" M thermostatic mixing valve anti-burn, with adjustable mixing temperature setting 35 ÷ 60 °C through graduated knob. Kv: 2,5.
- Solar non-return valve and filter inserted in the shank of cold water connection.

Dimension	Pcs. pack	Code	Price €
3/4"	1	02716860	427,60

To connect a thermal solar circuit with the tank
Threads: G (ISO 228-1)

Thermostatic mixers

Examples solar Kit application



Solar kit HEVSN



Composition

- 1 24 L solar expansion vessel
- 2 Bracket for fastening expansion vessel
- 3 Flexible hose kit
- 4 6-bar safety valve for domestic circuit
- 5 3/4" F thermostatic solar mixer
- 6 Pair of 3/4" M x 1" F fittings
- 7 Premixed protective non-toxic antifreeze (three packs of 5 kg for the 300 L kit and one pack of 25 kg for the 500 L kit)
- 8 Electronic anode
- 9 Auxiliary DN 180 flange
- 10 SSX 12 NP solar station

Dimensions and technical data: see section Technical Attachments



HEVSN solar kit



Solar kit HEVSN 300

Consisting of: HEVSN solar tank, preassembled built-in SSX 12 NP solar station on the tank, expansion vessel and related accessories, electronic anode, three packs of propylene glycols of 5 kg, thermostatic solar mixer and safety valve for hydraulic circuit.

The HEVSN solar tanks are glazed and have two fixed coils.

The solar coil is positioned in the lower part and is an anti-stratification type. In addition, an auxiliary DN180 flange is present, which permits insertion of an electric resistance or removable coil (LS 08).

Tank:

Useful volume: 273 liters

Dispersion: 63 W

Class Energy efficiency: B

Dimension of boiler	Pcs. pack	Code	Price €
300 L	1	02770001	4.593,00

Vitrified, complete with accessories (preassembled solar station and expansion vessel for solar circuit)



Solar kit HEVSN 500

Consisting of: HEVSN solar tank, preassembled built-in SSX 12 NP solar station on the tank, expansion vessel and related accessories, electronic anode, one pack of propylene glycol of 25 kg, thermostatic solar mixer and safety valve for hydraulic circuit.

The HEVSN solar tanks are glazed and have two fixed coils.

The solar coil is positioned in the lower part and is an anti-stratification type. In addition, an auxiliary DN180 flange is present, which permits insertion of an electric resistance or removable coil (LS 08 or LS 12).

Tank:

Useful volume: 475 liters

Dispersion: 80 W

Class Energy efficiency: B

Dimension of boiler	Pcs. pack	Code	Price €
500 L	1	02770011	5.513,00

Vitrified, complete with accessories (preassembled solar station and expansion vessel for solar circuit)

Accessories for HEVSN solar tank kit



LS coil kit in tinned finned copper for HEVSN, Euro V, Euro HPV, HP2V, HP2V-S tanks

Dimension	Pcs. pack	Code	Price €
LS 08 (*)	1	02792030	785,90
LS 12 (**)	1	02792040	986,00

Including flange DN 180 and gasket, flange cover and washers.

(*) LS 08 - Can be used on Euro V 150 - 200 - 300 - 500, Euro HPV 200 - 1000, HP2V 300 - 500 - 750 - 1000, HP2V-S 300 - 500, HEVSN 300 - 500.

(**) LS 12 - Can be used on Euro V 500, Euro HPV 1000, HP2V 500 - 750 - 1000, HP2V-S 500, HEVSN 500

Dimensions: see section Technical Attachments



Predisposition kit for electric resistance 1" 1/2 for HEVSN, Euro V, Euro HPV, HP2V tanks

Dimension	Pcs. pack	Code	Price €
KRE 180 (*)	1	02792020	134,20

Including flange DN 180 with sleeve F 1"1/2, gasket and flange cover (resistance not included).

(*) KRE 180 - Can be used on Euro V 150 - 200 - 300 - 500, Euro HPV 200 - 300 - 500, HP2V 300 - 500 (only as spare part), HEVSN 300 - 500.

Rapid domestic hot water production module



Rapid domestic hot water production module

For power up to 100 kW with ACS flow rates up to 40 l/min
 Maximum allowable pressure: 6 bar
 Operating pressure: 2÷95 °C
 Rated temperature of domestic hot water 45 °C adjustable from 30 to 70 °C
 Recirculation temperature adjustable up to 40 °C
 Recirculation programmable on three time slots for each day of the week
 Flow rate of domestic hot water variable 2÷40 l/min
 Unit EHWS 3 2015 pre-wired and featuring 3 Pt1000 probes.
 Anti-legionella and function and detailed metering (*) of the power used thanks to the digital sensor.
 Brazed plate exchanger made of stainless steel AISI 316 with 40 plates.
 Pipe couplings 3/4" M.
 With check valve on cold water and recirculation input (3 and 5 points).
 Minimum diameters of the pipes: DN20 (Cu 22x1); DN15 for the recirculation line.
 Circulation pump Yonos Para RS 15/7.5 PWM for the primary circuit.
 Circulation pump ECO CIRC PRO 15-3/65 for recirculation.

Equipped with rear metal plate for mounting.

Insulation box in EPP (Dimensions: 398x500x207 mm)

(*) The instrument is not certified in compliance with Directive 2004/22/EC - MID.

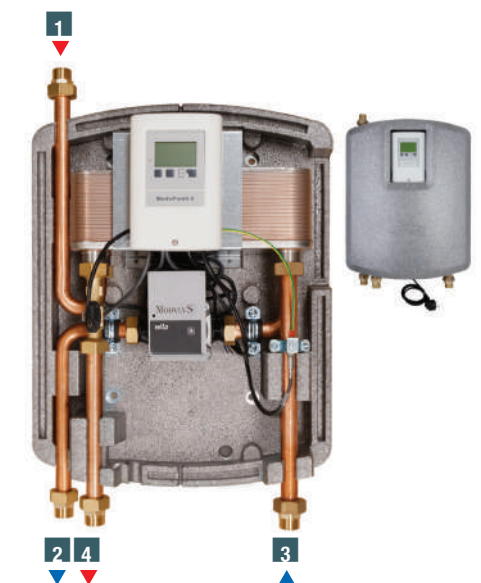
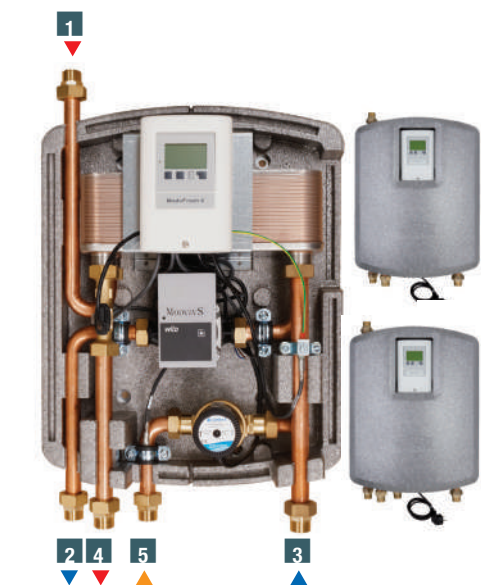
- 1 Puffer flow
- 2 Puffer Return
- 3 Water supply (10 °C)
- 4 Hot water
- 5 Recirculation

Model	Nr. plates	Pcs. pack	Code	Price €
SSHWR 40 N (**)	40	1	02716830	3.854,00
SSHNR 40 N (***)	40	1	02716878	3.399,00

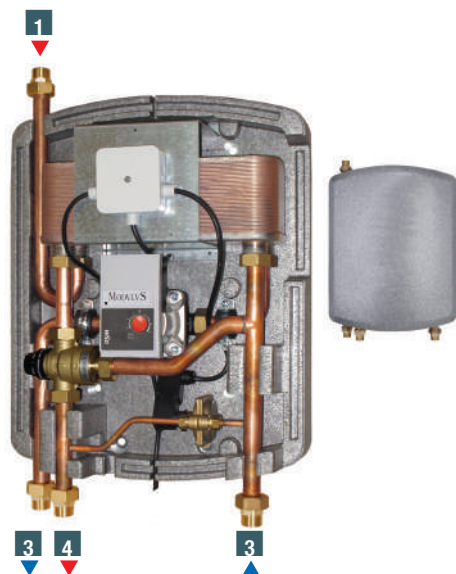
(**) With recirculation
 (***) Without recirculation

Applications: on inertial accumulators connected to thermal solar circuits, wood, pellet, biomass boilers, etc.
 The device ensures the production of instantaneous domestic hot water avoiding bacterial pollution (such as legionella) due to the stagnation of heated water in the tank.

Items available on request



Rapid domestic hot water production module



Thermostatic module SSHNT 40 N to produce rapid domestic hot water

For power up to 100 kW with DHW up to 40 l/min

Maximum allowable pressure: 6 bar - Operating temperature: 2÷95°C

Rated domestic hot water temperature 45 °C, adjustable up to 70 °C with a thermostatic mixing valve

Differential pressure switch for activation of the circulator pump (already with flow rates less than 1 l/min)

Braze-welded plate heat exchanger made of AISI 316 stainless steel with 40 plates

Wilo Yonos Para RS 15/7.5 RKC circulator pump

3/4" M pipe couplings

With check valve on cold water input (3 points)

Minimum pipe diameters: DN20 (Cu 22x1)

Provided with rear metal plate for mounting

- 1 Puffer Flow
- 2 Return to Puffer
- 3 Water mains supply 10°C
- 4 Domestic hot water

Option of installing several modules upon request.

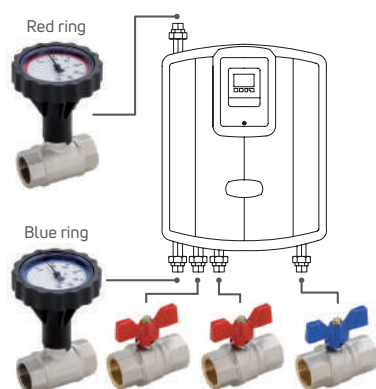
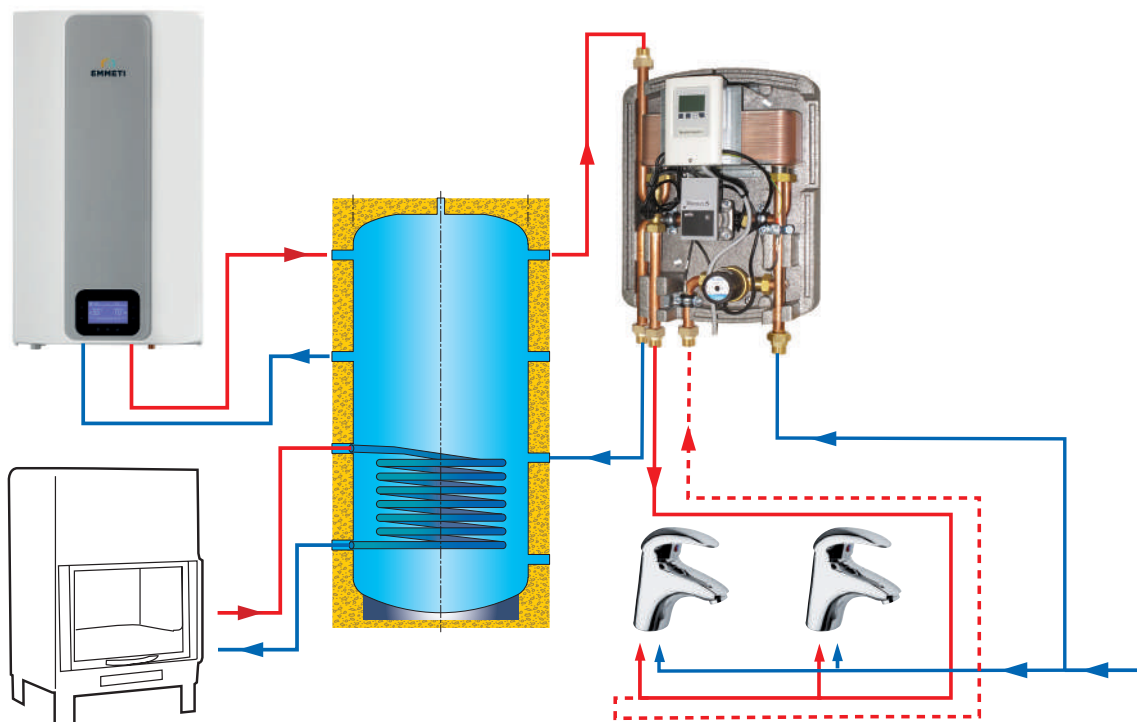
Dimension	Nr. plates	Pcs. pack	Code	Price €
SSHNT 40 N	40	1	02716880	2.618,00

Application on puffer tanks connected to traditional thermal circuits, wood, pellet, biomass, etc.

The device guarantees the production of instant domestic hot water and prevents the occurrence of bacterial pollution phenomena (such as legionellosis) caused by stagnation of the water heated in the tank. Possibility of installing multiple modules in cascade.

Available on request: 30 days from order confirmation

Installation example of a thermostatic module to produce rapid domestic hot water



Kit valves for rapid domestic hot water production module

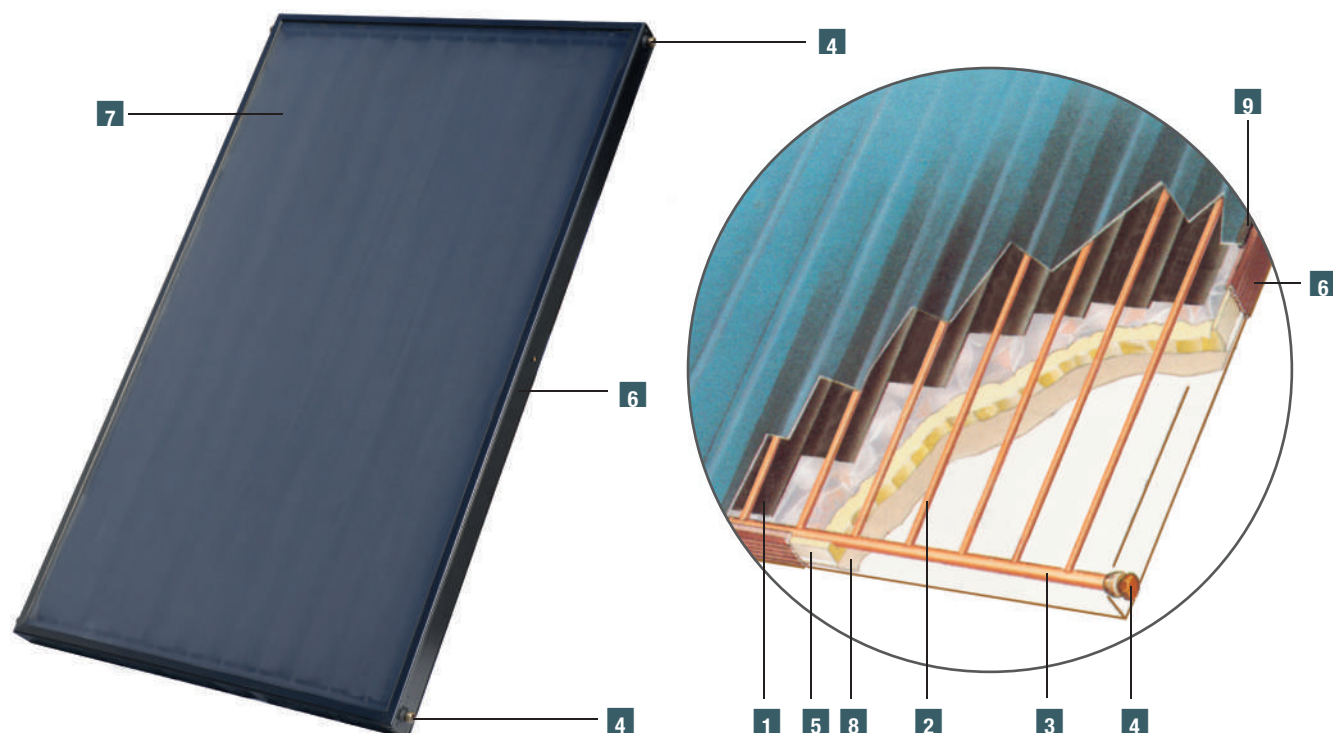
Dimension	Pcs. pack	Code	Price €
3/4" F-F	1	02707900	147,60

For models SSHWR 40 N, SSHNR 40 N, SSHNT 40 N.

Composed of 2 valves with thermometer, 2 ball valves with red handle and 1 ball valve with blue handle.

Arcobaleno

Solar collectors



Uses

The Arcobaleno solar collectors can be used in closed circuit hot water production systems for sanitary use, for heating swimming pools, as well as for pre-heating or completion of room heating, for example in the case of the use of radiating panels. The fields of use in construction, both public and private, run the range from wellings to common areas, from the tourism/lodging sector to manufacturing activities.

For temperatures below 0 °C, as a heat-carrying fluid in the solar collectors a water-antifreeze solution must be used with a concentration that is suitable to prevent damage from freezing. The solar collectors must be firmly attached and installed in compliance with current standards.

Optimal inclination varies depending on use.

The orientation of the collectors must be towards the equator (southeast since the afternoon hours are the warmest).

Utility

The initial investment for the creation of a solar energy system is rewarded by the fact that there are practically no operating costs. The only energy expenses are the electrical energy used by the circulating pump (if there is one).

Considering the current costs and the continuing increases in traditional energy sources (methane, LPG, fuel oil), the use of a solar energy system is fully justified, now more than ever.

Norms

Arcobaleno solar collector type "SXM" and "NS12" complies to UNI EN 12975-1 and UNI EN ISO 9806 and is certified Solar Keymark.

[UNI EN 12975-1]
[UNI EN ISO 9806]

Dimensions, technical data and diagrams: see section technical attachments

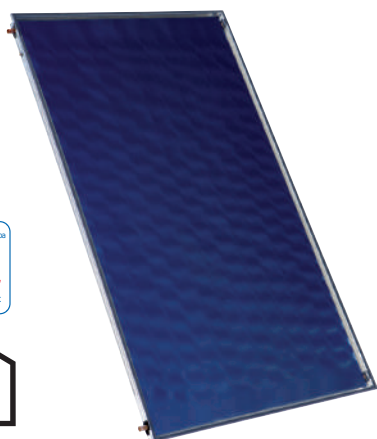
Solar collectors

Arcobaleno construction type SXM

- 1 Capturing surface: single aluminium plate, thickness 0.3 mm with highly selective covering with laser welding
- 2 Pipes: 12 copper pipes, Ø 8 mm, thickness 0.4 mm
- 3 Collector: copper pipe Ø 22 mm, thickness 0.8 mm
- 4 Fittings: copper pipe Ø 22 mm
- 5 Insulation: rock wool panel, thickness 30 mm, density 25 kg/m³
- 6 Collector housing: aluminium frame
- 7 Covering: "low ironed" tempered glass, transparent, thickness 3.2 mm
- 8 Bottom: aluminium sheet metal
- 9 Gasket: bi-component silicone

Arcobaleno construction type NS12

- 1 Capturing surface: single aluminium plate, thickness 0.3 mm with highly selective covering with laser welding
- 2 Pipes: 12 copper pipes, Ø 8 mm, thickness 0.45 mm
- 3 Collector: copper pipe Ø 18 mm, thickness 0.7 mm
- 4 Fittings: 3/4" M wrench socket
- 5 Insulation: rock wool panelm thickness 40 mm, density 50 kg/m³
- 6 Collector housing: dark brown painted aluminium frame
- 7 Covering: "low ironed" tempered glass, prismatic, thickness 4 mm
- 8 Bottom: embossed aluminium sheet metal
- 9 Gasket: EPDM rubber and silicone



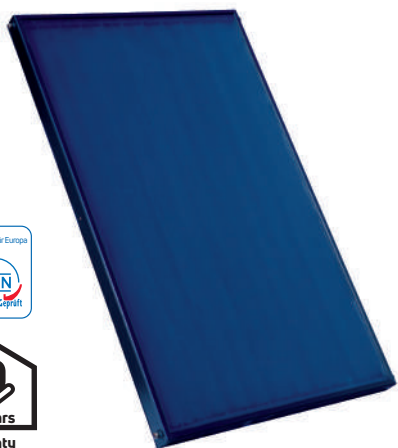
Solar collector Arcobaleno SXM with selective surface

Dimension	Pcs.pack	Code	Price €/pc.
H 2000 x L 1170 x P 73	9	02710440	1.081,00
H 2000 x L 1170 x P 73 (*)	1	02710441	1.294,00

(*) Single pack

With probe holder and copper connections Ø 22 mm

Dimensions: see section Technical Attachments



Solar collector Arcobaleno NS12 with selective surface

NEW

Dimension	Pcs.pack	Code	Price €/pc.
H 1988 x L 1218 x P 90	11	02710115	923,67 €
H 1988 x L 1218 x P 90 (*)	1	02710116	1108,59 €

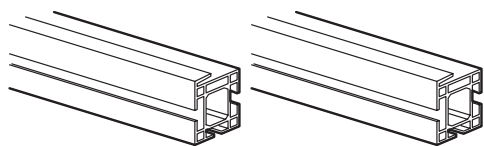
(*) Single pack.

With probe holder and connections 3/4" M.

It includes two flexible joints swiveling for the connection between two solar collectors NS12.

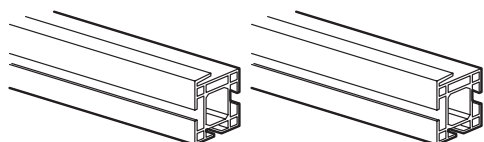
Dimensions: see section Technical Attachments

Installation Arcobaleno SXM



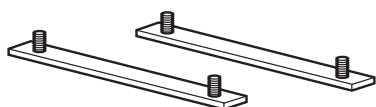
Couple of fixing guides for 1 Arcobaleno SXM

Dimension	Pcs. pack	Code	Price €
L= 1225 mm	1	02710450	113,30



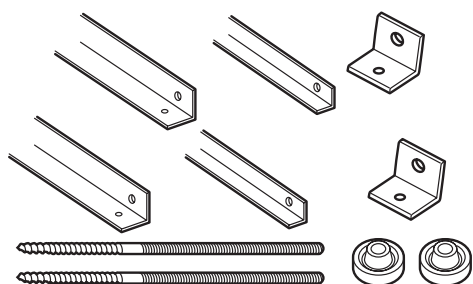
Couple of fixing guides for 2 Arcobaleno SXM

Dimension	Pcs. pack	Code	Price €
L= 2455 mm	1	02710460	230,30



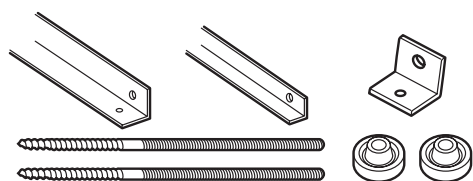
Connection kit for fixing guides for Arcobaleno SXM

Dimension	Pcs. pack	Code	Price €
	1	02710470	49,73



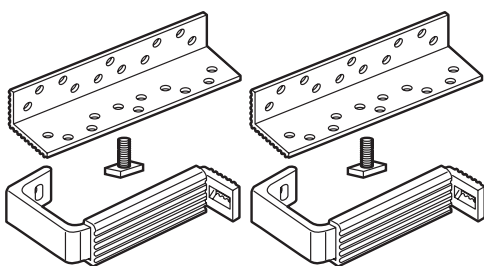
Double flat roof 45° installation set with fixing screws for Arcobaleno SXM

Dimension	Pcs. pack	Code	Price €
45°	1	02710480	380,80



Single flat roof 20° and 45° installation set with fixing screws for Arcobaleno SXM

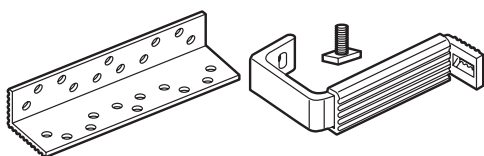
Dimension	Pcs. pack	Code	Price €
45°	1	02710490	210,70



Double tile roofs/bent tiles (*) installation set of brackets (2 pieces) for Arcobaleno SXM

Dimension	Pcs. pack	Code	Price €
	1	02710500	204,30

(*) For bent tiles: bent tile maximum height 60 mm

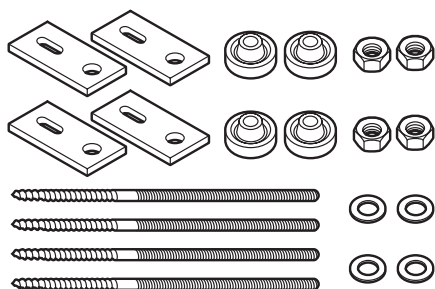


Single tile roofs/bent tiles (*) installation set of brackets (1 piece) for Arcobaleno SXM

Dimension	Pcs. pack	Code	Price €
	1	02710510	115,80

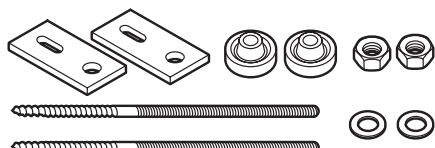
(*) For bent tiles: bent tile maximum height 60 mm

Solar collectors



Double tile roof set of brackets with fixing screws for Arcobaleno SXM

Dimension	Pcs. pack	Code	Price €
	1	02710520	179,40



Single tile roof set of brackets with fixing screws for Arcobaleno SXM

Dimension	Pcs. pack	Code	Price €
	1	02710530	102,00



D22 x D22 dry fitting for Arcobaleno SXM solar collector

Dimension	Pcs. pack	Code	Price €
D22 x D22	1	02710540	19,09

In rows of Arcobaleno SXM solar collectors, there must be two fittings for the connection between two collectors



Metallic seal fitting with male thread for copper pipes

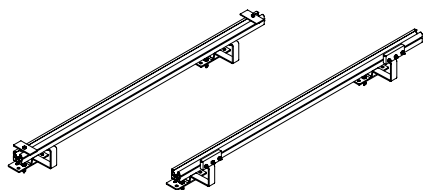
Dimension	Pcs. pack	Code	Price €
3/4" M x DN 22 copper	5	02707874	15,55
1" M x DN 22 copper	5	02707876	16,06



Plugs kit for Arcobaleno SXM

Dimension	Pcs. pack	Code	Price €
D22	1	02717120	39,37

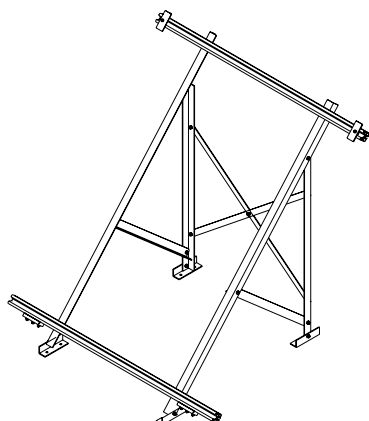
Installation Arcobaleno NS12



Parallel roof assembly set on roofs/bent tiles

Dimension	Pcs. pack	Code	Price €
1 NS12	1	02710242	291,60
2 NS12	1	02710244	582,20

In aluminum and galvanized steel



Flat roof 45° assembly set

Dimension	Pcs. pack	Code	Price €
1 NS12	1	02710172	431,10
2 NS12	1	02710182	740,50

In aluminium

Solar collectors



Flexible replacement joint for Arcobaleno NS12 solar collector

Dimension	Pcs. pack	Code	Price €
3/4" F with swivel union	1	02710110	16,69



Connector with initial length of 65 mm extensible to 125 mm

Dimension	Pcs. pack	Code	Price €
M 3/4" x F 3/4"	12	02412620	20,33



Plugs kit for Arcobaleno NS12

Dimension	Pcs. pack	Code	Price €
3/4"	1	02717130	8,94

Supplied with gaskets

Selection guide

Installation on bent tile and tile roofs with stud bolts for Arcobaleno SXM

	02710450	02710460	02710470	02710520	02710530
(02710440 - 02710441) Arcobaleno SXM					
	1			1	
		1		1	
	1	1	1	1	1
		2	1	1	2
	1	2	2	1	3

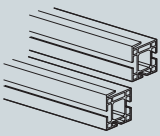
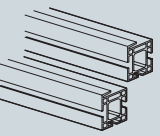
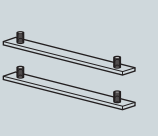
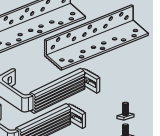
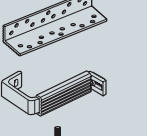
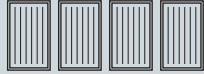
Provide nr. 2 fittings code 02710540 for the connection between two Arcobaleno SXM solar collectors.

Provide nr. 1 kit plugs code 02717120 for each group of Arcobaleno SXM solar collectors.

Provide nr. 2 fittings code 02707874 or 02707876 for each group of Arcobaleno SXM solar collectors.

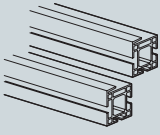
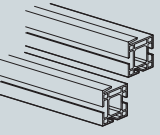
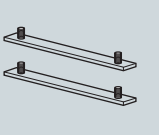
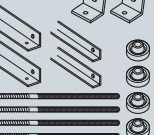
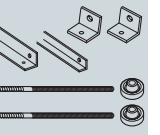
Solar collectors

Installation on bent tile and tile roofs with a bracket for Arcobaleno SXM

	02710450	02710460	02710470	02710500	02710510
					
(02710440 - 02710441) Arcobaleno SXM					
	1			1	
		1		1	
	1	1	1	1	1
		2	1	1	2
	1	2	2	1	3

Provide nr. 2 fittings code 02710540 for the connection between two Arcobaleno SXM solar collectors.
 Provide nr. 1 kit plugs code 02717120 for each group of Arcobaleno SXM solar collectors.
 Provide nr. 2 fittings code 02707874 or 02707876 for each group of Arcobaleno SXM solar collectors.

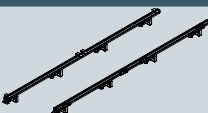
Installation on a 45° flat roof for Arcobaleno SXM

	02710450	02710460	02710470	02710480 (45°)	02710490 (45°)
					
(02710440 - 02710441) Arcobaleno SXM					
	1			1	
		1		1	
	1	1	1	1	1
		2	1	1	2
	1	2	2	1	3

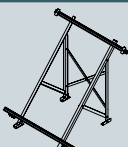
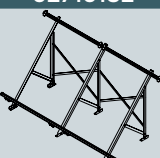
Provide nr. 2 fittings code 02710540 for the connection between two Arcobaleno SXM solar collectors.
 Provide nr. 1 kit plugs code 02717120 for each group of Arcobaleno SXM solar collectors.
 Provide nr. 2 fittings code 02707874 or 02707876 for each group of Arcobaleno wSXM solar collectors.

Solar collectors

Installation on bent tile and tile roof for Arcobaleno NS12

	(02710115 - 02710116) Arcobaleno NS12				
					
02710242 	1		1		1
02710244 		1	1	2	2
02717130 	1	1	1	1	1

Installation on a 45° flat roof for Arcobaleno NS12

	(02710115 - 02710116) Arcobaleno NS12				
					
02710172 	1		1		1
02710182 		1	1	2	2
02717130 	1	1	1	1	1

NVSN natural circulation solar kit



Model NVSN1S 150

Composition

- N° 1 solar thermal collector;
- Tank with cavity in vitrified steel;
- Universal fixing system for installation on a flat roof (inclination approximately 45 °)
- Installation kit comprising: 15 liter pack of propylene glycol; 3 bar safety valve solar circuit; 6 bar safety valve (sanitary circuit); insulated stainless steel pipes for manifold-storage tank connection; hydraulic fittings and mounting screws.

Solar collector technical data

- Absorber: aluminum with 0.5 mm thick selective surface
- Cover: 4 mm thick tempered glass
- Dimensions: (WxHxD) 2040 x 1040 x 88 mm
- Gross surface area: 2.11 m²
- Open surface area (net): 1.91 m²
- Fittings (4 copper pipes): Ø 22 mm
- Maximum operating pressure: 10 bar
- Stagnation temperature: 195 °C
- Contents: 1,40 liters
- Weight when empty: 38 kg

n0a=0,777
a1a = 4,350
a2a = 0,0073
Ke (50°) = 0,910

Tank technical data

- Dimensions: (L x diameter) 1055 x Ø 580 mm
- Material: vetrified steel
- Usefull volume: 152 l
- Protection: 2 manesium anodes
- Equipped with electrical resistance 1,5 W
- Equipped with side inspection flange
- Max pressure of sanitary circuit: 6 bar
- Max pressure of solar circuit: 3 bar
- Connections: G 3/4" F
- Dispersion: 54 W
- Energy efficiency class: B
- Weight when empty: 67 kg

Complete system technical data

- Heat carrier fluid content: 9,45 l
- In confirm to UNI EN 12976 norm
- Solar Keymark certification

Dimension	Pcs. pack	Code	Price €
NVSN1S 150	1	02717200	2.589,00

Dimensions: see section Technical Attachments



Model NVSN2S 280

Composition

- N ° 2 solar thermal collectors;
- Tank with cavity in vitrified steel;
- Universal fixing system for installation on a flat roof (inclination approximately 45 °)
- Installation kit comprising: 15 liter pack of propylene glycol; 3 bar safety valve solar circuit; 6 bar safety valve (sanitary circuit); insulated stainless steel pipes for manifold-storage tank connection; hydraulic fittings and mounting screws.

Solar collector technical data

- Absorber: aluminum with 0.5 mm thick selective surface
- Cover: 4 mm thick tempered glass
- Dimensions: (WxHxD) 2040 x 1040 x 88 mm
- Gross surface area: 2.11 m²
- Open surface area (net): 1.91 m²
- Fittings (4 copper pipes): Ø 22 mm
- Maximum operating pressure: 10 bar
- Stagnation temperature: 195 °C
- Contents: 1,40 liters
- Weight when empty: 38 kg

$n_{0a}=0,777$
 $a_{1a} = 4,350$
 $a_{2a} = 0,0073$
 $K_e (50^\circ) = 0,910$

Tank technical data

- Dimensions: (L x diameter) 1765 x Ø 580 mm
- Material: vetrified steel
- Usefull volume: 272 l
- Protection: 2 manesium anodes
- Equipped with electrical resistance 1,5 W
- Equipped with side inspection flange
- Max pressure of sanitary circuit: 6 bar
- Max pressure of solar circuit: 3 bar
- Connections: G 3/4" F
- Dispersion: 75 W
- Energy efficiency class: C
- Weight when empty: 107 kg

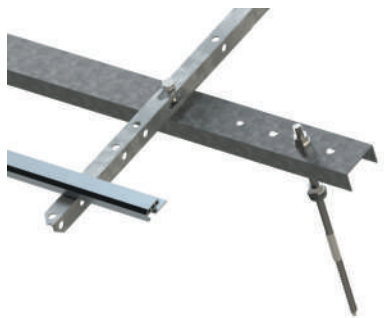
Complete system technical data

- Heat carrier fluid content: 19,80 l
- In confirm to UNI EN 12976 norm
- Solar Keymark certification

Dimension	Pcs. pack	Code	Price €
NVSN2S 280	1	02717230	3.945,00

Dimensions: see section Technical Attachments

Accessories for NVSN natural circulation solar kit



Assembly set on roofs and bent tiles with studs

Dimension	Pcs. pack	Code	Price €
SFTC200 (*)	1	02717240	178,70
SFTC300 (**)	1	02717242	175,90

(*) For models NVSN1S 150, NVSN1S 200, NVSN2S 200

(**) For model NVSN2S 280



Side cover profile

Dimension	Pcs. pack	Code	Price €
70x80x2050 mm (LxHxP)	1	02717244	31,60

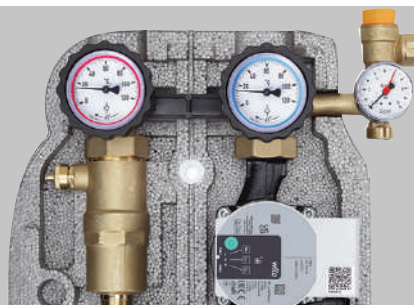
To hide the insulated pipe on the side of the panel



Front cover for solar collector

Dimension	Pcs. pack	Code	Price €
1060x2000	1	02717070	111,90

Solar stations and groups



Solar circulation pump group GSN1V 38 NP

Nominal pressure: PN 10 - - Continuous temperature 120°C (brief period: 160°C for 20 sec.)
External connections 1" M - Threads: G (ISO 228-1)

Return

- Flow rate adjuster measuring device with system fill and discharge valves
- Flanged ball valve, 3-way, DN 20 with non-return valve 10 mbar (the non-return valve can be bypassed by turning the handle 45°) provided with handle for thermometer (thermometer with blue ring; 0 °C - 120 °C)
- Safety group 6 bar with pressure gauge Ø 50 mm 0-10 bar with connection 3/4" M for expansion vessel
- Circulation pump Para STG 25/7 (fixed speed, constant Delta p, adjustment via signal PWM1 (heating) or PWM2 (solar))

Supplied with metal plate rear fixing.
Insulation box in EPP (Dimension 155 x 425 x 150 mm).
Group dimensions (WxHxD): 200 x 450 x 150 mm.

Power supply: 230 Vac + 10% / -15%, 50/60 Hz

Power consumption in stand-by:

- Circulator pump: 0.8 W

Dimension	Flow rate L/min	Pcs. pack	Code	Price €
38	8-38	1	02716922	646,40

Dimensions: see section Technical Attachments



One way solar group SS1V 12 NP

Nominal pressure: PN 10 - Continuous temperature 120 °C (brief period: 160°C for 20 sec.)
External connections 1" M

Return

- Flow rate adjuster measuring device with system fill and discharge valves
- Flanged ball valve, 3-way, DN 20 with non-return valve 10 mbar (the non-return valve can be bypassed by turning the handle 45°) provided with handle for thermometer (thermometer with blue ring; 0 °C - 120 °C)
- Safety group 6 bar with pressure gauge Ø 50 mm 0-10 bar with 3/4" M connection for expansion vessel
- Circulation pump Para STG 25/7 (with PWM2 (solar) signal adjustment via STDC controller 2015, fixed speed, constant Delta p, PWM1 (heating)).

Solar unit STDC 2015, pre-wired, includes 2 probes PT1000 with silicone cable; third probe optional only for visualization.

Supplied with metal plate rear fixing.

Insulation box in EPP (Dimension 215 x 440 x 150 mm).

Power supply: 230 Vac + 10% / -15%, 50/60 Hz

Power consumption in stand-by:

- Circulator pump: 0.8 W
- Solar control unit: 1.5 W

Dimension	Flow rate L/min	Pcs. pack	Code	Price €
12	2 - 12	1	02716924	1.004,00

Dimensions: see section Technical Attachments



Solar stations and groups



Complete solar group SSX 12-38 NP

Nominal pressure: PN 10 - Continuous temperature 120 °C (brief period: 160 °C for 20 sec.)
Takeoffs: 125 mm - External connections 1" M - Threads: G (ISO 228-1)

Return

- Flow rate adjuster measuring device with system fill and discharge valves
- Flanged ball valve, 3-way, DN 20 with non-return valve 10 mbar (the non-return valve can be bypassed by turning the handle 45°) provided with handle for thermometer (thermometer with blue ring; 0 °C - 120 °C)
- Safety group 6 bar with pressure gauge Ø 50 mm 0-10 bar with 3/4" M connection for expansion vessel
- Circulation pump Para STG 25/7 (with control signal PWM2 (solar) via EMCS controller 2015, fixed speed, constant Delta p, PWM1 (heating)).

Flow

- Flanged ball valve, DN 20 with non-return valve 10 mbar (the non-return valve can be bypassed by turning the handle 45°) provided with handle for thermometer (thermometer with red ring; 0 °C - 120 °C)
- Brass de-aeration with manually air valve
- Connexion and fitting pipe

Pre-cabled EMCS 2015 solar wiring box with 3 probes PT1000 with silicone cable.

Supplied with metal plate rear fixing.

Insulation box in EPP (Dimension 308 x 434 x 169 mm).

Power supply: 230 Vac + 10% / -15%, 50/60 Hz

Power consumption in stand-by:

- Circulator pump: 0.8 W
- Solar control unit: 0.5 W

Dimension	Flow rate lt/min	Pcs. pack	Code	Price €
12	2 - 12	1	02716930	1.453,00
38	8 - 38	1	02716932	1.453,00

Dimensions: see section Technical Attachments



Complete solar group SSC 40 NP with function of measuring consumption

Nominal pressure: PN 10 - Continuous temperature on flow copper 120 °C (short term: 160 °C for 20 sec.) - Return branch: the measurement is made between 0 °C and 100 °C
Takeoffs: 125 mm - External connections 1" M - Threads: G (ISO 228-1)

Return

- Combined measurement device of flow rate and temperature VFS with system discharge valve
- Flanged ball valve, 3-way, DN20 with non-return valve 10 mbar (the non-return valve can be bypassed by turning the handle 45 °) provided with handle for thermometer (thermometer with blue ring; 0 °C - 120 °C)
- Safety group 6 bar with pressure gauge Ø 50 mm 0-10 bar with connection 3/4" M for expansion vessel
- Circulator pump Para STG 25/7 (with PWM2 (solar) via ELCS 2016 signal adjustment unit, fixed speed, constant Delta p, PWM1 (heating)).
- Pipe fitting of 3/4" with system fill valve (provide flexible hose code 02706836 not supplied).

Flow

- Flanged ball valve, DN 20 with non-return valve 10 mbar (the non-return valve can be bypassed by turning the handle 45°) provided with handle for thermometer (thermometer with red ring; 0 °C - 120 °C)
- Brass de-aeration device with manual bleed valve
- Fitting and connection tube
- Temperature probe in contact with the connection tube

Solar unit ELCS 2016, pre-wired, includes 4 probes (3 immersion, 1 in contact) PT1000 with silicone cable with heat accounting function (*)

(*) Instrument non certified in confirm to directive 2004/22/CE - MID.

Supplied with metal plate rear fixing.

Insulation box in EPP (Dimensions 308 x 434 x 169 mm).

Power supply: 230 Vac + 10% / -15%, 50/60 Hz

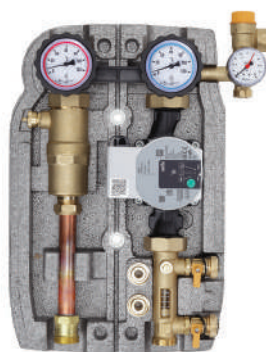
Power consumption in stand-by:

- Circulator pump: 0.8 W
- Solar control unit: 0.5 W

Dimension	Flow rate lt/min	Pcs. pack	Code	Price €
40	2 - 40	1	02716934	1.875,00

With drain kit

Dimensions: see section Technical Attachments



Solar circulation group GSN 12-38 NP

Nominal pressure: PN 10
Continuous temperature 120°C (brief period: 160°C for 20 sec.)
Takeoffs: 125 mm
External connections 1" M - Threads: G (ISO 228-1)

Return

- Flow rate adjuster measuring device with system fill and discharge valves
- Flanged ball valve, 3-way, DN 20 with non-return valve 10 mbar (the non-return valve can be bypassed by turning the handle 45°) provided with handle for thermometer (thermometer with blue ring; 0 °C - 120 °C)
- Safety group 6 bar with pressure gauge Ø 50 mm 0-10 bar with 3/4" M connection for expansion vessel
- Circulation pump Para STG 25/7 (fixed speed, constant Delta p, adjustment with PWM1 (heating signal) or PWM2 (solar))

Flow

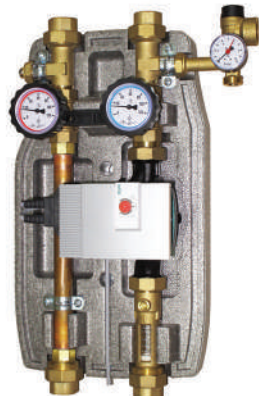
- Flanged ball valve, DN 20 with non-return valve 10 mbar (the non-return valve can be bypassed by turning the handle 45°) provided with handle for thermometer (thermometer with red ring; 0 °C - 120 °C)
- Brass de-aeration with manually air valve
- Connexion and fitting pipe

Supplied with metal plate rear fixing.

Insulation box in EPP (Dimension 280 x 425 x 150 mm).
Group dimensions (WxHxD): 325 x 460 x 150 mm
Power supply: 230 Vac + 10% / -15%, 50/60 Hz
Power consumption in stand-by:
- Circulator pump: 0.8 W

Dimension	Flow rate lt/min	Pcs. pack	Code	Price €
12	2 - 12	1	02716926	827,30
38	8 - 38	1	02716928	831,40

Dimensions: see section Technical Attachments



Solar circulation group for high flow rate GSA 42-70 N

Nominal pressure: PN 10
Continuous temperature 120°C (brief period: 160°C for 20 sec.)
Takeoffs: 125 mm
External connections 1" 1/4 M - Threads: G (ISO 228-1)

Return

- Flow rate adjuster measuring device 5/42 l/min or 20/70 l/min
- Ball valve with non-return valve 18 mbar (the non-return valve can be bypassed by turning the handle 45°) provided with handle for thermometer (thermometer with blue ring; 0 °C - 120 °C)
- "T" fitting for safety group
- Safety group 6 bar with pressure gauge Ø 50 mm 0-10 bar with 3/4" M connection for expansion vessel
- Circulation pump Stratos Para 25 / 1-8 (ΔP const, ΔP variable or adjustment by external signal 0-10 V)

Flow

- Ball valve with non-return valve 18 mbar (the non-return valve can be bypassed by turning the handle 45°) provided with handle for thermometer (thermometer with red ring; 0 °C - 120 °C)
- "T" fitting with probe holder socket Ø 6 mm
- Connexion and fitting pipe

Supplied with metal plate rear fixing.

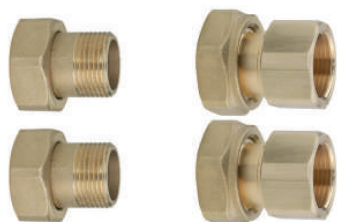
Insulation box in EPP (Dimension 285 x 500 x 170 mm).
Power consumption in stand-by:
- Circulator pump: 1.44 W

Dimension	Flow rate l/min	Pcs. pack	Code	Price €
42	5-42	1	02716760	1.605,00
70	20-70	1	02716770	1.606,00

Provide valve for fill/discharge system code 02707898

Dimensions: see section Technical Attachments

Accessories for solar systems



Pipe unions couple for solar groups

Dimension	Pcs. pack	Code	Price €
1" F x 3/4" M	1	90027810	12,46
1" F x 3/4" F	1	90027850	26,84
1" 1/4 F x 1" M	1	90028290	26,07



Bracket for fixing expansion tank with fitting up to 24 liters

L-bracket for wall mounting of expansion vessel.
The 3/4" M x 3/4" F fitting is equipped with a non-return valve.
Gasket and wall plugs included.

Dimension	Pcs. pack	Code	Price €
	1	02706834	49,13



Stainless steel flexible hose kit for connection to expansion vessel

Flexible tube in stainless steel AISI 304 for connection of the expansion vessel to the safety group - Threading 3/4" - Includes hose, fittings and gaskets.

Dimension	Pcs. pack	Code	Price €
L 500	1	02706836	23,84
L 1000	1	02706838	36,45



Flow regulator/flowmeter

Connection DN15: 1" M - 1" cap, Connection DN20: 1" 1/4 M - 1" 1/4 cap - Nominal pressure: PN 10 - Continuous temperature 120 °C (brief period: 160°C for 20 sec.)

Dimension	Flow rate l/min	Pcs. pack	Code	Price €
DN15	2-12	1	02716644	63,72
DN15	8-38	1	02707750	63,72
DN20	5-42	1	02716648	104,50
DN20	20-70	1	02716650	104,50

Option of horizontal or vertical installation with any direction of flow



Differential thermostat

Model	Pcs. pack	Code	Price €
Differential thermostat TD1 ⁽¹⁾	1	02708010	209,40
Differential thermostat TD2 ⁽²⁾	1	02706840	249,30
Sensor PTC +125 °C for TD1	1	02708012	16,00
Sensor PT 1000 +160 °C for TD2	1	02706844	23,84
Sensor PT 1000 +200 °C for TD2	1	02706842	29,88
Immersion sleeve Ø 10 L 100 mm ^(*)	1	00510686	11,10
NEW Immersion sleeve Ø 7 L 100 mm	1	00510687	11,67

⁽¹⁾ Complete with three probes PTC +125 °C. Equipped with 1 differential thermostat and 1 adjustment thermostat.

⁽²⁾ Complete with two probes PT 1000 +160 °C and 1 probe PT 1000 +200 °C. Equipped with 2 differential thermostats, one of which can be configured for integration/overheat discharge

^(*) Item to be out of stock

Accessories for solar systems



Temperature differential controller EMCS 2015

Temperature differential controller for systems with solar manifolds or solid fuel tanks, equipped with 4 inputs for temperature probes PT1000, 2 on/off outputs with live relay, 1 PWM/0-10V output to control high efficiency circulators, external connection via CAN-Bus or Ethernet for the management of the system even at a distance via local network or internet.

27 different hydraulic diagrams selectable with the possibility to activate additional functions for any unused relays.

Display of the measured temperatures and of the status of the relays.

Complete with clock and reserve battery (autonomy 24 h).

Simple heat metering function*. Functions protecting the system, the solar manifold and the tank. Anti-legionella function. Anti-freeze function. Offset correction of temperature sensors.

* Instrument not certified according to Directive 2004/22/CE - MID

Model	Pcs. pack	Code	Price €
EMCS 2015	1	02716711	471,50

Supplied with 3 immersion sensor PT1000 + 180 °C with silicone cable



Over voltage kit protection

Dimension	Pcs. pack	Code	Price €
	1	02716616	28,96



Temperature sensors

Sensors PT1000 + 180 °C with silicone cable

Dimension	Pcs. pack	Code	Price €
Immersion sensor with cable 2 m, Ø 5,5 mm	1	02716612	29,88
Contact sensor with cable 1,5 m	1	02716614	41,86



Vent valve for high temperature solar

Body and cover in brass UNI EN 12165 CW617N - Polyethylene float - Max. temperature: 150 °C -Max. pressure: 10 bar

Dimension	Pcs. pack	Code	Price €/pc.
1/2" M	10	28140020	23,84



Valve for fill and discharge system

Technical data

Continuous temperature 120 °C (brief period 160 °C for 20 sec.)

Nominal pressure: PN 10

Connections: 1" F

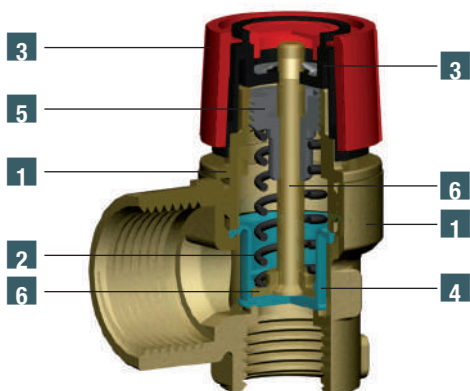
Lateral bibcocks 3/4" for hose connection

Flow rate up to 70 l / min

Kvs: 17,0

Dimension	Pcs. pack	Code	Price €
1"	1	02707898	77,98

Accessories for solar systems



Product 100% tested

Sicura HT, Safety valve for high temperature solar

Membrane valve, with fixed high-lift calibration and direct reaction spring. The calibration screw cannot be tampered with, without causing irretrievable damage to the valve.

The shutter membrane is guaranteed non-stick type and will not alter shape after prolonged utilisation.

The calibration pressure is stamped in relief on the plug placed on top of the valve. The possibility of the valve being opened accidentally is prevented by a protection cap.

In order to turn the knob, it is necessary to remove the cap.

The addition of a pressure gauge is already foreseen.

Max. temperature: 160 °C

Suitable for use with glycol mixtures of up to 50%

Construction

- 1 Body and ring nut in UNI EN 12165 CW617N brass
- 2 AISI stainless steel spring
- 3 Handle and cap in PA6
- 4 Silicone membrane
- 5 Adjustment ring nut in PPS
- 6 Rod and disc in UNI EN 12164 CW614N brass

Note:

intended use with pressure equipment as per art. 4 paragraph 3 PED directive 2014/68/EU or art. 3 paragraph 3 PED directive 97/23/EC.

Dimension	Pressure	Pcs. pack	Code	Price €/pc.
1/2" F x 3/4" F	4 bar	12	00206122	25,74
1/2" F x 3/4" F	6 bar	12	00206124	23,56
1/2" F x 3/4" F	3 bar	12	00206120	25,03



Expansion vessel for solar

Special membrane for solar in confirm to DIN 4807 - Precharge pressure: 2,5 bar - Maximum pressure: 10 bar - Temperature: -10÷+100 °C

Liters	Connection	H (mm)	Ø (mm)	Pcs. pack	Code	Price €
12	M 3/4" Gas	315	260	1	00104212	96,23
18	M 3/4" Gas	380	260	1	00104200	107,10
24	M 3/4" Gas	490	260	1	00104205	122,10
35	M 3/4" Gas	435	380	1	00104210	191,70
50	M 3/4" Gas	565	380	1	00104215	227,20

CE marking in compliance with the directive PED 2014/68/UE
Model from 35 to 50 litres with support feet



Progress for Solar Male-Female

Temperature of use: -20 ÷ +180 C

Nominal pressure: 50 bar for size 1/2", 40 bar for size 3/4"

Dimension	Pcs. pack	Code	Price €
1/2"	18	09815370	11,49
3/4"	12	09815372	15,82



Vertical de-aeration device

Maximum operating temperature: 140 °C - Maximum operating pressure: 10 bar
Kv: 6,5 - Employment fluid: water, glicole

Dimension	Pcs. pack	Code	Price €/pc.
DN 15 - G 1" M x G 3/4" F	1	02707822	78,59
Extension 50 mm (*)	1	02707820	11,87

(*) for air vent valve - items to be out of range



Tank of premixed protective non-toxic antifreeze for solar systems

* Propylene glycol content: 25-28% - pH of the solution: 9.2-10 - Minimum alkalinity reserve: ml HCl 0.1 N:15 - Freezing point: -12 °C - density: 1,0 kg/l

** Propylene glycol content: 42-45% - pH of the solution: 9.2-10 - Minimum alkalinity reserve: ml HCl 0.1 N: 20 - Freezing point: -28 °C - density: 1,0-1,1 kg/l

Dimension	Pcs. pack	Kg/pack	Code	Price €
T ≥ - 12 °C*	1	5 kg	02706372	68,82
T ≥ - 12 °C*	1	25 kg	02706376	322,40
T ≥ - 28 °C**	1	5 kg	02706382	101,10
T ≥ - 28 °C**	1	25 kg	02706386	452,50

Liquid with disappearing red-violet colour, indicative of the pH, non-toxic and ready to use, protects against corrosion of the metal surfaces, prevents the formation of salt encrustation, allows to reach stagnation temperatures up to 300 °C.

Boiling point: 102 °C for codes 02706372 - 02706376, 105 °C for codes 02706382 - 02706386.



System loading station

Delivery capacity: 5,2 - 50 litres/min - Static pressure H: 5 - 52 m. c. H₂O - Power supply: 230 V - 50 Hz - Current = 2,6 A - Electric power absorbed: 500 W max - Spin speed: 2900 rpm - Protection: IP44 - Tank volume: 50 litres

Dimension	Pcs. pack	Code	Price €
50 litres	1	02706862	1.696,00

Fitted with two connection pipes L = 3 m

Pipes and fittings for solar systems



Insulating material in EPDM, resistant to UV rays.
Thermal conductivity:
 $\lambda (0\text{ }^{\circ}\text{C}) = 0.033\text{ W/mK}$,
 $\lambda (40\text{ }^{\circ}\text{C}) = 0.037\text{ W/mK}$,
Class of construction material: B2 (DIN 4102)
Max. operating temperature: 150 °C
Max. peak temperature: 175 °C

Pipe material:
corrugated stainless steel AISI 316 L with temperature range between
-270 °C and +600 °C
Copper pipe DIN EN 12249 (R220) resistant to temperatures that reach 180 °C

Maximum operating pressure of corrugate stainless steel pipe:
20 °C: DN16=11 bar; DN20=11 bar; DN25=10 bar
200 °C: DN16=7,5 bar; DN20=7,5 bar; DN25=6,9 bar



Single flexible pre-insulated stainless steel hose

Dimension	Insulating thickness	Pcs. pack	Code	Price €
DN 16 - L= 15 m	13 mm	1	02706402	412,70
DN 20 - L= 15 m	13 mm	1	02706412	515,40
DN 25 - L= 15 m	13 mm	1	02706422	590,00



Double flexible pre-insulated stainless steel hose - separable

Dimension	Insulating thickness	Pcs. pack	Code	Price €
DN 16 - L=15 m	13 mm	1	02707502	714,90
DN 20 - L=15 m	13 mm	1	02707522	879,50
DN 25 - L=15 m	13 mm	1	02707462	1.140,00

Sensor cable: 2x0,75 mm²



Double pre-insulated copper pipe - separable

Dimension	Insulating thickness	Pcs. pack	Code	Price €
15x0,8 - L=15 m	13 mm	1	02707841	1.096,00
18x0,8 - L=20 m	13 mm	1	02707845	1.800,00

Sensor cable: 2x0,75 mm²



Pipe connection kit with screws for inox pipes

Dimension	Pcs. pack	Code	Price €
DN 16 mm (3/4")	1 kit	02706552	41,86
DN 20 mm (1")	1 kit	02706602	56,14
DN 25 mm (1" 1/2)	1 kit	02706610	104,50

The kit consists of: 4 connecting nuts, 4 fixing rings, 4 flat gaskets, 1 nipple and 1 stainless steel washer (the nipple and washer must be used to form the flat seal housing on the pipe).



Double male nipple for inox pipes

Dimension	Pcs. pack	Code	Price €
3/4" M - 3/4" M	1	02706730	9,09
1" M - 1" M	1	02706740	18,55
1"1/4 M - 1"1/4 M	1	02706750	37,30

Pipes and fittings for solar systems



Reduction ring monopiece for copper pipes

Dimension	Pcs. pack	Code	Price €/pc.
DN 18 copper x DN 15 copper	10	02707850	9,68
DN 22 copper x DN 18 copper	10	02707852	8,31



Kit fast connection copper-copper

Dimension	Pcs. pack	Code	Price €/pc.
DN 15 copper x DN 15 copper	5	02707860	13,75
DN 18 copper x DN 18 copper	5	02707862	18,43



Metallic seal fitting with male head thread for copper pipes

Dimension	Pcs. pack	Code	Price €/pc.
3/4" M x DN 15 copper	5	02707870	17,62
3/4" M x DN 18 copper	5	02707872	17,62
3/4" M x DN 22 copper	5	02707874	15,55
1" M x DN 22 copper	5	02707876	16,06



Kit of 4 brackets for installation of coupled and pre-insulated pipes

Dimension	Pcs. pack	Code	Price €
DN 16÷20 mm for inox	1	02706540	36,45
DN 15÷18 mm for copper	1	02707848	25,75



Adhesive insulating tape, thickness 3 mm

Dimension	Pcs. pack	Code	Price €
H=5 cm x L=15 m	1	03965952	53,45



Black adhesive tape in aluminium

Dimension	Pcs. pack	Code	Price €
H=5 cm x L=50 m	1	03965960	33,34



Heating unit components



> Eco+
pressure
reducer



403

> Tecno-Varia and Varia
automatic
air valve



405

> Safety
group



407

> Sicura
safety
valve



408

> Alimatic
automatic
feeder



410

> Circulator pumps



411

> Expansion
vessel



413

> Mesh
filter



414

> Dirt separator
and Deareator



415

> Overpressure
valve



416

> Mixing
valves
and servomotors



417

> Servomotors and
balancing valves



419

> Plate heat
exchangers



420

> Autoclaves,
pressure switch
and instruments
for regulation



421

> Open manifolds



422

> Fuel
cut-off
valve



425

> Insulation



426

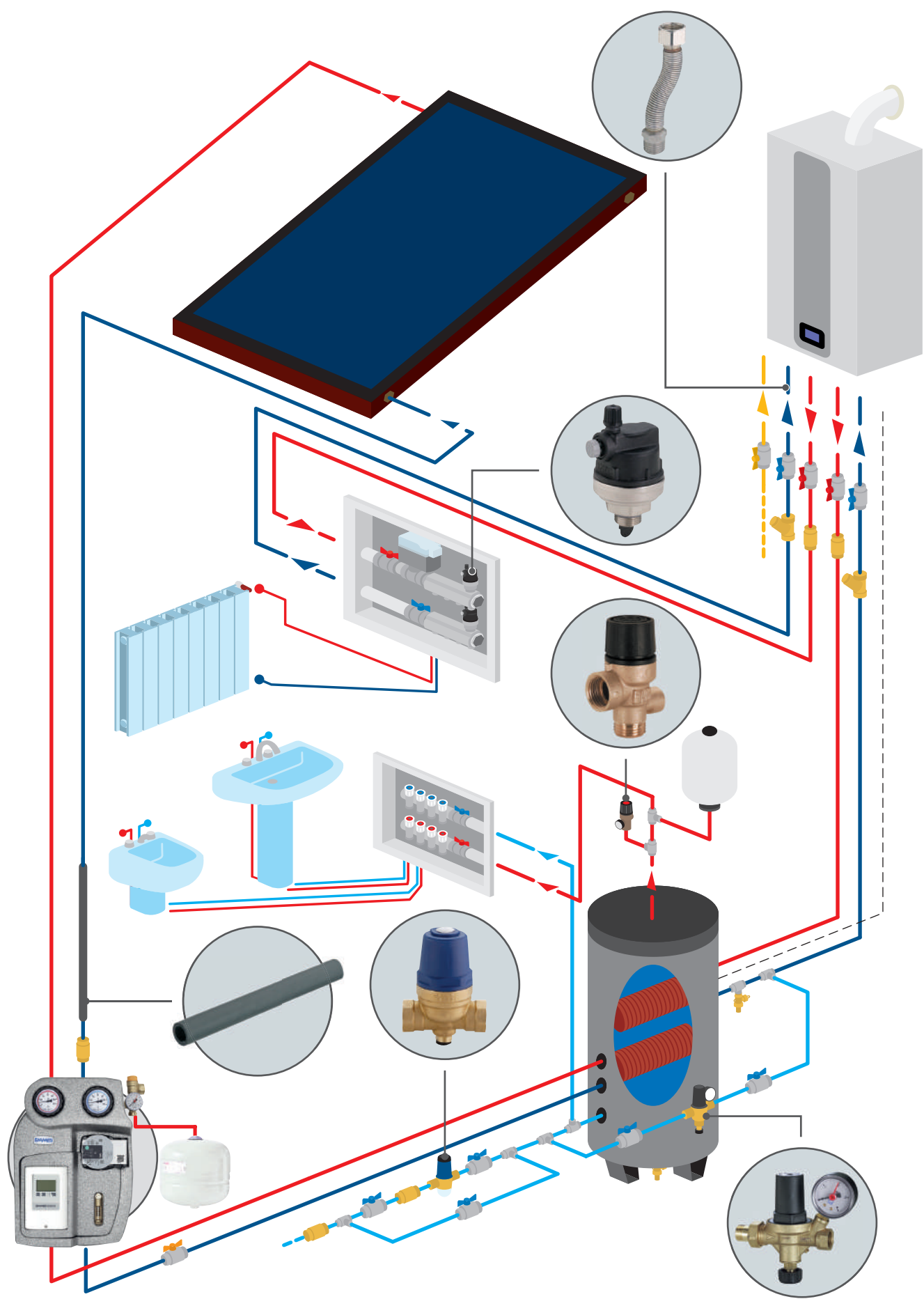
> Filters, water
meters and
solenoid valves



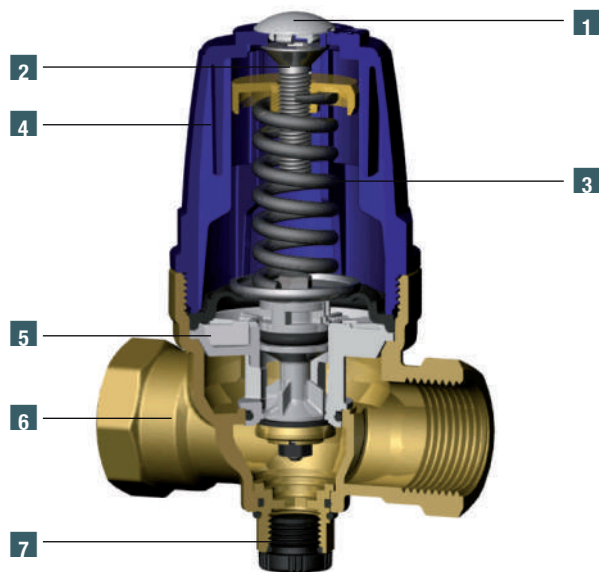
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Example of installation



Pressure Reducer Eco+



ACS
Conformité sanitaire

Membrane pressure reducer.

The stopper cartridge is located around a stainless steel bolt, guaranteeing mechanical resistance and easy maintenance: the cartridge can always be replaced by removing it from the reducer without the need to remove the latter from the system.

The stopper is coupled with a piston, whose surface compensates for the force exercised by the pressure upstream of the stopper itself, thereby guaranteeing the stability of the delivered pressure independently of fluctuations in supply pressure.

The sliding surfaces of the seal elements are made with synthetic components with a low friction coefficient, which reduces the formation of deposits and the onset of malfunctions.

The maximum inlet pressure is 25 bar, and the outlet pressure can be regulated between 1 and 6 bar.

All reducers are bench tested and calibrated to a delivery pressure of 3 bar, this setting can be changed using the adjustment screw, screwing it in to increase the output pressure and unscrewing it to decrease it.

The reducer is available with connections with female or male threads. It is recommended to place a silt filter upstream of the reducer, which retains any impurities in the water. This will extend the life of the reducer itself.

Construction

- 1 Protection cap in PA 6 (15% GF)
- 2 Adjustment mechanism in brass UNI EN 12164 CW614N
- 3 Spring in stainless steel AISI 302
- 4 Cap in PA 66 (30% GF)
- 5 Stopper cartridge: plastics in Hostaform - gasket and membrane in EPDM 70 WRAS - shaft and washers in stainless steel AISI 304
- 6 Brass body UNI EN 12165 CW617N
- 7 G 1/4" pressure gauge fittings in brass UNI EN 12164 CW617N

Technical data

Thread UNI EN 10226-1
Max upstream pressure: 25 bar
Adjustable field: 1÷6 bar
Max temperature: 70 °C

Compliant with 4MS Common Composition List requirements

Membrane pressure reducer Eco+



Eco+ pressure reducer Female - Female, sandy

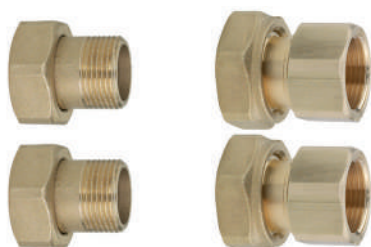
Dimension	Pcs. pack	Code	Price €
DN15 (G 1/2" F)	1	28104220	42,13
DN20 (G 3/4" F)	1	28104222	46,75
DN25 (G 1" F) (*)	1	28104224	54,07

(*) Use the pressure gauge with rear connection



Eco+ pressure reducer Male - Male, sandy

Dimension	Pcs. pack	Code	Price €
DN 15 (G 3/4" M)	1	28104340	42,13
DN 20 (G 1" M)	1	28104342	46,75



Pipe unions couple for pressure reducer Male - Male without pipe unions

Dimension	Pcs. pack	Code	Price €/couple
3/4" F x 1/2" M	1	90027800	8,46
1" F x 3/4" M	1	90027810	12,46
3/4" F x 1/2" F	1	90027840	18,63
1" F x 3/4" F	1	90027850	26,84

Thread UNI EN ISO 228-1



Pressure gauge radial attachment Ø 63 for pressure reducer DN15 and DN20

Dimension	Pressure	Pcs. pack	Code	Price €/pc.
1/4" x 63 mm	6 bar	10	00622006	10,64
1/4" x 63 mm	10 bar	10	00622010	10,64

Thread UNI EN ISO 228-1



Pressure gauge Ø 50 side back connection for pressure reducer Female - Female DN25

Size	Pressure	Pcs. pack	Code	Price €/pc.
1/4"	10 bar	10	00622442	10,00

Thread UNI EN ISO 228-1

Emmeti Pressure reducer



Emmeti Pressure reducer

Max upstream pressure: 25 bar

Adjustable field: 0,5÷6 bar

Max temperature: 80 °C

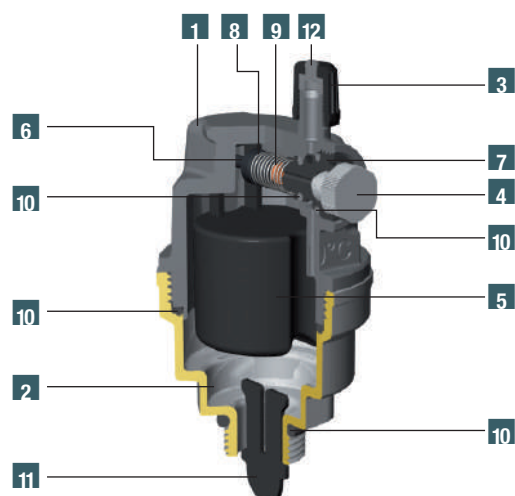
Body and internal components in UBA compliant brass alloy

Threads: G (UNI EN ISO 228-1)

Dimension	Connections	Pcs. pack	Code	Price €
1" with pipe unions	F-F	1	01060100	123,40
1"1/4 with pipe unions	F-F	1	01060114	206,30
1"1/2 with pipe unions	F-F	1	01060150	236,20
2" with pipe unions	F-F	1	01060200	337,10
2"1/2 without pipe unions	F-F	1	01060212	418,70

Tecno-Varia

Automatic air valve with plastic cover and anti-dirt air chamber



Construction

- 1 Casing in Zytel (HTN51)
- 2 Cup in brass UNI EN 12165 CW617N
- 3 Black cap manual venting PA 6 stiffened
- 4 Grey cap automatic venting PA 6 stiffened
- 5 Floater in PP
- 6 Splingle in PA 6
- 7 Ring in PPO
- 8 Spring in steel inox
- 9 Shutter in silicone rubber
- 10 O-ring in NBR
- 11 Bubble-breaker in PA 6 stiffened
- 12 Gasket in NBR

Technical data

Thread UNI EN ISO 228-1
Maximum pressure 10 bar
Maximum temperature +110 °C

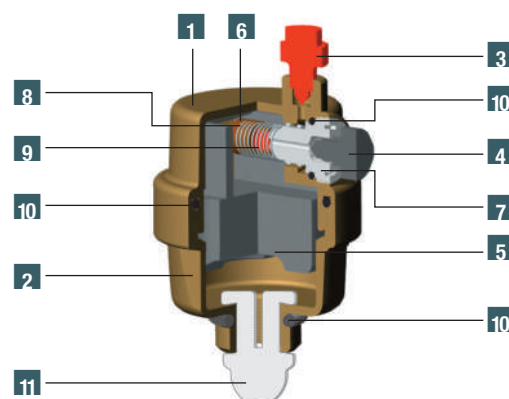
Product 100% tested



Tecno-Varia

Dimension	Pcs. pack	Code	Price €/pc.
3/8" reduced + bubble-breaker	12	00400000	8,73
3/8" standard + bubble-breaker	12	00400002	9,32
1/2" standard	12	00400004	10,25

Automatic air valve



Construction

- 1 Casing in brass UNI EN 12165 CW617N
- 2 Cup in brass UNI EN 12165 CW617N
- 3 Red cap manual venting PA 6 stiffened
- 4 Black cap automatic venting PA 6 stiffened
- 5 Floater in PP
- 6 Splingle in PA 6
- 7 Ring in PPO
- 8 Spring in steel inox
- 9 Shutter in silicone rubber
- 10 O-ring in NBR
- 11 Bubble-breaker in PA 6 stiffened

Technical data

Thread UNI EN ISO 228-1
Maximum pressure 10 bar
Maximum temperature +120 °C

Product 100% tested



Emmeti patented

Varia reduced with bubble-breaker

Dimension	Pcs. pack	Code	Price €/pc.
3/8"	16	00400620	11,06



Varia standard with bleed-nipple at top and without bubble-breaker

Dimension	Pcs. pack	Code	Price €/pc.
1/2"	12	00400660	12,25



Varia maxi automatic air vent valve 3/4"

Dimension	Pcs. pack	Code	Price €/pc.
3/4"	10	00400340	16,85

Thread UNI EN ISO 228-1

Varia and Tecno-Varia accessories



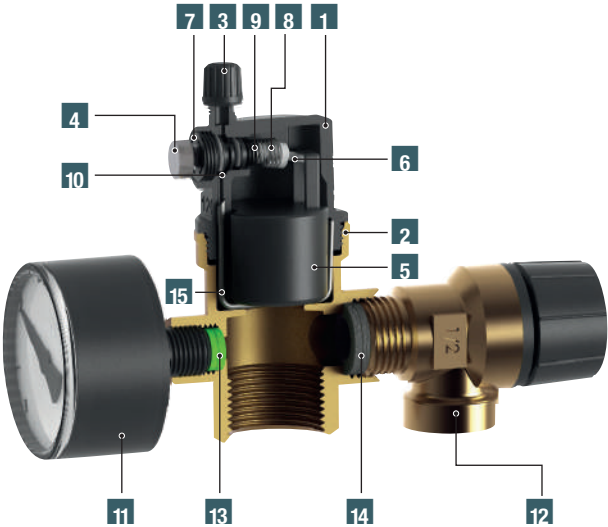
Check valve

Dimension	Pcs. pack	Code	Price €/pc.
3/8" M x 3/8" F	12	00402060	2,59
1/2" M x 3/8" F	12	00402080	3,34
1/2" M x 1/2" F	12	00402100	4,07

Thread UNI EN ISO 228-1

System safety unit

Heat generator safety unit



Uses
Heat generating units

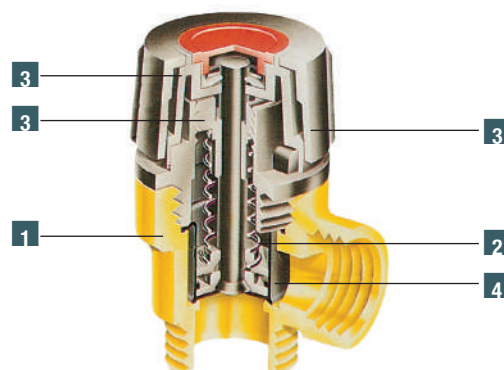
Technical data
Thread UNI EN ISO 228-1
Maximum operating pressure: 3 bar
Maximum operating temperature: 95 °C

- Construction**
- 1 Cup in Zytel (HTN51)
 - 2 Body in brass UNI EN 12165 CW617N
 - 3 Black cap manual venting PA 6 stiffened
 - 4 Grey cap automatic venting PA 6 stiffened
 - 5 Floater in PP
 - 6 Splingle in PA 6
 - 7 Ring in PPO
 - 8 Spring in steel inox
 - 9 Shutter in silicone rubber
 - 10 O-ring in NBR
 - 11 Pressure gauge Ø 50 / 4 bar
 - 12 Safety relief valve 3 bar size 1/2" M-F
 - 13 Gaskets in fiber
 - 14 Gaskets in EPDM
 - 15 Float support in Inox Steel AISI 304

System safety unit

Dimension	Pcs. pack	Code	Price €
3/4" F	1	00200700	39,74

Safety relief valves



Construction

- 1 Body in brass UNI EN 12165 CW617N
- 2 Spring in stainless steel AISI
- 3 Ring nut, knob and cap in nylon
- 4 Membrane in ethylpropylene rubber

Technical data

Membrane valve, with fixed high-lift calibration and direct reaction spring.

The calibration screw cannot be tampered with, without causing irretrievable damage to the valve.

The shutter membrane is guaranteed non-stick type and will not alter shape after prolonged utilisation.

The calibration pressure is stamped in relief on the plug placed on top of the valve.

The possibility of the valve being opened accidentally is prevented by a protection cap. In order to turn the knob, it is necessary to remove the cap.

Maximum operating temperature: 110 °C

All the valves are subjected to a hydraulic and functional test after calibration.

Thread UNI EN ISO 228-1

Note

intended use with pressure equipment referred to art. 4 paragraph 3 of directive PED 2014/68 /UE or art. 3 paragraph 3 of the directive PED 97/23 /EC

Product 100% tested



Safety valve

Dimension	Calibration pressure	Nominal discharge pressure	Pcs. pack	Code	Price €/pc.
1/2" F-F	3 bar	3,3 bar	12	00205030	9,17
1/2" M-F	3 bar	3,3 bar	12	00206030	9,17
1/2" F-F	6 bar	6,6 bar	12	00205060	9,17
1/2" M-F	6 bar	6,6 bar	12	00206060	9,17
3/4" F-F	3 bar	-	10	00202334	18,55
3/4" F-F	6 bar	-	10	00202634	18,94

Safety relief valves



Safety valve with special regulation

Dimension	Calibration pressure	Pcs. pack	Code	Price €/pc.
1/2" F-F	1,5 bar	12	00205015	9,17
1/2" F-F	1,8 bar	12	00205018	9,17
1/2" F-F	2 bar	12	00205020	9,17
1/2" F-F	2,5 bar	12	00205025	9,17
1/2" F-F	4 bar	12	00205035	9,71
1/2" F-F (*)	7 bar	10	00201270	10,36
1/2" F-F (*)	8 bar	10	00201282	18,57
1/2" F-F (*)	9 bar	10	00201292	18,48
3/4" F-F (*)	2,5 bar	10	00203425	18,94
1/2" F-F	8 bar	12	00205082	15,97
1/2" M-F	2 bar	12	00206020	9,90
1/2" M-F	4 bar	12	00206040	9,71

(*) Item on request for minimum lots: 30 days from order confirmation



With gauge fitting

Dimension	Calibration pressure	Nominal discharge pressure	Pcs. Pack	Code	Price €/pc.
1/2" F-F	3 bar	3,3 bar	10	00206080	9,73
1/2" F-F	6 bar	6,6 bar	10	00206082	9,73
1/2" M-F	3 bar	3,3 bar	10	00206090	11,47
1/2" M-F	6 bar	6,6 bar	10	00206092	11,47



With pressure gauge Ø 50

Dimension	Calibration pressure	Nominal discharge pressure	Pcs./pack	Code	Price €/pc.
1/2" F-F	3 bar	3,3 bar	2	00206100	21,03
1/2" F-F	8 bar	-	8	00206114	24,85
1/2" F-F	3 bar	3,3 bar	1	00206110	21,21
1/2" F-F	8 bar	-	1	00206112	20,20

For export market settings different from standard can be required

Automatic feeder



Technical data

Max upstream pressure: 10 bar
Adjustable field: 0,3÷4 bar
Max temperature: 40 °C
Pressure gauge: Ø 5,2 cm

Product 100% tested



Automatic filling valve

Dimension	Pcs. pack	Code	Price €
1/2" without pressure gauge	1	00200514	69,33
1/2" with pressure gauge	1	00200614	73,69

Shark CP

Heating and cooling circulator pump



Shark CP circulator pump

Wet rotor circulator with threaded connections, self-protected high-efficiency motor with EC technology for electronic performance control.
Applications: heating and cooling systems.

Mode of operation

- n. 3 curves at Δp -c (Δp constant);
- n. 3 curve a Δp -v (Δp variable);
- n. 3 fixed speed curves.

Reporting and display functions

The control module is equipped with a control button and LEDs for setting and displaying operating parameters:

- indication of the selected adjustment mode;
- Indication of the selected characteristic curve within the control mode.

Technical data

Fluid temperature: -10 °C to +95 °C

Mains power supply: 1-230 V, 50 Hz

Degree of protection: IPX2D

Maximum operating pressure: 6 bar

Power consumption: 4-40 W (model 25/6-130), 4-75 W (model 25/7-130)

Connections: 1"1/2 male

Connection spacing: 130 mm

EEI≤0.23

Allowable fluids: heating and cooling water; mixtures of water and glycol (max 1:1)

The circulator pump comes complete with connector and gaskets.

Model	Connections	Pcs. Pack	Code	Price €
25/6-130	1"1/2 male – takeoffs 130 mm	1	00710376	326,50
25/7-130	1"1/2 male – takeoffs 130 mm	1	00710378	367,30

Dimensions and diagrams: see section Technical Attachments

Circulator pumps



Domestic circulator for the recirculation of domestic hot water

Temperature range for the fluid: from 2 to 95 °C
 Adjustment range: from 40 to 70 °C - Max ambient temperature: 40 °C
 Max pressure: 10 bar
 Power supply: 230 V / 50 Hz - Insulation class: F (155 °C)
 Attachment distance: 138 mm - Absorption: 6 W
 Degree of protection: IP42

Size	Connections	Pcs. pack	Code	Price €
STAR Z NOVAT	1"	1	00710398	463,20

Application: domestic hot water recirculation. Three programmable operating times per day. Setting the minimum operating temperature. Thermal disinfection function. Anti-lock protection. Complete with check valve and shut-off valve and gaskets.



Pipe union manufactured in brass for circulator pump

Dimension	Pcs. pack	Code	Price €
3/4" F x 1 1/2" F	1	00801034	22,90
1" F x 1 1/2" F	1	00801100	20,42
1 1/4" M x 1 1/2" F	1	00801114	26,95
1 1/4" F x 2" F	1	00801130	34,36
1" F x 1 1/2" F	1	28130312	12,63

Supplied with gasket.

Threads: G (UNI EN ISO 228-1)

Heating unit components

Heating unit components



Multifunctional expansion vessels with fixed membrane and protective sleeve

Uses: heating, cooling and sanitary water systems.
Fixed membrane and protective sheath in BUTYL rubber
Operating temperature: -10°C ÷ +99°C
Max working pressure: 10 bar - Precharge pressure: 2.5 bar
Attack in stainless steel

Liters	Connection	H (mm)	Ø (mm)	Pcs. pack	Code	Price €
5	M 3/4" Gas	225	205	1	00820000	98,47
8	M 3/4" Gas	285	205	1	00820002	110,60
11	M 3/4" Gas	305	270	1	00820004	126,80
18	M 3/4" Gas	400	270	1	00820006	160,60
24	M 1" Gas	500	270	1	00820010	152,90

NEW

Conformi alla direttiva 2014/68/UE
Filettature: G (UNI EN ISO 10226)



Expansion vessels with fixed membrane

Uses: heating and cooling systems.
Fixed diaphragm in SBR
Operating temperature: -10 ÷ +100 °C
Max working pressure: 5 bar (35 litres), 6 bar (50 ÷ 300 litres)
Precharge pressure: 1.5 bar

Liters	Connection	H (mm)	Ø (mm)	Pcs. pack	Code	Price €
6	M 3/4" Gas	250	245	1	00103006	59,83
8	M 3/4" Gas	280	245	1	00103008	59,83
10	M 3/4" Gas	330	245	1	00103010	67,31
12	M 3/4" Gas	325	285	1	00103012	68,79
18	M 3/4" Gas	395	285	1	00103018	77,05
24	M 3/4" Gas	420	325	1	00103024	87,86
35	M 3/4" Gas	455	380	1	00102400	152,10
50	M 3/4" Gas	590	380	1	00102405	187,20
80	M 3/4" Gas	690	460	1	00102410	318,10
100	M 3/4" Gas	810	460	1	00102415	366,60
150	M 1" Gas	970	510	1	00102420	523,50
200	M 1" Gas	985	590	1	00102425	673,10
250	M 1" Gas	1230	590	1	00102430	841,10
300	M 1" Gas	1220	650	1	00102435	1.010,00

In compliance with directive 2014/68/UE. From 80 to 300 litres equipped with support base.
Threads: G (UNI EN ISO 10226)



Bracket for fixing expansion tank with fitting up to 24 liters

L-bracket for wall mounting of expansion vessel. The 3/4" M x 3/4" F fitting is equipped with a non-return valve. Gasket and wall plugs included.

Dimension	Pcs. pack	Code	Price €
	1	02706834	49,13



Stainless steel flexible hose kit for connection to expansion vessel

Flexible tube in stainless steel AISI 304 for connection of the expansion vessel to the safety group. Threading 3/4". Includes hose, fittings and gaskets.

Dimension	Pcs. pack	Code	Price €
L 500	1	02706836	23,84
L 1000	1	02706838	36,45

Threads: G (UNI EN ISO 10226)



Expansion vessels for sanitary water with interchangeable membrane

Uses: hot and cold water, heating and cooling system circuits.

Interchangeable membrane in BUTYL

Operating temperature: -10 ÷ +100 °C - Max operating pressure: 10 bar

Precharge pressure: 3,5 bar (2 liters), 2,5 bar (5 ÷ 8 liters)

Liters	Connection	H (mm)	Ø (mm)	Pcs. pack	Code	Price €
2	M 1/2" Gas	240	120	4	00800002	57,96

In compliance with directive 2014/68/UE

Threads: G (UNI EN ISO 10226)



Expansion vessels for sanitary water

Uses: domestic hot and cold water circuit, pressurization autoclave, heating and cooling system circuits.

Interchangeable membrane in EPDM - Operating temperature: -10 ÷ +100 °C

Max operating pressure: 8 bar - Precharge pressure: 1,5 bar

Liters	Connection	H (mm)	Ø (mm)	Pcs. pack	Code	Price €
24	M 1" Gas	365	350	1	00800026	76,27

In compliance with directive 2014/68/UE. Threads: G (UNI EN ISO 10226)



Expansion vessels for sanitary water

Uses: domestic hot and cold water circuit, pressurization autoclave, heating and cooling system circuits. Interchangeable membrane in EPDM

Operating temperature: -10 ÷ +100 °C - Max operating pressure: 10 bar

Precharge pressure: 1,5 bar (35 ÷ 80 liters), 2,5 bar (100 ÷ 300 liters)

Liters	Connection	H (mm)	Ø (mm)	Pcs. pack	Code	Price €
35 *	M 1" Gas	475	380	1	00800595	202,10
35	M 1" Gas	560	380	1	00800590	284,40
50	M 1" Gas	720	380	1	00800600	283,50
80	M 1" Gas	760	460	1	00800610	441,30
100	M 1" Gas	880	460	1	00800615	530,90
150	M 1" Gas	1030	510	1	00800620	885,90
200	M 1 1/4 Gas	1100	590	1	00800625	1.086,00
300	M 1 1/4 Gas	1250	650	1	00800630	1.416,00

In compliance with directive 2014/68/UE

*L35 without feet. Threads: G (UNI EN ISO 10226)



ISPEL qualified and calibrated safety valve. Compliant with directive PED 97/23/EC

Dimension	Pressure	kcal/h	Pcs. pack	Code	Price €
1/2" x 3/4" Ø 15	3 bar	126.873	1	00208030	73,69
1/2" x 3/4" Ø 15	6 bar	221.407	1	00208060	73,69
3/4" x 1" Ø 20	3 bar	254.151	1	00209030	120,30
3/4" x 1" Ø 20	6 bar	443.520	1	00209060	122,40

Threads: G (UNI EN ISO 228-1)



F F sandblasted filter with inox steel filter

- Brass cap UNI EN 12165 CW617N; body: brass UNI EN 12165 CW617N (from 1/2" to 1") - brass Delta C EN 1982 CB 7455 (from 1 1/4 to 2") - bronze SN UNI EN 1982 DIN 50930/6 (2 1/2); female thread G (UNI EN ISO 228-1);

stainless steel sieve filter with filtration rating:

- 400 µm for models 1/2", 3/4" and 1";
- 500 µm for models 1 1/4, 1 1/2 and 2";
- 600 µm for model 2 1/2.

Dimension	Pcs. pack	Code	Price €
1/2"	6	01005012	10,36
3/4"	7	01005034	18,55
1"	4	01005100	27,41
1 1/4	2	01005114	43,28
1 1/2	1	01005112	54,87
2"	1	01005200	91,71
2 1/2	1	01005205	212,90



Magnetic dirt separator filter for heating and cooling systems

Magnetic dirt separator filter, for horizontal installation, designed to stop solid impurities circulating inside a winter/summer air conditioning system. The dual function of filtration and blocking of ferrous particles (by means of an internal magnet), allows the complete elimination of solid impurities contained within the system, preserving the life of the heat generator and its components. The strainer should be installed horizontally on the return branch (before the inlet of the heat pump or boiler), respecting the flow direction indicated on the product; when installing, provide a ball valve upstream and one downstream of the dirt separator to facilitate maintenance operations.

Technical data

Head and cup material: technopolymer
Fittings material: brass
Vent screw material: brass - Neodymium magnet, power 12000 G
Filter cartridge material: 250 µm stainless steel
Cup O-ring: NBR - Fitting gaskets: EPDM
Maximum operating temperature: 80 °C
Length without fittings: 133 mm
Length with fittings: 205 mm (1" model), 230 mm (1 1/4" model)
Maximum pressure: 12 bar

Delivery

Supplied complete with wrench and nozzles.

Model	Pcs. pack	Code	Price €
M 1" (nut F 1 1/4)	1	09089506	207,30
M 1 1/4" (nut F 1 1/4)	1	09089508	241,60
Replacement filter cartridge 250 µm	1	09089512	16,42
NEW Replacement O-ring	1	09089510	0,88

Dimensions: see section Technical Attachments



Metal bracket for magnetic dirt separator

Dimension	Pcs. pack	Code	Price €
	1	15460014	13,25



Progress Female-Nut swivel square butterfly handle

Dimension	PN	Pcs. pack	Code	Price €/pc.
3/4" F x 3/4" G	40 bar	10	09811267	22,82

To be connected to the outlet of magnetic dirt separators code 09089506 and 09089508.



Progress Female-Female Straight Lever Handle

Dimension	PN	Pcs. pack	Code	Price €
1" F-F	30 bar	1	80001100	25,59
1 1/4" F-F	25 bar	1	80001114	36,87

To be connected upstream and/or downstream of magnetic dirt separators code 09089506 and 09089508.



Progress Butterfly female-female or right angle handle

Dimension	PN	Pcs. pack	Code	Price €
1" F-F	30 bar	1	6770R106	28,65
1 1/4" F-F	25 bar	1	6770R107	46,38

To be connected upstream and/or downstream of magnetic dirt separators code 09089506 and 09089508.

Heating unit components



Magnetic dirt separator for heating and cooling circuits

Technopolymer dirt separators with magnet are used to continuously eliminate the impurities contained in the hydraulic circuits.

They separate the impurities, even ferrous ones, found in the circuit water, collecting them at the bottom (collection pit).

Made of a composite material specifically for use in air conditioning systems, this dirt separator is particularly versatile because it can be installed on both horizontal and vertical pipes.

Technical data

Dirt separator body: PA66G30

Brass components: UNI EN 12165 CW 617 N or UNI EN 12164 CW 614 N

Elastomers used: EPDM and Viton

Magnet: Samarium - cobalt - Fluid used: Water, Water + Glycol (max 30%)

Maximum fluid temperature: 90°C

Maximum operating pressure: 3 bar

Magnetic field: 2 x 10000 G

Kvs: 10,4

Dimension	Pcs. pack	Code	Price €
3/4" F	1	09089500	278,60



Vertical de-aeration device

Maximum operating temperature: 140 °C - Maximum operating pressure: 10 bar

Kv: 6,5 - Employment fluid: water, glicole

Dimension	Pcs. pack	Code	Price €
DN 15 - G 1" M x G 3/4" F	1	02707822	78,59
Extension 50 mm for air vent valve (*)	1	02707820	11,87

(*) Item to be out of stock



Deaerator for installation in heating and conditioning circuits, with horizontal disposition on supply.

Construction

Body: brass CW 617N EN 12165 - Elastomer used: EPDM and NBR

Float: lever, in polypropylene resin - Cartridge: Stainless steel AISI 302

Spring: Stainless steel AISI 302 - Connections: F UNI-EN-ISO-228

Usable fluid: Water + Glycol (max 30%) - Fluid maximum temperature: 110 °C

Maximum operating pressure: 10 bar - Maximum discharge pressure: 10 bar

Kv: 12,66 (3/4") - 20,44 (1") - 28,14 (1 1/4")

Dimension	Pcs. pack	Code	Price €
3/4"	1	00406010	164,60
1"	1	00406020	176,20
1 1/4"	1	00406030	225,40



Overpressure valve

Maximum pressure: 6 bar

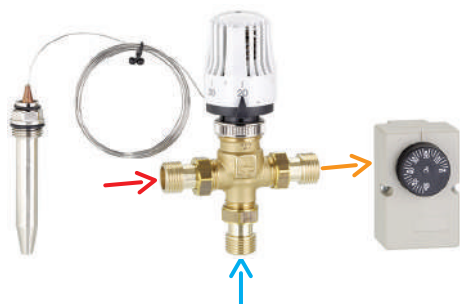
Maximum temperature: 110 °C

Calibration range: 0.03÷0.50 bar

Dimension	Pcs. pack	Code	Price €
3/4"	1	90000064	130,70

Heating unit components

Mixing valves and accessories

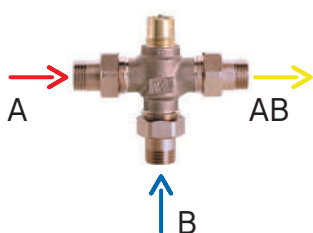


Thermostatic regulation kit

Dimension	Pcs. pack	Code	Price €
1/2"	1	28130054	224,20
3/4"	1	28130056	238,40
1"	1	28130058	253,10

Consisting of: liquid-expansion thermostatic probe head (range of adjustment 20÷65°C) with remote immersion probe holder, safety contact thermostat. Mixing valve class PN 16, body in brass, spindle in chemically nickel-plated brass, shutter in MDPE. Complete with unions.

Threads: G (UNI EN ISO 228-1)
Threads for thermostatic head: M30x1,5



Three-ways mixing valve for electronic kit regulation

Dimension-Kvs (m³/h)	Pipe union connection	Pcs. pack	Code	Price €
DN 10 - 1,6 (*) (***)	G 3/8" M	1	28130210	219,70
DN 20 - 4 (*)	G 1/2" F	1	28130214	281,90
DN 25 - 6,3 (*)	G 3/4" F	1	28130316	850,40
DN 25 - 10 (**)	G 1" F	1	28130218	452,00
DN 32 - 16 (**)	G 1 1/4" F	1	28130220	596,60
DN 40 - 25 (**)	G 1 1/2" F	1	28130222	799,40

PN 16 class, body in bronze, spindle in steel and o-rings in PDPE. Complete with unions.

(*) Can be used in conjunction with electric servo-motors code 28130314 - 28130208 - 28130316

(**) Can be used in conjunction with electric servo-motors code 28130208 - 28130316

(***) Items to be out of stock

Stem BELOW: AB open, A open, B closed
Stem ABOVE: AB open, A closed, B open

Threads: F (UNI EN ISO 228-1)
Threads for servomotor: G 3/4"



3 points servomotor for three-ways mixing valve

Type of operation: 3-position control
Nominal voltage: 230 Vac (± 15 %)
Nominal frequency: 50/60 Hz
Maximum consumption: 6 VA
Permissible room temperature: from 1 to 50 °C
Maximum permissible fluid temperature: 110 °C
Nominal stroke: 5.5 mm Stroke time (at 50/60 Hz): 150 s
Nominal force: 300 N
Degree of protection: IP40 according to EN 60529
Insulation class: II according to EN 60730 - Threaded fitting size: G 3/4"

Dimension	Pcs. pack	Code	Price €
3 points	1	28130208	337,20

To be combined with RCE regulator



0-10 V DC servomotor for 3-ways mixing valves until DN25 - Kvs 6,3

Type of operation: 0-10 V DC control
Nominal voltage: AC/DC 24 V (±15 % / ±20 %)
Nominal frequency: 50/60 Hz
Maximum consumption: 3 VA
Permissible room temperature: from 1 to 50 °C
Maximum permissible fluid temperature: 120 °C
Nominal stroke: 1,2 - 6,5 mm
Stroke speed: 5 mm/s (+/- 25%)
Nominal force: 200 N
Degree of protection: IP54 according to EN 60529
Insulation class: III according to EN 60730 - Threaded fitting size: G 3/4"

Dimension	Pcs. pack	Code	Price €
0-10 V DC	1	28130314	636,60

To be combined with RCE regulators
0 VDC = pusher UP (AB open, A closed, B open)
10 VDC = pusher DOWN (AB open, A open, B closed)

Heating unit components



0-10 Vdc servomotor for 3-way mixing valves (can be combined with mixing valves from DN25 - Kvs 10 to DN40)

Type of operation: 0-10 V DC control
 Nominal voltage: AC/DC 24 V ($\pm 15\%$ / $\pm 20\%$)
 Nominal frequency: 50/60 Hz
 Maximum consumption: 3 VA
 Permissible room temperature: from 1 to 50 °C
 Max permissible fluid temperature: 120 °C
 Nominal stroke: 1,2 - 6,5 mm
 Stroke speed: 5 mm/s ($\pm 25\%$)
 Nominal force: 300 N
 Degree of protection: IP54 according to EN 60529
 Insulation class: III according to EN 60730
 Threaded fitting size: G 3/4"

Dimension	Pcs. pack	Code	Price €
0-10 V DC	1	28130316	850,40

To be combined with RCE regulators
 0 VDC = pusher UP (AB open, A closed, B open)
 10 VDC = pusher DOWN (AB open, A open, B closed)

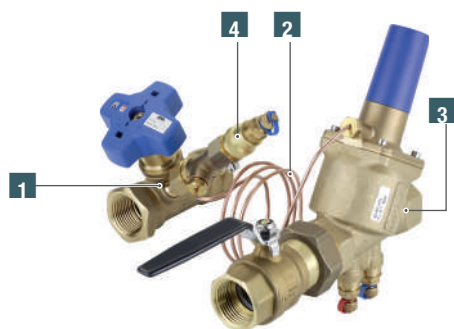


Adjusting lockshield

Dimension	Pcs. pack	Code	Price €
1"	1	28130084	101,40

Body in nickel-plated brass, sealing parts in MPDE. Connection for steel pipe.
 Female thread G (UNI EN ISO 228-1); Male thread R (UNI EN 10226)

Balancing valves



Dynamic balancing kit

The dynamic balancing kits are composed of:

- 1 Balancing valve
- 2 Capillary tube
- 3 Differential pressure valve
- 4 T-fitting with measuring and drainage socket

They allow to distribute the flow that serves a circuit, maintaining the constant differential pressure.

The differential pressure value can be adjusted within a given range to ensure the required flow rate within the circuit.

Technical data

Nominal pressure: PN20

Minimum operating temperature: -10 °C

Maximum working temperature: 120 °C

Maximum differential pressure: 450kPa

Construction

DZR brass, stainless steel, greyron, PPS with glass fiber - Seals: EPDM, HNBR

Size	Differential pressure regulation range		Pcs. pack	Code	Price €
1/2" F	20-60 kPa	DN15 - PVM15	1	01406296	487,90
3/4" F	20-60 kPa	DN20 - PVM20	1	01406298	505,20
1" F	20-80 kPa	DN25 - PVM25	1	01406300	569,60
1"1/4 F	20-80 kPa	DN32 - PVM30	1	01406302	844,60
1"1/2 F	20-80 kPa	DN40 - PVM40	1	01406304	953,40
2" F	20-80 kPa	DN50 - PVM50	1	01406306	1.130,00

Threads: G (UNI EN 10226)



Balancing valve

Balancing valves for the correct calibration and adjustment of heating, conditioning and sanitary.

They are equipped as standard with two pressure inlets, quick coupler, for connection to an electronic differential pressure gauge.

Technical data

Maximum operating pressure: 20 bar

Minimum operating temperature: -20 °C (for water and glycol solutions)

Max operating temperature: 120 °C (for water solutions and additives anti-boiling)

Minimal pressure drop: 2 kPa

Construction

Body: DZR brass - Seals in EPDM

Dimension	Kv	Pcs. pack	Code	Price €
3/4" F F - DN20	0.34÷5.10	1	01406290	99,98
1" F F - DN25	0.48÷8.8	1	01406292	121,30
1"1/4 F F - DN32	0.79÷13.10	1	01406294	153,60

Threads: 3/4" G (UNI EN ISO 228-1), 1" and 1"1/4 Rp (UNI EN 10226)



Differential pressure gauge

Instrument for measuring differential pressure, for dynamic balancing valve kit. Supplied with two rechargeable NiMH AA batteries, carrying case, flexible hoses complete with needles for grafts on pressure taps.

Technical data

Error margin for pressure: 0.15%

Error margin for temperature: 1.5%

Fluid temperature: from -5 °C to 90 °C

Battery powered: 2xAA

Display: illuminated 128x64 pixels

Dimensions: 94x218x40 mm

Degree of protection: IP65

Size	Pcs. pack	Code	Price €
	1	01406314	3.119,00

Heating unit components

Heat exchangers



SPES 210 heat exchangers with braze-welded heat exchangers

Plates material: stainless steel 316L - Brazing material: pure copper - Min. operating temperature: 0 °C - Max. operating temperature: 100 °C - Maximum operating pressure: 10 bar a 100 °C - Fittings: 3/4" M primary - 1/2" M secondary - Threads: G (UNI EN ISO 228-1)

Dimension	CSA (*)	Pcs. pack	Code	Price €
10 plates	5	1	02709200	104,50
12 plates	6	1	02709202	106,50
14 plates	8	1	02709204	121,00
16 plates	10	1	02709206	131,00
20 plates	14	1	02709208	136,70
24 plates	18	1	02709210	152,40
30 plates	20	1	02709212	183,00
34 plates	24	1	02709214	188,40
40 plates	28	1	02709216	249,30
Insulating shell for SPES 210 24 plates		1	01306508	40,94

Dimensions: see section Technical Attachments



SPES 315 heat exchangers with braze-welded heat exchangers

Plates material: stainless steel 316L - Brazing material: pure copper - Min. operating temperature: 0 °C - Max. operating temperature: 100 °C - Maximum operating pressure: 10 bar a 100 °C - Fittings: 3/4" M primary - 3/4" M secondary - Threads: G (UNI EN ISO 228-1)

Dimension	CSA (*)	Pcs. pack	Code	Price €
20 plates	20	1	02709220	189,30
24 plates	24	1	02709222	249,30
30 plates	30	1	02709224	255,90
34 plates	36	1	02709226	273,20
40 plates	40	1	02709228	319,60

Dimensions: see section Technical Attachments



SPES 524 heat exchangers with braze-welded heat exchangers

Plates material: stainless steel 316L - Brazing material: pure copper - Min. operating temperature: -196 °C - Max. operating temperature: 225 °C - Maximum operating pressure a 135 °C: 17 bar - Maximum operating pressure a 225 °C: 12 bar - Fittings: 1" M primary - 1" M secondary - Threads: G (UNI EN ISO 228-1)

Dimension	CSA (*)	Pcs. pack	Code	Price €
20 plates	42	1	02709231	601,50
30 plates	60	1	02709233	751,10
40 plates	80	1	02709235	885,00
50 plates	100	1	02709237	1.027,00
60 plates	120	1	02709239	1.175,00
80 plates	140	1	02709241	1.457,00

Dimensions: see section Technical Attachments

Controlpump



Electric controller

Dimension		Pcs. pack	Code	Price €
Adjustable setting	1,5÷3 bar	1	00700004	143,70

Threads: G (UNI EN ISO 228-1)

Autoclaves



Horizontal autoclave with brackets

Certified 97/23/CEE - Temperature from -10 °C to +100 °C - Maximum pressure: 8 bar - Precharge pressure: 1,5 bar - For sanitary water - EPDM membrane
Threads: G (UNI EN ISO 228-1)

Dimension	L (mm)	H (mm)	Ø (mm)	Pcs. pack	Code	Price €
24 lt	520	280	260	1	00802034	121,80

Spare membrane for autoclave

Dimension	Pcs. pack	Code	Price €
24 liters	1	00806024	39,17

For cylindrical and spherical models



5-ways fitting

Dimension	Pcs. pack	Code	Price €/pc.
1"	10	00810010	16,00

Threads: G (UNI EN ISO 228-1)



Automatic pressure switch for autoclave

Range of adjustment: from 1 to 5 bar - Factory calibration: 1.4-2.8 bar -
Minimum differential: 0.6 bar - Maximum differential: 2.3 bar
Connection: 1/4" F swivel - Nominal current: 16A (10)A -
Nominal voltage: 250 V - Threads: G (UNI EN ISO 228-1)

Dimension	Pcs. pack	Code	Price €
	1	00300004	43,28

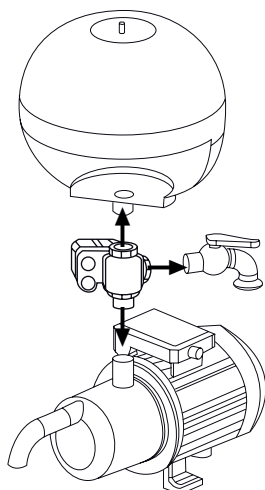


Pressure switch for autoclave with integrated pressure gauge and 3-ways fitting

Pressure switch, with integrated pressure gauge and 3-ways fitting, to be used with water in autoclave systems. The switch automatically adjust the start and stop of electric-pump in according to set pressure value.

Range of adjustment: from 1 to 15 bar - Factory calibration: 1,4-2,8 bar -
Minimum differential: 0,6 bar - Maximum differential: 2,3 bar -
Nominal current: 16 A (10 A) - Nominal voltage: 250 Vac -
International protection: IP44 - Maximum environmental temperature: 55 °C -
Threads: G (UNI EN ISO 228-1)

Dimension	Pcs. pack	Code	Price €
1" M x 1" F x 1" F	1	00300008	52,84



Open manifolds



Open manifold 2+2

Dimension	Ways	Pcs. pack	Code	Price €
2"	2+2+5	1	07400170	165,80
3"	2+2+5	1	07400174	198,90

Made in zinc-plated steel welding UNI EN 13134.

Lateral connections Female 1" - Auxiliar connection Female 1/2".

Max operating pressure: 8 bar - Threads: G (UNI EN ISO 228-1)

Dimensions: see section Technical Attachments



Open manifold 2+2 S

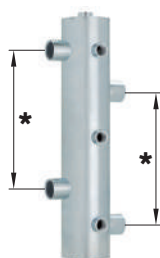
Dimension	Ways	Pcs. pack	Code	Price €
3"	2+2+5 S	1	07400182	264,80

Made in zinc-plated steel welding UNI EN 13134.

Lateral connections Female 1" - Auxiliar connection Female 1/2".

Max operating pressure: 8 bar - Threads: G (UNI EN ISO 228-1)

Dimensions: see section Technical Attachments



Open manifold 2+2 S, takeoff Firstbox

Dimension	Ways	Pcs. pack	Code	Price €
3"	2+2+5 S	1	07400284	420,20

Made in zinc-plated steel welding UNI EN13134.

Lateral connections Female 1 1/4" - Auxiliar connection Female 1/2"

Max operating pressure: 8 bar

Threads: G (UNI EN ISO 228-1)

(*) Takeoff Firstbox 159 mm

Dimensions: see section Technical Attachments



Open manifold 4+2

Dimension	Ways	Pcs. pack	Code	Price €
3"	4+2+5	1	07400176	213,10

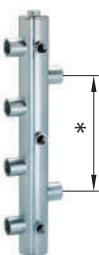
Made in zinc-plated steel welding UNI EN 13134.

Lateral connections Female 1" - Auxiliar connection Female 1/2".

Max operating pressure: 8 bar

Threads: G (UNI EN ISO 228-1)

Dimensions: see section Technical Attachments page 533



Open manifold 4+2, takeoff Firstbox

Dimension	Ways	Pcs. pack	Code	Price €
3"	4+2+5	1	07400286	465,80

Made in zinc-plated steel welding UNI EN13134.

Lateral connections Female 1 1/4" - Auxiliar connection Female 1/2".

Max operating pressure: 8 bar.

Threads: G (UNI EN ISO 228-1)

(*) Takeoff Firstbox 159 mm.

Dimensions: see section Technical Attachments



Open manifold 6+4

Dimension	Ways	Pcs. pack	Code	Price €
3"	6+4+5	1	07400186	367,10

Made in zinc-plated steel welding UNI EN 13134.

Lateral connections Female 1".

Auxiliar connection Female 1/2".

Max operating pressure: 8 bar.

Threads: G (UNI EN ISO 228-1)

Dimensions: see section Technical Attachments



Insulating shells for open manifolds

Dimension	Pcs. pack	Code	Price €
2"	1	01306504	47,71

In extruded polyethylene.

Suitable for installation with open manifolds code 07400170 and 07400172

Adjustment and accessories



[CE 0497]
[ENEC 03]
According to ISPESL

Immersion thermostat

Connection: M 1/2" - Bulb length: 90 mm - Setting: from 30÷90 °C ± 3
Max temperature: 105 °C - Contacts: 250 V 10(2) A
Security temperature: 100 +0 -6 - Differential: 6 °C
Threads: R (UNI EN 10226)

Dimension	Pcs. pack	Code	Price €
Thermostat for adjustment	1	02012052	31,27
Regulation and safety bi-thermostat with manual reset	1	02012060	74,26



Contact thermostat

Setting 30÷90 °C ± 3 / 0÷60 °C ± 3 - Max temperature: 105 °C -
Contacts: 250 V 10(2) A - Differential: 6 °C

Dimension	Pcs. pack	Code	Price €
NEW 30÷90 °C	1	02012036	23,15
NEW 0÷60 °C	1	02012034	23,15



[CE 0497]
[ENEC 03]
According to ISPESL

Adjustment capillary thermostat

Bulb length: 65 mm - Ø bulb: 7 mm - Setting: 30÷90 °C ± 3 -
Contacts: 400 V 16(4) A - Differential: 4 °C

Dimension	Pcs. pack	Code	Price €/pc.
Capillar 1000 mm 30÷90 °C	10	02016014	21,47
Capillar 1500 mm 30÷90 °C	10	02016016	21,47



[CE 0497]
[ENEC 03]
According to ISPESL

Safety capillary thermostat

Temperature: 100 °C +0 -6 - Bulb length: 70 mm - Ø bulb: 6,5 mm -
Contacts P1: 250 V 10(2,5) A - Contacts P2: 250 V 2 A

Dimension	Pcs. pack	Code	Price €/pc.
Capillar 1000 mm	10	02018095	21,47
Capillar 1500 mm	10	02018097	22,04



Safety pressure switch with manual reset, in confirm to directive 2014/68/UE.

Maximum pressure switch for heating systems to automatically stop the heat generator once a preset maximum water pressure limit has been reached.

Range of adjustment: from 2 to 4,5 bar - Factory calibration: 3 bar -
Nominal current: 16A (10)A - Nominal voltage: 250 V -
Max fluid temperature: from 20 °C to 110 °C - Max room temperature: 50 °C -
Connection: 1/4" F - Type of contact: NC - Threads: G (UNI EN ISO 228-1)

Dimension	Pcs. pack	Code	Price €
1/4"	1	00300006	66,36



Minimum pressure switch with manual reset, in confirm to directive 2014/68/UE.

Protection rating: IP44 - Type of contact: N.O. - Adjustment range: 0.5 ÷ 1.7 bar -
Default setting: 0.9 bar - Nominal current: 16 (10)A - Nominal voltage: 250V -
Max fluid temperature: from 20 °C to 110 °C - Max room temperature: 50 °C -
NBR rubber membrane with fabric insert - Threads: G (UNI EN ISO 228-1)

Dimension	Pcs. pack	Code	Price €
1/4" F	1	00300010	73,69

Minimum pressure switch for heating systems to automatically stop the heat generator once a preset minimum water pressure limit has been reached.

Accessories for adjustment



Flow switch for liquids

Max allowable fluid temperature: -40 to +120 °C
 Max allowable pressure: 11 bar
 Contacts: dustproof microswitch, switching contacts (n.c./n.a.)
 Contact rating: 24 to 250 Vac 15 (8) A
 Activation flow rate: adjustable from 1.0 to 2.1 m³/h
 Deactivation flow rate: adjustable from 0.6 to 2.0 m³/h
 Paddles: 1", 2", 3", 8" AISI 316L stainless steel
 Lid: made of transparent PC
 Base: in ABS
 Threads: R (UNI EN 10226)
 Degree of protection: IP65

Connection	Pcs. pack	Code	Price €
1"	1	01200700	260,60



Pressure gauge compliant with EN837.1 radial connection ABS case

Dimension	Pressure	Pcs. pack	Code	Price €
3/8" x 80 mm (*)	25 bar	1	00614025	19,60

Threads: G (UNI EN ISO 228-1)

(*) Items to be out of stock



Pressure gauge according to EN837.1 with radial connection and casing in ABS

Dimension	Pressure	Pcs. pack	Code	Price €
1/4" x 63 mm	2,5 bar	10	00622003	9,68
1/4" x 63 mm	4 bar	10	00622004	10,64
1/4" x 63 mm	6 bar	10	00622006	10,64
1/4" x 63 mm	10 bar	10	00622010	10,64
1/4" x 63 mm	16 bar	10	00622016	10,64
1/4" x 63 mm	25 bar	10	00622025	10,64
3/8" x 80 mm	4 bar	1	00624004	19,60
3/8" x 80 mm	6 bar	1	00624006	19,60
3/8" x 80 mm	10 bar	1	00624010	19,60
3/8" x 80 mm	16 bar	1	00624016	19,60

Threads: G (UNI EN ISO 228-1)



Pressure gauge according to EN837.1 with side back connection and casing in ABS

Dimension	Pressure	Pcs. pack	Code	Price €
1/4" x 63 mm	4 bar	10	00626004	10,36
1/4" x 63 mm	6 bar	10	00626006	10,36
1/4" x 63 mm	10 bar	10	00626010	10,36

Threads: G (UNI EN ISO 228-1)



Immersion thermometer according to EN 13190 complete with trap

Temperature 0÷120 °C

Dimension	L bulb	Pcs. pack	Code	Price €
1/2" x 63 mm	50 mm	10	00620612	11,68
1/2" x 80 mm	50 mm	4	00620812	12,85
1/2" x 80 mm	100 mm	2	00621812	18,55

Threads: G (UNI EN ISO 228-1)



Capillary thermometer Ø 52

Temperature 0÷120 °C - Bulb lenght 25 mm - Ø bulb 6,5 mm - Ø casing: 52 mm

Capillar Dimension	Pcs. pack	Code	Price €
1000 mm	10	00622056	18,55

Accessories for adjustment



Thermo-manometer

Pressure 0÷4 bar - Temperature 0÷120 °C - Ø casing 80 mm - Fitting 1/4" M complete with check valve 1/2" M

Dimension	Pcs. pack	Code	Price €
Back connection	1	00620012	26,10
Radial connection	1	00622012	39,90



Capillary thermo-manometer

Pressure 0÷4 bar - Temperature 0÷120 °C - Capillar lenght 1 mt - Lenght bulb temperature 19 mm - Ø bulb temperature 6,5 mm - Pressure outlet connection M 14x1 - Ø casing 52 mm

Dimension	Pcs. pack	Code	Price €/pc.
	6	00622052	37,30



Check valve for capillary thermo-manometer

Dimension	Pcs. pack	Code	Price €/pc.
M 14 x 1 F x 1" M	6	00600010	5,05

To use only for Capillary thermomanometer code 00622052
Male thread: R (UNI EN 10226)

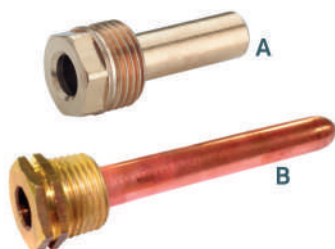


Bibcock with pressure gauge union according to ISPEL standards

Pressure: 0÷4 bar - Temperature: 0÷120 °C

Dimension	Pcs. pack	Code	Price €/pc.
1/4"	10	00508014	19,60
3/8"	10	00508038	21,98

Female thread: Rp (UNI EN 10226);
Male thread: R (UNI EN 10226).



Socket for thermometer according to ISPEL standards, connection M 1/2"

Dimension	Pcs. pack	Code	Price €/pc.
Ø 7 L 50 mm (A)	1	00510682	8,20
Ø 9 L 50 mm (A)	20	00510012	4,67
Ø 10 L 50 mm (A)	12	00510684	8,53
Ø 10 L 100 mm (B) (*)	12	00510686	11,10
NEW Ø 7 L 100 mm (B)	12	00510687	11,67
NEW Ø 7 L 300 mm (B)	1	00510691	14,84
Ø 15 L 110 mm (B)	12	00510688	8,69

Threads: G (UNI EN ISO 228-1)

(*) Item to be out of stock



Elastic connection for pressure gauge

Dimension	Pcs. pack	Code	Price €/pc.
1/4"	10	00512008	21,36
3/8"	10	00512010	21,36

Female thread: G (UNI EN ISO 228-1);
Male thread: R (UNI EN 10226).



Fuel cut-off valve ISPEL qualified and calibrated, ATEX approved. Compliant with directive PED 97/23/EC

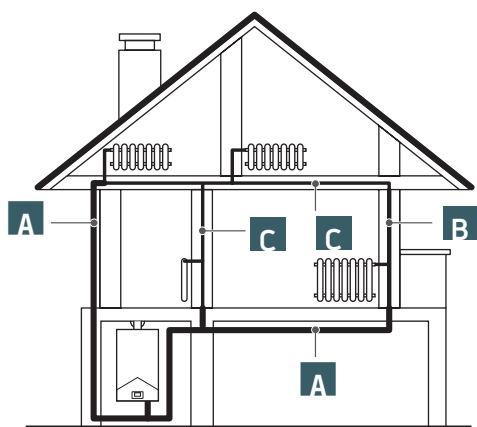
Manual reset and positive action - Calibration temperature 97 ± 3°C
Capillar lenght 5 m - Reset 85 °C - For use with liquids and gaseous combustibles

Dimension	Pcs. pack	Code	Price €
1/2" - P max 6 bar	1	00504010	476,00
3/4" - P max 6 bar	1	00504012	625,20
1" - P max 6 bar	1	00504014	809,50
1"1/4 - P max 1 bar	1	00504016	870,50
1"1/2 - P max 1 bar	1	00504018	986,00
2" - P max 1 bar	1	00504020	1.164,00

Threads: G (UNI EN ISO 228-1)

Insulation

Thermic insulation



External pipe diameter [mm] for installation type A

(W/m °C)	<20	20-39	40-59	60-79	80-90	>100
0,030	13	19	26	33	37	40
0,032	14	21	29	36	40	44
0,034	15	23	31	39	44	48
0,036	17	25	34	43	47	52
0,038	18	28	37	46	51	56
0,040	20	30	40	50	55	60
0,042	22	32	43	54	59	64
0,044	24	35	46	58	63	69
0,046	26	38	50	62	68	74
0,048	28	41	54	66	72	79
0,050	30	44	58	71	77	84

Thermal conductivity

Reference for the calculation example

Compliance with Italian regulation

The principal regulation on the subject is contained in Annex B of Presidential Decree 412/93.

Note: the useful thermal conductivity for each diameter of pipe can be derived from the minimum thickness of the insulation in relation to the pipe to be insulated with respect to the outside, multiplying the thickness indicated in the table in Appendix B below by 0,3, 0,5 or 1,0 .

Example of calculation

Thermal conductivity of material: 0,037 W/m °C

External pipe diameter: 22 mm

Installation type: C (see drawing)

Minimum thickness for installation type A: 26,5 mm (from table, linear interpolation)

Coefficient for installation type C: 0,3

Minimum thickness for installation type C: $26,5 \times 0,3 = 7,9$ mm

Emmeti insulating pipes, in accordance with Statute 549 of 28/12/1993, do not contain CFCs and are composed of non-toxic materials.

Insulation of heat distribution networks within thermic plants

Installation type A (**A** symbol)

The piping in the distribution networks for warm fluids, whether in liquid form or steam, of thermic power plants, must be insulated with a special insulating material, where the minimum required thickness determined by the following table, in relation to the diameter of the piping given in mm and the useful thermic conductivity of the insulating material shown in W/m °C at a temperature of 40 °C.

Installation type B (**B** symbol)

The vertical mounting of the piping is to be placed on the other side of the building's heat insulation, towards the inside of the building, and the relevant minimum required thicknesses for the insulation, as resulting from the table, must be multiplied by 0,5.

Installation type C (**C** symbol)

For pipes running inside structures which do not face either outside or unheated rooms, the thicknesses indicated in the table just be multiplied by 0,3.



[EN 14304]

Uses

Thermic insulation for both hot and cold water piping. Features a steam barrier to prevent the formation of condensation on cold piping. Supplied in 2-metre-long bars. For external installation, provide suitable protection against bad weather and UV rays. For underground installations, provide suitable protection against humidity and direct contact with the ground (the use of an external sheath is recommended).

Construction

Obtained by extrusion and expansion of closed-cell elastomer (synthetic expanded rubber) without the use of CFCs and HCFCs. No contribution to ozone depletion (ODP zero) and no contribution to the greenhouse effect (GWP zero). Contains no dust and fibres.

Technical data

Operating temperature range: $-45^{\circ}\text{C} \div +100^{\circ}\text{C}$
Thermal conductivity: $0,033 \text{ W/mK}$ at 0°C ; $0,037 \text{ W/mK}$ at 40°C .
Water vapour diffusion resistance factor: $\mu=10000$
Fire reaction class: $\text{B}_1\text{-s}_2$, d0 (UNI N 13501-1)
Designation code (EN 14304):
FEF-EN-14304- ST(+) 110 MU 10000 pH 7,0 - CL 500 - WS01

Installation

In consideration of the possible variations in length related to the fluid temperature fluctuations, it is advisable to compress the insulating pipe by about 5 cm per metre and either glue or tape the junctions between two sections.



Thermic insulation



Reading example

B 18 - 3/8" - DN 10 - 16x2

B Type of installation
18 Ø copper pipe
3/8" Ø steel pipe
DN 10 Ø nominal
16x2 Ø multilayer pipe



[EN 14304]

ISO GUM in expanded elastomer – 2 m bars

Dimensions	Thickness	m pack	Code	Price €/pack
B 18 - 3/8" - DN 10 - 16x2 - 18x2	9 mm	168	03967748	233,10
C 22 - 1/2" - DN 15 - 20x2	9 mm	136	03967724	172,10
C 28 - 3/4" - DN 20 - 26x3	9 mm	100	03967726	183,30
C 35 - 1" - DN 25 - 32x3	9 mm	80	03967728	160,10
42 - 1 1/4" - DN 32 - 40x3,5	9 mm	64	03967730	148,40
48 - 1 1/2" - DN 40 - 50x4	9 mm	56	03967732	139,40
54 - 1 1/2" - DN 40 - 50x4	9 mm	54	03967734	171,50
60 - 2" - DN 50 - 63x4,5	9 mm	48	03967736	161,40
76 - 2 1/2" - DN 60-65 - 75x5	9 mm	40	03967738	179,70
B 18 - 3/8" - DN 10 - 16x2 - 18x2	13 mm	118	03967756	203,90
C 22 - 1/2" - DN 15 - 20x2	13 mm	100	03967758	180,00
C 28 - 3/4" - DN 20 - 26x3	13 mm	80	03967760	180,10
C 35 - 1" - DN 25 - 32x3	13 mm	58	03967762	152,10
C 42 - 1 1/4" - DN 32 - 40x3,5	13 mm	48	03967764	143,70
C 48 - 1 1/2" - DN 40 - 50x4	13 mm	48	03967766	167,00
C 54 - 50x4	13 mm	40	03967768	169,90
60 - 2" - DN 50 - 63x4,5	13 mm	36	03967770	164,40
76 - 2 1/2" - DN 60-65 - 75x5	13 mm	32	03967772	181,90
89 - 3" - DN 80	13 mm	28	03967774	200,80
B 22 - 1/2" - DN 15 - 20x2	19 mm	64	03967782	266,40
B 28 - 3/4" - DN 20 - 26x3	19 mm	52	03967784	249,60
B 35 - 1" - DN 25 - 32x3	19 mm	40	03967786	228,70
B 42 - 1 1/4" - DN 32 - 40x3,5	19 mm	32	03967802	230,40
B 48 - 1 1/2" - DN 40 - 50x4	19 mm	32	03967804	241,60
B 54 - 50x4	19 mm	30	03967788	258,30
C 60 - 2" - DN 50 - 63x4,5	19 mm	24	03967790	222,40
C - 76 2 1/2" - DN 60-65 - 75x5	19 mm	20	03967792	256,00
C 89 - 3" - DN 80	19 mm	18	03967794	232,10
C 114 - 4" - DN 100	19 mm	14	03967806	268,80
C 140 - 5" - DN 125	19 mm	10	03967796	288,00

ISO GUM accessories

Description	Dimension	Pcs. pack	Code	Price €/pack
Glue	0,85 kg/can	1	02965900	40,59
Adhesive tape	10 m roll	1	02965950	20,02

Filters



Water filter 9"

Head in polypropylene - Max operating pressure 8 bar
Burst pressure 28 bar - Max continuous operating temperature 40 °C
Diameter 178 mm
Threads: G (UNI EN ISO 228-1)

Dimension	Pcs. pack	Code	Price €
3/4" 3 pieces	1	15460004	51,70
1" 3 pieces	1	15460006	51,70

Suitable for use in water treatment plants intended for human consumption and compliant with the Italian D.M. 174/2004 and subsequent amendments



Water filter 5"

Head in polypropylene - Max operating pressure: 8 bar
Burst pressure: 28 bar - Max operating temperature: 40 °C
Diameter: 178 mm
Threads: G (UNI EN ISO 228-1)

Dimension	Pcs. pack	Code	Price €
3/4" 3 pieces	1	15460028	42,64

Suitable for use in water treatment plants intended for human consumption and compliant with the Italian D.M. 174/2004 and subsequent amendments



Cartridge 5" and 9"

Nominal delivery 3.500 l/h

- 1 - Nylon: filtration 60 micron
- 2 - Polypropylene: filtration 10 micron

Dimension	Pcs. pack	Code	Price €
5" Nylon	1	15460018	18,41
5" Polypropylene	2	15100005	6,64
9" Nylon	1	15120110	20,90
9" Polypropylene	1	15100010	7,40

Suitable for use in water treatment plants intended for human consumption and compliant with the Italian D.M. 174/2004 and subsequent amendments



Cartridge 9" with polyphosphates

Dimension	Pcs. pack	Code	Price €
	1	15120112	51,70

Suitable for use in water treatment plants intended for human consumption and compliant with the Italian D.M. 174/2004 and subsequent amendments



Polyphosphates

Dimension	Kg pack	Code	Price €/kg
	20	15500000	22,65

Suitable for use in the food industry according to D.M. 443 dated 21/12/1990 under normal usage conditions.



Spreader pipe

Dimension	Pcs. pack	Code	Price €/pc.
5"	6	15410550	3,58
9"	6	15140010	3,58

Devices for clean drinking water



Spreader

Dimension	Pcs. pack	Code	Price €/pc.
For 3 pieces	6	15140012	2,52



Spanner for filter

Dimension	Pcs. pack	Code	Price €
For 3 pieces	1	15460012	8,96

Suitable for use in water treatment plants intended for human consumption and compliant with the Italian D.M. 174/2004 and subsequent amendments
Item to be out of range



Metal bracket for filter without by-pass

Dimension	Pcs. pack	Code	Price €
	1	15460014	13,25



Square water filter for 5" cartridge

Max operating pressure: 6 bar - Burst pressure: 25 bar
Max continuous operating temperature: 40 °C - Diameter: 90 mm
Threads: G (UNI EN ISO 228-1)

Dimension	Pcs. pack	Code	Price €
1/2" 3 pieces	1	15400012	27,06

Suitable for use in water treatment plants intended for human consumption and compliant with the Italian D.M. 174/2004 and subsequent amendments



5" cartridge for square filter

- 1 - Nylon: filtration 60 micron
- 2 - Polypropylene: filtration 10 micron

Dimension	Pcs. pack	Code	Price €/pc.
Nylon	1	15410520	17,92
Polypropylene	2	15410510	6,64

Suitable for use in water treatment plants intended for human consumption and compliant with the Italian D.M. 174/2004 and subsequent amendments



Spreader pipe 5" for square water filter

Dimension	Pz. conf.	Code	Price €/pc.
	6	15410550	3,58



Spanner for square filter 5"

Dimension	Pcs. pack	Code	Price €
For 3 pieces	1	15350001	7,87



Anti-scaling filter for washmachine

Dimension	Pcs. pack	Code	Price €/pc.
	12	15500034	18,88

Water meters and solenoid valves

Water meters



Water meter model with wet dial

Dimension	Water	Pcs. pack	Code	Price €
1/2"	Cold	1	01138000	64,70
3/4"	Cold	1	01138002	83,63
1"	Cold	1	01138004	133,60
1"1/4	Cold	1	01138006	165,30
1/2"	Hot	1	01138020	64,70

Complies with Leg. Dec. no. 84 dated 19/05/2016 (implementation of European directive 2014/32/EU MID)

Cold water maximum temperature 30 °C. Hot water maximum temperature 90 °C

Threads: G (UNI EN ISO 228-1)



Water meter models with dry dial

Dimension	Water	Pcs. pack	Code	Price €
1/2"	Cold	1	01138040	89,43
1"	Cold	1	01138044	205,30
1"1/4	Cold	1	01138046	205,30
1"1/2	Cold	1	01138048	416,40
2"	Cold	1	01138050	995,90

Complies with Leg. Dec. no. 84 dated 19/05/2016 (implementation of European directive 2014/32/EU MID)

Cold water maximum temperature 30 °C

Threads: G (UNI EN ISO 228-1)



Water meter model with dry dial

Dimension	Water	Pcs. pack	Code	Price €
1/2"	Cold	1	01138080	64,70
3/4"	Cold	1	01138082	89,43
1/2"	Hot	1	01138084	83,63
3/4"	Hot	1	01138086	99,97

Complies with Leg. Dec. no. 84 dated 19/05/2016 (implementation of European directive 2014/32/EU MID).

Cold water maximum temperature 30 °C.

Hot water maximum temperature 90 °C. CEE metering class:

horizontal display installation: class B, vertical display installation: class A

Threads: G (UNI EN ISO 228-1)

Solenoid valves for water and air



Solenoid valve for water and air - Normally Closed type

Dimension	Type	Pcs. pack	Code	Price €
1/2" F	N.C. 230 V	1	00306200	84,72
3/4" F	N.C. 230 V	1	00306202	117,90
1" F	N.C. 230 V	1	00306204	128,80
1/2" F	N.C. 24 V	1	00306206	101,00
3/4" F	N.C. 24 V	1	00306208	117,90

Membrane in NBR

Body in brass CW617N (EN 12165)

Operating temperature: -10 °C ÷ +90 °C

Thread: G (UNI EN ISO 228-1)



Spare parts and accessories





Spare parts and accessories



Replacement bush + bush holder kit for Gerpex and Gerpex LBP fittings

Dimension	Pcs. pack	Code	Price €/pc.
16	10	09009000	1,88
20	10	09009002	2,08
26	5	09009004	3,03
32	5	09009006	3,53
40	5	09009008	7,65
50	4	09009010	11,10
63	2	09009012	13,43
75	1	09009014	18,51

Spare part only for water fittings. Not usable for gas.
The product warranty is conditioned by the integrity of the original fitting.

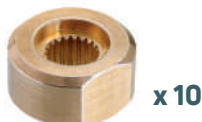
Spare parts for 3/4" screw fitting

Dimension	Pcs. pack	Code	Price €
Screw for dummy sleeve	1	90008022	18,29
Screw for drilled sleeve with handwheel	1	90008030	10,63
Rosette + gasket for plasterboard	1	90008060	2,97



Set of 10 spare parts plastic butterfly handle for 3/4" blind quill screw assembly

Dimension	Pcs. pack	Code	Price €/set
Set of 10 butterfly handles	1	90008194	3,49



Set of 10 Brass Handles for 3/4" blind quill screw Group

Dimension	Pcs. pack	Code	Price €/set
Set of 10 brass handles	1	90008192	30,33



Spare parts for multilayer pipe shear

Dimension	Pcs. pack	Code	Price €
Spare blade for shears, Ø 14–26 code 28101808 (*)	1	28101810	52,98

(*) Item to be out of stock



Spare battery 14,4 V for SMP32 pressing machine

Battery Lithium-Ion (Li-ion) - Weight: 500 g - Battery power: 2,6 Ah

Dimension	Pcs. pack	Code	Price €
2,6 Ah	1	28122018	473,40

Allows battery power to the SPM32 230 V pressing machine, replacing the 230 V adapter.



Battery charger 14,4 V for SPM32 pressing machine

Dimension	Pcs. pack	Code	Price €
	1	28122016	446,70



230 V adapter for SPM32 pressing machine

Dimension	Pcs. pack	Code	Price €
	1	28122010	964,20

Permits power supply to the SPM32 pressing machine, directly at 230 V, replacing the 14,4 V battery



Spare Battery 18 V for UAP332 pressing machine

Battery Lithium-Ion (Li-ion) - Weight: 400 g - Battery capacity: 4,0 Ah

Dimension	Pcs. pack	Code	Price €
4,0 Ah	1	28122052	845,20

Allows battery power to the SPM32 230 V pressing machine, replacing the 230 V adapter.

Spare parts and accessories



Battery charger 18V for UAP332 pressing machine

Dimension	Pcs. pack	Code	Price €
	1	28122054	509,00

Spare part for pressing machine UAP2 (12V)

Model	Pcs. pack	Code	Price €
Battery 12V	1	28101804	473,40

Spare part for bending pipe

Dimension	Pcs. pack	Code	Price €
Bending pipe tool Ø 16	1	28104002	103,90
Bending pipe tool Ø 20	1	28104006	106,80
Bending pipe tool Ø 26	1	28100922	151,60
Bending pipe tool Ø 32	1	28100924	166,30
Counterform Ø 14-16	1	28104010	148,70
Counterform Ø 18-20	1	28104012	148,70
Counterform Ø 26	1	28100926	149,30
Counterform Ø 32	1	28100928	240,60

Spare parts for Emmeti Plasterboard - plasterboard system

Dimension	Pcs. pack	Code	Price €
Quick connector replacement kit 8x1	1	28134318	7,14
Quick connector replacement kit 20x2	1	28134319	7,09



Lockshield kit for Topway and Floor Mixing Unit

Dimension	Thread	Pcs. pack	Code	Price €
For 1" collector (*)	24x19	4	01306116	13,08
For 1 1/4" collector	24x19	4	01306124	13,91
1" cut-off seat	24x19	1	90038600	4,29
1 1/4" cut-off seat	24x19	1	90038610	5,30
1" cut-off seat	3/4" Eurocone	1	90038620	6,22
1 1/4" cut-off seat	3/4" Eurocone	1	90038630	6,87
1/2" thermometer well		1	90026530	4,86

(*) It is suitable for Floor Mixing Unit

Screw kit for Multiplex manifold

Dimension	Pcs. pack	Code	Price €
	1	01307220	5,91

Screw kit for Topsan and Topway M manifold

Dimension	Pcs. pack	Code	Price €
3/4"	1	01306838	5,70
1"	1	01306840	6,12

Spare parts for metal boxes Metalbox and Metalbox Plus with lock in PLASTIC

Dimension	Pcs. pack	Code	Price €
Guide for box H 600 - H 700 - H 850 with 2 screws M8 x 13 (also suitable for manifolds with plastic brackets) (*)	1	90069270	9,50
NEW Guide for box H 600 - H 700 - H 850 with 2 screws M8 x 13	1	90075270	10,90
NEW Guide for box H 600 - H 700 - H 850 with 4 screws M8 x 13	1	90075280	12,35
Screwdriver lock in plastic (*)	1	90065030	12,62
Screwdriver lock in metal	1	90067990	21,83
Key lock in plastic (*)	1	90065020	36,88
Frame / Door for Metalbox Plus L 1200 with lock with screwdriver cut in plastic (*)	1	01301360	139,30
Frame / Door for metal box H 850 / L 500 with lock with screwdriver cut in plastic (*)	1	01301362	96,69
Frame / Door for metal box H 850 / L 700 with lock with screwdriver cut in plastic (*)	1	01301364	123,20
Door for external metal box H 700 / L 1000 with lock with screwdriver cut in plastic (*)	1	01301380	196,10

(*) Items to be out of stock

Spare parts and accessories

Spare parts for metal boxes Metalbox and Metalbox Plus with lock in METAL

Size	Pcs. pack	Code	Price €
Guide for box H 600 - H 700 - H 850 with 2 screws M8 x 13 (*)	1	90069270	9,50
NEW Guide for box H 600 - H 700 - H 850 with 2 screws M8 x 13	1	90075270	10,90
NEW Guide for box H 600 - H 700 - H 850 with 4 screws M8 x 13	1	90075280	12,35
Frame/Door for Metalbox Plus L 500 with screwdriver lock in metal code 01301450	1	01301500	76,22
Frame/Door for Metalbox Plus L 600 with screwdriver lock in metal code 01301452	1	01301502	84,63
Frame/Door for Metalbox Plus L 700 with screwdriver lock in metal code 01301454	1	01301504	95,19
Frame/Door for Metalbox Plus L 850 with screwdriver lock in metal code 01301456	1	01301506	118,10
Frame/Door for Metalbox Plus L 1000 with screwdriver lock in metal code 01301458	1	01301508	127,90
Frame/Door for Metalbox Plus L 1200 with screwdriver lock in metal code 01301460	1	01301510	146,80
Frame/Door for Metalbox H 850 / L 500 with screwdriver lock in metal code 01301470	1	01301512	102,00
Frame/Door for Metalbox H 850 / L 700 with screwdriver lock in metal code 01301472	1	01301514	129,80
Frame/Door for Metalbox H 850 / L 850 with screwdriver lock in metal code 01301474	1	01301516	162,00
Frame/Door for Metalbox H 850 / L 1000 with screwdriver lock in metal code 01301476	1	01301518	176,20
Frame/Door for Metalbox H 850 / L 1200 with screwdriver lock in metal code 01301478	1	01301520	203,70
Door for external Metalbox H 700 / L 500 with screwdriver lock in metal code 01301480	1	01301522	128,70
Door for external Metalbox H 700 / L 700 with screwdriver lock in metal code 01301482	1	01301524	158,10
Door for external Metalbox H 700 / L 850 with screwdriver lock in metal code 01301484	1	01301526	191,90
Door for external Metalbox H 700 / L 1000 with screwdriver lock in metal code 01301486	1	01301528	206,60
Door for external Metalbox H 700 / L 1200 with screwdriver lock in metal code 01301488	1	01301530	274,10
Metal key lock	1	90067980	50,90
Metal screwdriver lock	1	90067990	21,83

(*) Item to be out of stock

Spare parts for Metalbox metal cabinets

Description	Pcs. pack	Code	Price €
Guide for box H630 with 2 screws M8x25 (Floor Controlbox, Floor Control Unit, Firstbox) (!) (*)	1	90020200	20,33
Guide for box H630 with 4 screws M8x14 (Energy Box e Energy First Box) (!) (*)	1	90041250	20,33
Guide for box H900 with 6 screws M8x14 (!) (*)	1	01301150	26,21
For metal cabinets H630/P90 Opening 450 for Topway manifolds up to 1"			
Frame/door key lock for metal cabinet L 500 code 01301040 (!) (*)	1	01301060	105,60
For metal cabinets H630/P110 Opening 450 for Floor Controbox-Floor Control Unit-Topway up to 1"1/4			
Frame/door key lock for metal cabinet L 500 code 01301030 (!) (*)	1	01301060	105,60
For metal cabinet H630/P110 Opening 505 for Energy Box-Energy Firstbox-Firstbox			
Frame/door key lock flush with wall for cabinet L 600 code 01301110 (!) (*)	1	01301140	117,10
For metal box H900/P110 Opening 720 for all mixing groups			
Frame/door lock with screwdriver flush with wall for cabinet L 700 code 01301192 (!) (*)	1	01301182	257,80

(!) Flush with wall

(*) Items to be out of stock

Spare parts for Termobox plastic boxes

Dimension	Pcs. pack	Code	Price €
Cover for cabinet 310 x 310 x 90	1	90019410	11,15
Cover for cabinet 460 x 310 x 90	1	90019470	15,21
Cover for cabinet 610 x 310 x 90	1	90019530	19,03

Spare parts and accessories

Spare parts for motorized valves

Spare parts for motorized ball valves Modulo Compact and Modulo Plus

Dimension	Pcs. pack	Code	Price €
Nut nickel plated 1" ch.37 for motorized valves 3/4"	1	09208903	3,65
Nut nickel plated 1"1/4 ch.52 for motorized valves 1"	1	09208910	6,00
Nut nickel plated 1"1/2 ch.47 for motorized valves 1"1/4	1	09208914	6,36
Nut nickel plated 2" ch.64 for motorized valves 1"1/2	1	09208916	16,92
Nut nickel plated 2"1/2 ch.80 for motorized valves. 2"	1	09208918	25,96
Tang nickel plated 1/2" flat seat for motorized valves. 1/2"	1	4874R004	3,03
Tang nickel plated 3/4" flat seat for motorized valves. 3/4"	1	4874R005	4,70
Tang nickel plated 1" flat seat for motorized valves 1"	1	4874R006	6,36
Tang nickel plated 1"1/4 flat seat for motorized valves 1"1/4	1	4874R007	12,25
Tang nickel plated 1"1/2 flat seat for motorized valves 1"1/2	1	4874R008	24,29
Tang nickel plated 2" flat seat for motorized valves 2"	1	4874R009	50,19
Flat seat for nut 1"	1	4974G005	0,57
Flat seat for nut 1"1/4	1	4974G006	0,91
Flat seat for nut 1"1/2	1	4974G007	0,94
Flat seat for nut 2"	1	4974G008	1,76
Flat seat for nut 2"1/2	1	4974G009	2,42



Flange and rod for motorized ball valves

Dimension	Pcs. pack	Code	Price €
1/2" - 3/4"	1	01306330	6,98
1" - 1"1/4	1	01306332	6,98
1"1/2 - 2"	1	01306334	11,71

Flange and rod for valve ISO 5211

Dimension	Pcs. pack	Code	Price €
1/2" - 3/4"	1	01306340	6,98
1" - 1"1/4	1	01306342	9,09
1"1/2 - 2"	1	01306344	14,03

Circulator pumps spare parts for mixing and regulation groups

Variable speed circulator spare part, for Floor Controlbox, TM3-R and Modular Firstbox groups

Dimension	Pcs. pack	Code	Price €
Circulator pump Para 25-130/7-50/SC h 12	1	00710550	258,70

Circulator pump spare part for Floor Control Unit Plus / HE groups

Dimension	Pcs. pack	Code	Price €
Circulator Wilo Para HU 15/7	1	00710190	294,30

Spare parts for consumption measuring instruments

Spare part for volumetric counters DN15-DN20

Dimension	Pcs. pack	Code	Price €
Pulse emitter for volumetric counters DN15-DN20	1	02709168	25,30

Spare part for energy meters DN15 and DN20

Dimension	Pcs. pack	Code	Price €
O-Ring for flow sensor energy meters DN15 and DN20	1	90041140	0,13
Communication module M-Bus for energy meter EVO	1	02709574	59,66
Module 3 impulse inlet for energy meter EVO	1	02709576	43,96
Spare battery for energy meter	1	02709578	66,20

Spare parts and accessories

Poker tooling



Shutter for thermostatic valve

Dimension	Pcs. pack	Code	Price €/pc.
	20	01306094	6,93

For conversion from Poker manual to Thermostatic



"Rapido" tool box for conversion and maintenance of Poker valves

Dimension	Pcs. pack	Code	Price €
Tool box "Rapido" (*)	1	01306066	299,40

(*) Item to be out of stock



Spanner kit 3/8"-1/2"-3/4"-1"

Dimension	Pcs. pack	Code	Price €
	1	01306056	299,40

Item to be out of stock



Kit exagonal keys 10 - 12

Dimension	Pcs. pack	Code	Price €
	1	01306048	98,95

Item to be out of stock

Spare parts for Poker / Full valves and lockshields

Dimension	Pcs. pack	Code	Price €/pc.
Manually valve handle	10	90003680	0,91
Thermostizable handle valve	10	01306092	1,24
Cap for thermostizable valve	10	90067520	0,46
Cap for lockshield	10	90003690	0,16
Kit nut for long tang 1/2" for straight angle Poker	20	01306076	3,43
Kit nut and tang 3/8" (*)	20	01306562	2,62
Kit nut and tang 3/8" + O-ring (*)	20	01306079	3,65
Kit nut and tang 1/2" (*)	20	01306560	3,03
Kit nut and tang 1/2" + O-ring (*)	20	01306081	4,35
Kit nut 24x19 and reduced tang 3/8" (**)	20	01306556	3,92
Kit nut 24x19 and reduced tang 3/8" + O-ring (**)	20	01306558	3,98
Kit nut / tang 3/4" + O-Ring for Full 3/4"	5	01306606	9,09

(*) Poker - Full (**) Full only

Spare parts for Tris valves and lockshields

Dimension	Pcs. pack	Code	Price €/pc.
White pressure reducer handle (*)	1	90000991	0,42
Kit nut and tang for 3/8" (*)	24	01306070	3,28
Adapter for Sensor head assembly on Tris 2 Thermostatic valves	1	90001716	0,48

(*) Items to be out of stock

Spare parts and accessories

Spare parts for Progress ball valves

Dimension	Pcs. pack	Code	Price €
Black lever handle 1/4" - 3/4"	1	09008901	1,12
Black lever handle 1" - 1 1/4"	1	09008902	1,36
Black lever handle 1" 1/2 - 2"	1	09008903	2,24
Black butterfly handle 1/4" - 3/4"	1	09008215	1,24
Black butterfly handle 1" - 1 1/4"	1	09008225	1,60

Spare parts for Pesante and Export ball valves

Dimension	Pcs. pack	Code	Price €
Lever for Pesante valve 3/8" and Export 1/2" - 3/4"	1	09008961	0,77
Lever for Pesante valve 1/2" - 3/4"	1	09008081	0,69
Lever for Pesante valve 1" - 1 1/4"	1	09008082	1,25
Lever for Export valve 1 1/2 - 2"	1	09008963	1,64
Lever for valve 2 1/2 - 3"	1	09008212	5,29
Butterfly for Pesante valve 3/8" - 3/4" and Export 1/2" - 3/4"	1	09008216	0,80
Butterfly for Pesante valve 1" - 1 1/4" and Export 1" - 1 1/4"	1	09008226	0,96

Accessories for Progress, Pesante and Export ball valves

Dimension	Pcs. pack	Code	Price €
Extension kit 1/2" - 3/4"	20	09815190	2,22
Extension kit 1" - 1 1/4"	15	09815192	2,84
Extension kit 1" 1/2 - 2"	10	09815194	3,54
Extension kit 2 1/2 - 3" ⁽¹⁾	10	09815196	4,88
NEW Extension kit 2 1/2 - 3" ⁽²⁾	1	09008860	33,89
NEW Extension kit 4" ⁽³⁾	1	09008862	66,75

⁽¹⁾ Can be combined with 2 1/2 ball valves, codes 08107212 and 08007212 / Can be combined with 3" ball valves, codes 08107300 and 08007300.

⁽²⁾ Can be combined with 2 1/2 ball valves, codes 01300032 and 01300030 / Can be combined with 3" ball valves, codes 01300036 and 01300034.

⁽³⁾ Can be combined with 4" ball valves codes 01300040 and 01300038.

Spare parts for with hose-end bibcocks

Dimension	Pcs. pack	Code	Price €
Swivel union 1/2"	1	09214012	1,26
Swivel union 3/4"	1	09214034	1,86
Hose-end 1/2"	1	09211012	0,94
Hose-end 3/4"	1	09211034	1,37
Gasket 1/2"	1	09003104	0,16
Gasket 3/4"	1	09013034	0,18

Spare parts for built-in bibcocks

Dimension	Pcs. pack	Code	Price €
Hand wheel	1	4433C004	9,11
Cromed plate for hand wheel	1	5543C004	0,74
Blue ring for hand wheel	1	5541P004	0,23
Red ring for hand wheel	1	5542P004	0,23
Lever screw	1	4761Z504	0,05
Bell for socket tap	1	09215014	3,15
Cap for socket tap	1	5534C004	9,01
Cromed lever for socket tap	1	99800198	10,36
Rosette for socket tap	1	09215015	2,72
Extension kit for recessed water valve 1/2"	1	6250R604	8,67

Spare parts for Futurgas ball valves

Dimension	Pcs. pack	Code	Price €
Lever handle 1" ÷ 1 1/4"	1	4324T006	1,57
Lever handle 1 1/2 ÷ 2"	1	4324T008	2,97
Butterfly handle 1/4" ÷ 3/4"	1	4605T004	0,93
Butterfly handle 1" ÷ 1 1/4"	1	4605T006	1,09

Spare parts and accessories

Coils for solenoid valves with manual re-activation normally open and normally closed

Model	Solenoid valve code	Power supply voltage	Coil stamping	Pcs. pack	Spare coil code	Price €
M16/RM N.C. DN20÷DN50 M16/RMO N.C. DN15÷DN25	00309054 / 00309056 00309058 / 00309060 00309062 / 00309050 00309052 / 00309057	230 Vac	BO-0050 220 V RAC	1	00308312	21,36
M16/RM N.C. DN65÷DN200	00309064 / 00309066 00309068	230 Vac	BO-0325 V 196 DC W18	1	00308314	91,50
M16/RMO N.A. DN15÷DN25	00308504	230 Vac	BO-0120 230 V 50÷60 Hz V	1	00308332	51,38
M16/RMO N.A. DN15÷DN20	00308500 / 00308502	230 Vac	BO-0830 230 V 50÷60 Hz	1	00308330	26,10

N.A. = Normally Open
N.C. = Normally Closed
RM = Aluminium Manual Reset
RMO = Brass Manual Reset

Connector for solenoid valve

Model	Pcs. pack	Code	Price €
Connector CN-0010 for solenoid valve RM/N.A.	1	00308307	3,76
Connector CN-0045 with rectifier for solenoid valve RM/N.C.	1	00308304	32,27

N.A. = Normally Open
N.C. = Normally Closed
RM = Aluminium Manually Re-activation
RMO = Brass Manually Re-activation

Components for tanks ETW - HEVS - HEVSN - HYBV - HE2V - Euro V - EURO HPV - Comfort V - Storage tanks V - EB - Puffer - Tank in Tank (covers)

Dimension	Pcs. pack	Code	Price €
Cover for ETW 25, ETW 50, ETW 60 (*)	1	92891182	48,00
Cover for ETW 100, ETW 120 (*)	1	92891184	46,83
Cover for ETW 200	1	92891388	54,39
Cover for HEVS 300, HEVSN 300	1	92891170	63,49
Cover for HYBV 300	1	92891186	62,89
Cover for Puffer 300 N, Puffer 300 N 1S	1	92891470	49,91
Cover for HE2V 200/300 - Euro V 150/200/300 - Euro HPV 200/300 - Comfort V 200/300 - Accumulation tank V 300 - EB 300 S15 A50	1	92891086	61,43
Cover for HEVS 500, HYBV 500, HEVSN 500, EB 500 S18 AS50 2016	1	92891084	87,61
Cover for HE2V 500 - Euro V 500 - Euro HPV 500 - Comfort V 500 - Accumulation tank V 500 - EB 500 S18 A50	1	92891172	84,00
Cover for 500 N, Puffer 500 N 1S	1	92891472	57,89
Cover for Tank in Tank 600 N 1S, Tank in Tank 600 N 2S	1	92891436	73,19
Cover for HE2V 750/1000 - Euro HPV 1000 - Comfort V 750/1000 - Accumulation tank V 750/1000, Tank in Tank 1000 N, Tank in Tank 1000 N 1S, Puffer 1000 N, Puffer 1000 N 1S	1	92891144	126,70
Cover for HE2V 1500 - Comfort V 1500 - Comfort S 1500 - Accumulation tank V 1500, Puffer 1500 N, Puffer 1500 N 1S	1	92891174	164,50
Cover for HE2V 2000 - Comfort V 2000 - Comfort S 2000 - Accumulation tank V 2000, Puffer 2000 N, Puffer 2000 N 1S	1	92891176	298,40
Cover for Comfort V 3000 - Comfort S 3000	1	92891346	341,00
Flange cover for HEVS 300 / 500 - HE2V 200 / 300 / 500 - Euro V 150 / 200 / 300 / 500 - Euro HPV 200 / 300 / 500 - HYBV 300 / 500	1	92891300	39,24
Flange cover for HE2V 750 / 1000 - Euro HPV 1000	1	92891302	36,77
Flange cover for HE2V 1500 / 2000 - Comfort V 200 / 300 / 500 - Comfort V 750 / 1000 / 1500 / 2000 / 3000 - Comfort S 1500 / 2000 / 3000 - Accumulation tank V 2000	1	92891304	44,13

(*) Specify whether for 50/100 or 60/120 models.

Spare parts and accessories

Components for tanks ETW - HEVS - HEVSN - HYBV - HE2V - Euro V - EURO HPV - Comfort V - Accumulation tank V - EB - Puffer - Tank in Tank (gaskets, serpentine kit removable, flanges, anode, stainless steel pipe, rosettes, brackets)

Size	Pcs. pack	Code	Price €
Gasket for flange HEVS 300 / 500 - HE2V 200 / 300 / 500 - HYBV 300 / 500 - Euro V 150 / 200 / 300 / 500 - Euro HPV 200 / 300 / 500 - LS 08 - LS 12 - KRE 180A	1	02791502	7,72
Gasket for flange HE2V 750 / 1000 - Euro HPV 1000 - KRE 180	1	02791512	12,86
Gasket for flange HE2V 1500 / 2000 - Comfort V 200 / 300 / 500 - Comfort V 750 / 1000 / 1500 / 2000 / 3000 - Comfort S 1500 / 2000 / 3000 - EB 300 S15 A50 - EB 500 S18 A50 - KRE 290 - LN 12, 18, 26, 32, 45, 63	1	02791514	20,24
Removable coil kit for EB 300 S15 A50 - EB 500 S18 A50 (*)	1	02791522	3.228,00
Upper flange D. 290 for Tank in Tank	1	92891438	173,10
Upper flange for EB 300 S15 A50 - EB 500 S18 A50	1	02791518	111,80
Blind flange kit for HEVS 300 / 500 - HE2V 200 / 300 / 500 - HYBV 300/500 - Euro HPV 200 / 300 / 500 - Euro V 150 / 200 / 300 / 500	1	02791504	155,90
Blind flange kit for HE2V 750 / 1000 - Euro HPV 1000	1	02791506	188,10
Blind flange kit for HE2V 1500 / 2000 - Comfort C2F V 200 / 300 / 500 - Comfort C3F V 750 / 1000 / 1500 / 2000 / 3000 - Comfort C3F S 1500 / 2000 / 3000	1	02791508	249,30
Magnesium anode D. 32 x 400 - 1"1/4 for Tank in Tank	1	92891444	39,92
Stainless steel tube D. 20 x 0,4 x 350 for Tank in Tank	1	92891446	19,98
Stainless steel tube D. 20 x 0,4 x 1320 for Tank in Tank	1	92891448	46,57
Black rosette for connections 1/2"	1	92891306	1,92
Black rosette for connections 3/4"	1	92891308	1,92
Black rosette for connections 1"	1	92891310	1,92
Black rosette for connections 1"1/4	1	92891312	1,92
Black rosette for connections 1"1/2	1	92891314	1,92
Blind black rosette for connection anode 1"1/4	1	92891316	1,92
Blind black rosette for connection anode 1"1/2	1	92891318	1,92
Red rosette for connections 3/4"	1	92891324	1,92
Red rosette for connections 1"	1	92891320	1,92
Blue rosette for connections 3/4"	1	92891326	1,92
Blue rosette for connections 1"	1	92891322	1,92
External bracket for ETW (for models up to 120)	1	92891476	29,96

(*) Supplied with gaskets, cover for flange, bolts and nuts.

Spare parts and accessories

Components for tanks ETW - HEVS - HEVSN - HYBV - HE2V - Euro V - EURO HPV - Comfort V - Accumulation tank V - EB - Puffer - Tank in Tank (casing)

Size	Pcs. pack	Code	Price €
Casing for ETW 25 (coating only)	1	92891474	106,50
Casing for ETW 50, ETW 60 (coating only)	1	92891164	162,40
Casing for ETW 100, ETW 120 (coating only)	1	92891166	173,00
Casing for Euro V 150 (coating only)	1	92891330	193,60
Casing for ETW 200 (coating only)	1	92891390	309,10
Casing for ETW 280 (coating only)	1	92891478	215,20
Casing for HE2V 200 - Euro V 200 - Euro HPV 200 (coating only)	1	92891036	233,80
Polyester casing for Comfort V 200, Comfort V 200 2018 (insulation + coating)	1	92891508	731,90
Casing for HEVS 300 (coating only)	1	92891092	326,10
Casing for HEVSN 300 (coating only)	1	92891382	353,10
Casing for HYBV 300 (coating only)	1	92891372	363,30
Casing for HE2V 300 - Euro V 300 - Euro HPV 300 (coating only)	1	92891034	284,60
Polyester casing for Comfort V 300, Comfort V 300 2018 (insulation + coating)	1	92891510	764,80
Polyester casing for accumulation tank V 300, V 300 2018 (insulation + coating)	1	92891522	670,20
Casing for EB 300 S15 A50 (coating only)	1	92891160	279,80
Casing for EB 300 S15 A50 2018 (coating only)	1	92891426	305,70
Polyester casing for Puffer 300 N (insulation + coating)	1	92891450	492,40
Polyester casing for Puffer 300 N 1S (insulation + coating)	1	92891460	505,60
Casing for HEVS 500 (coating only)	1	92891094	364,60
Casing for HEVSN 500 (coating only)	1	92891384	362,10
Casing for HYBV 500 (coating only)	1	92891374	416,30
Casing for HE2V 500 - Euro V 500 - Euro HPV 500 (coating only)	1	92891038	342,00
Casing for Comfort V 500, V 500 2017, V 500 2018 (insulation + coating)	1	92891512	892,10
Polyester casing for accumulation tank V 500, V 500 2017, V 500 2018 (insulation + coating)	1	92891524	801,80
Casing for EB 500 S18 A50 (coating only)	1	92891162	353,60
Casing for EB500 S18 AS50 2016 (coating only)	1	92891386	388,70
Casing for Puffer 500 N (insulation + coating)	1	92891452	585,60
Polyester casing for Puffer 500 N 1S (insulation + coating)	1	92891462	618,80
Polyester casing for Tank in Tank 600 N 1S (insulation + coating)	1	92891428	725,20
Polyester casing for Tank in Tank 600 N 2 S (insulation + coating)	1	92891432	745,10

Spare parts and accessories

Components for tanks ETW - HEVS - HEVSN - HYBV - HE2V - Euro V - EURO HPV - Comfort V - Accumulation tank V - EB - Puffer - Tank in Tank (casing)

Size	Pcs. pack	Code	Price €
Polyester casing for HE2V, HE2V 750 2017, HE2V 750 2018 (insulation + coating)	1	92891500	1.175,00
Polyester casing for Comfort V 750, V 750 2017, V 750 2018 (insulation + coating)	1	92891514	1.231,00
Polyester casing for Accumulation tank V 750, V 750 2017, V 750 2018 (insulation + coating)	1	92891526	1.094,00
Polyester casing for HE2V 1000, HE2V 1000 2017, HE2V 1000 2018 (*) (insulation + coating)	1	92891502	1.349,00
Polyester casing for Comfort V 1000, V 1000 2017, V 1000 2018 (insulation + coating)	1	92891516	1.388,00
Polyester casing for Accumulation tank V 1000, V 1000 2017, V 1000 2018 (insulation + coating)	1	92891528	1.252,00
Polyester casing for Euro HPV 1000, HPV 1000 2017, HPV 1000 2018 (insulation + coating)	1	92891542	1.418,00
Polyester casing for Puffer 1000 N (insulation + coating)	1	92891454	911,40
Polyester casing for Puffer 1000 N 1S (insulation + coating)	1	92891464	938,00
Polyester casing for Tank in Tank 1000 N 1S (insulation + coating)	1	92891430	964,60
Polyester casing for Tank in Tank 1000 N 2S (insulation + coating)	1	92891434	984,50
Polyester casing for HE2V 1500, HE2V 1500 2017, HE2V 1500 2018 (*) (insulation + coating)	1	92891504	1.785,00
Polyester casing for Comfort V 1500, V 1500 2017, V 1500 2018 (insulation + coating)	1	92891518	1.689,00
Polyester casing for Comfort S 1500, S 1500 2017, S 1500 2018 (insulation + coating)	1	92891536	1.875,00
Polyester casing for Accumulation tank V 1500, V 1500 2017, V 1500 2018 (insulation + coating)	1	92891530	1.551,00
Polyester casing for Puffer 1500 N (insulation + coating)	1	92891456	1.132,00
Polyester casing for Puffer 1500 N 1S (insulation + coating)	1	92891466	1.165,00
Polyester casing for HE2V 2000, HE2V 2000 2017, HE2V 2018 (*) (insulation + coating)	1	92891506	2.167,00
Polyester casing for Comfort V 2000, V 2000 2017, V 2000 2018 (insulation + coating)	1	92891520	2.034,00
Polyester casing for Comfort S 2000, S 2000 2017, S 2000 2018 (insulation + coating)	1	92891538	2.259,00
Polyester casing for Accumulation tank V 2000, V 2000 2017, V 2000 2018 (insulation + coating)	1	92891532	1.943,00
Polyester casing for Puffer 2000 N (insulation + coating)	1	92891458	1.413,00
Polyester casing for Puffer 2000 N 1S (insulation + coating)	1	92891468	1.452,00
Polyester casing for Comfort V 3000, V 3000 2018 (insulation + coating)	1	92891534	2.317,00
Polyester casing for Comfort S 3000, S 3000 2018 (insulation + coating)	1	92891540	2.724,00
Polyester casing for EB 1000 (insulation + coating)	1	92891544	1.425,00
Polyester casing for EB 1500 (insulation + coating)	1	92891546	1.756,00

(*) Supplied with: cover, rosette and flange cover

Spare parts for exchanger kit model LN and LS

Dimension	Pcs. pack	Code	Price €
Kit electric joints for heat exchangers 3/4" F - 1" M (models LS 08 - LS 12 - LN 18 - LN 26 - LN 32)	1	02790700	60,86
Kit electric joints for heat exchangers 1" F - 1 1/4" M (models LN 45 - LN 63)	1	02790702	83,57

Supplied with reductions, rings for flange, nuts, brass washers and O-ring.

Spare parts for electronic anode Boguard

Dimension	Pcs. pack	Code	Price €
Anode L=380 mm	1	02791310	66,45
Anode L=430 mm	1	02791312	67,28

Spare parts and accessories

Components for Tanks Euro, HE1, Comfort, Accumulation tanks and Heating exchangers

Dimension	Pcs. pack	Code	Price €
Kit 2 fittings for L14 - L18 - L25 - L30 - S200 - D200	1	02790284	42,64
Fitting for coil 3/4" L 135 mm	1	92790184	14,70
Kit 2 fitting for L45 - L55	1	02790287	88,64
Coating coupled sky for lt. 150	1	92890760	130,30
Coating coupled sky for lt. 200	1	92890770	139,60
Coating coupled sky for lt. 300	1	92890780	148,00
Coating coupled sky for lt. 500	1	92890790	236,80
Kit 12 screws M12, washers and nut (galvanized)	1	02790282	14,39
Headset with 3 bosses for Emmeti flange (*)	1	92790154	11,43
Polyurethane disc for casing	1	92790153	2,96
Flange Emmeti perforated D. 30x90 enamelled for sleeve	1	02791146	191,30
Flange Emmeti perforated D. 30x90 with support enamelled for sleeve	1	02791151	131,50
Flange Emmeti perforated D. 48,5x90 with support enamelled for sleeve	1	02791156	213,30
Gasket for flange	1	02790300	16,11
Kit flexible insulation grey for 750 lt C3F	1	92890801	873,70
Kit flexible insulation grey for 1000 lt C3F	1	92890810	1.013,00
Kit flexible insulation grey for 1500 lt C3F	1	92890820	1.004,00
Kit flexible insulation grey for 2000 lt C3F	1	92890830	1.163,00
Kit flexible insulation grey for 3000 lt C3F	1	92890840	1.219,00
Kit flexible insulation grey for 750 lt S	1	92890871	873,70
Kit flexible insulation grey for 1000 lt S	1	92890880	1.013,00
Kit flexible insulation grey for 1500 lt S	1	92890891	1.004,00
Kit flexible insulation grey for 2000 lt S	1	92890901	1.163,00
Kit flexible insulation grey for 3000 lt S	1	92890911	1.219,00
Kit flexible insulation grey for Tank in Tank 600 lt with code 02704910	1	92891018	858,40
Kit flexible insulation grey for 600 with code 02704992	1	92891116	850,70
Kit flexible insulation grey for Tank in Tank 1000 lt with code 02704930	1	92891022	1.258,00
Kit flexible insulation grey for Tank in Tank 1000 lt with code 02704932 and 02704996	1	92891114	1.350,00

(*) Item to be out of stock

Spare parts for Top - Eco - Eco+ reducers

Dimension	Pcs. pack	Code	Price €
Kit pressure reducer mechanics 1/2" - 3/4" (*)	1	90038812	16,08
Kit pressure reducer transparent tap with pie union 1/2" - 3/4" (*)	1	90038818	7,02
Kit pressure reducer brass tap without pipe union 1/2" - 3/4" (*)	1	90038820	8,69
Kit pressure reducer mechanics Eco+	1	90032252	13,29

(*) Item to be out of stock

Controlpump spare parts

Dimension	Pcs. pack	Code	Price €
Electronic plate	1	90002160	66,36
Membrane group	1	90002170	11,13

Varia spare parts

Dimension	Pcs. pack	Code	Price €
Bubble-breaker	1	90000390	0,18

Spare parts and accessories

Tecno-Varia spare parts

Dimension	Pcs. pack	Code	Price €/pc.
Automatic vent gray cap	10	00400900	1,05
Automatic vent black cap	10	00400902	1,97

Spare cartridge for safety group

Dimension	Pcs. pack	Code	Price €
Cartridge	1	00200710	8,18

Membrane for expansion vessels

Dimension		Pcs. pack	Code	Price €
L. 8	EPDM	1	00806014	35,54
L. 16-18-24	EPDM	1	00806024	39,17
L. 35 ÷ 50	EPDM	1	00806050	91,50
L. 60 ÷ 80 ÷ 100	EPDM	1	00806100	203,70
L. 150-200	EPDM	1	00806200	397,80
L. 300	EPDM	1	00806210	598,00

Kit for thermostatic regulation

Dimension	Pcs. pack	Code	Price €
Thermostatic head	1	90046770	39,22
Socket 1/2"	1	90056420	17,73



Spare vacuum tube for Arcobaleno VP solar panel

Dimension	Type	Pcs.	Code	Price €
L = 1500 mm	single	1	02708971	183,00

Spare parts for water and air solenoid valves

Model	Solenoid valve code	Pcs. pack	Code	Price €
Coil EV NA/NC 1/2"-3/4"-1" 230 V/50 Hz	00306200 / 00306202 / 00306204 / 00306210 / 00306212 / 00306214 /	1	00306400	11,68
Coil EV NC 1/2"-3/4" 24 V/50 Hz	00306206 / 00306208	1	00306410	11,68
Membrane NBR EV NC 1/2"	00306200 / 00306206 / 00306210	1	00306300	21,36
Membrane NBR EV NC 3/4"	00306202 / 00306208 / 00306212	1	00306302	21,98
Membrane EPDM EV NC 1/2"	00306200 / 00306206 / 00306210	1	00306320	21,36
Membrane EPDM EV NC 3/4"	00306202 / 00306208 / 00306212	1	00306322	21,98
Membrane EPDM EV NC 1"	00306204 / 00306214	1	00306324	41,00
Membrane NBR EV NA 1/2"	00306200 / 00306206 / 00306210	1	00306310	21,98
Membrane NBR EV NA 3/4"	00306202 / 00306208 / 00306212	1	00306312	26,10
Membrane EPDM EV NA 1/2"	00306200 / 00306206 / 00306210	1	00306330	21,98
Membrane EPDM EV NA 3/4"	00306202 / 00306208 / 00306212	1	00306332	26,10
Membrane EPDM EV NA 1"	00306204 / 00306214	1	00306334	34,36

N.C. = solenoid valve normally closed

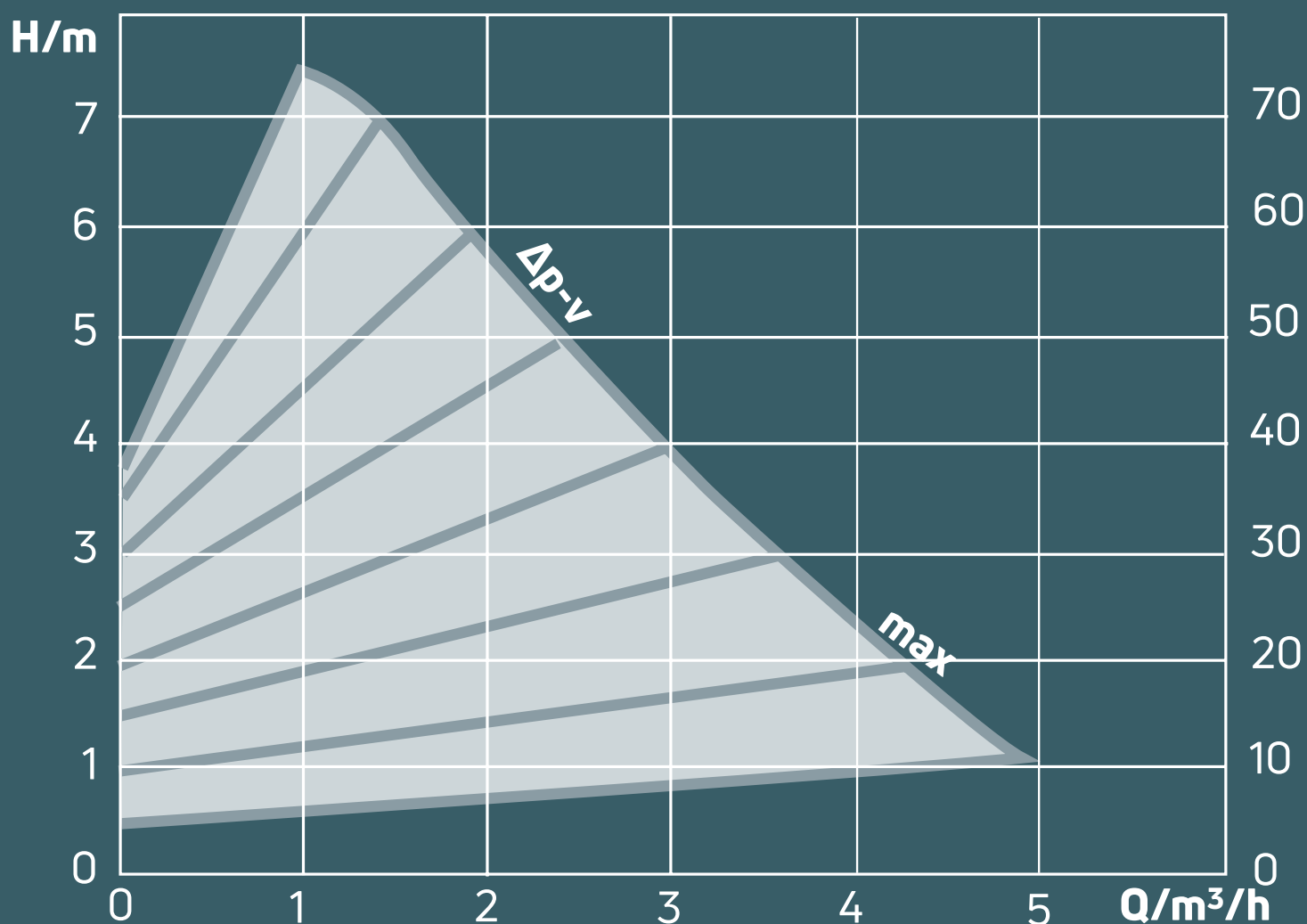
N.A. = solenoid valve normally open



Technical attachments

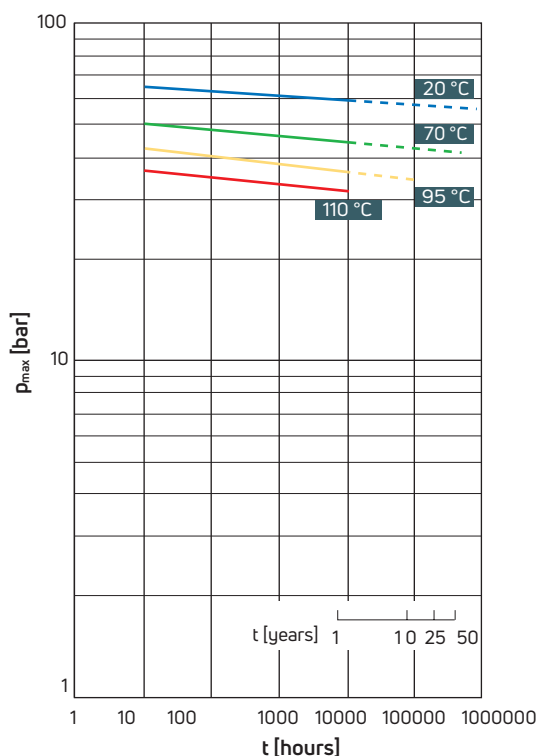


Scan the QR code
to consult the Technical Attachments
in full version

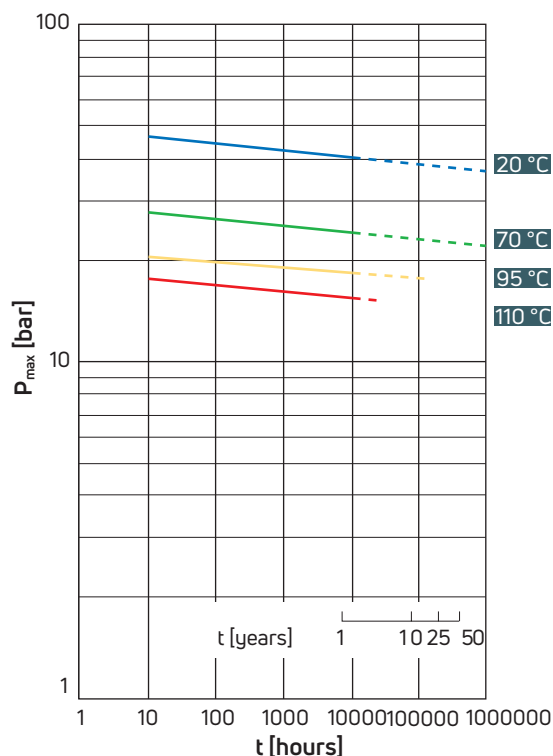


Gerpex and EMMETI Alpert - Multilayer pipes

Regression curves
Gerpex - Gerpex RA pipe (16x2)



Regression curves
EMMETI Alpert pipe (16x2)



Regression curves reading example

The maximum pressure (P_{max}) for a period of 50 years at a set temperature can be identified by intersecting the vertical straight section relative to 50 years with the coloured straight section relative to that temperature.

Note the planned working pressure (P_{es}), the safety coefficient will be equal to $k_s = P_{max} / P_{es}$

Classification of conditions of use for Gerpex, Gerpex RA, EMMETI Alpert pipes (UNI EN ISO 21003-1)

Application class	Design Temperature T_D (°C)	Duration ^b at T_D (years)	T_{max} (°C)	Duration at T_{max} (years)	T_{mal} (°C)	Duration at T_{mal} (hours)	Field of use
1 ^a	60	49	80	1	95	100	Hot water (60 °C)
2 ^a	70	49	80	1	95	100	Hot water (70 °C)
4 ^b	20 + 40 + 60	2,5 20 25	70	2,5	100	100	Underfloor heating and low temperature radiators
5 ^b	20 + 60 + 80	14 25 10	90	1	100	100	High temperature radiators

Note:

T_D design Temperature

T_{max} maximum design temperature for short periods

T_{mal} malfunction temperature

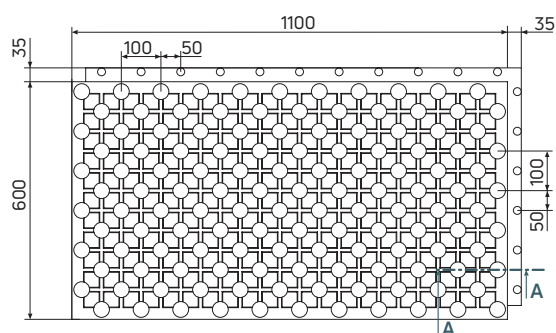
a) A Country may select either class 1 or class 2 in conformity with its national regulations.

b) Where more than one design temperature for time and associated temperature appears for any class, they should be aggregated. "Plus cumulative" in the table implies a temperature profile of the mentioned temperature over time (e. g. the design temperature profile for 50 years for class 5 is 20 °C for 14 years followed by 60 °C for 25 years, 80 °C for 10 years, 90 °C for 1 year and 100 °C for 100 h).

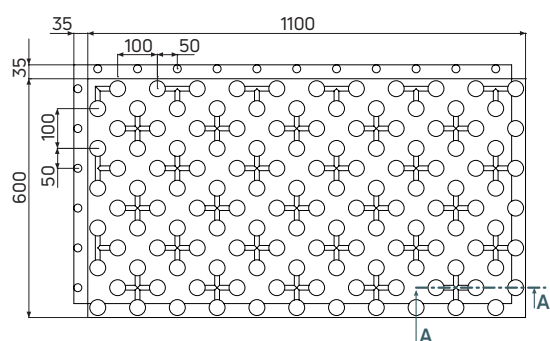
Emmeti Floor - Floor system

Standard Floor Insulating panel

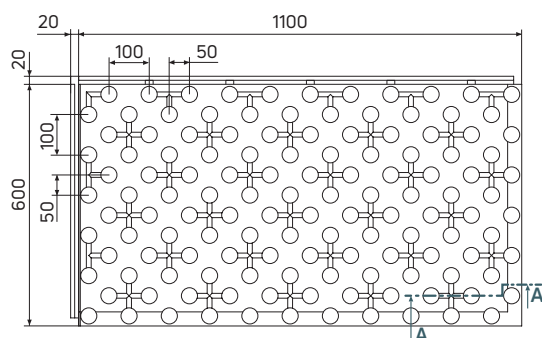
Model H = 10



Models H = 20/30



Models H = 40/50/60



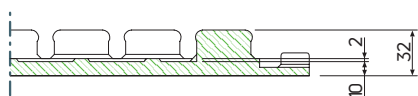
Emmeti Floor - Floor system

Standard Floor

Insulating panel

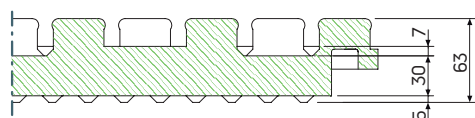
Pannello 1100 x 600 H 10

Section A-A



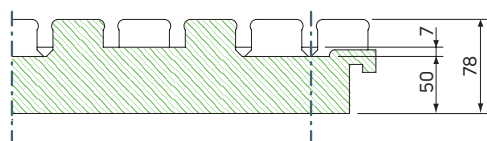
Panel 1100 x 600 H 30

Section A-A



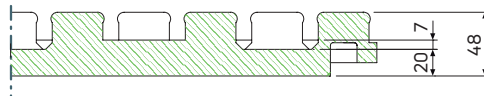
Panel 1100 x 600 H 50

Section A-A



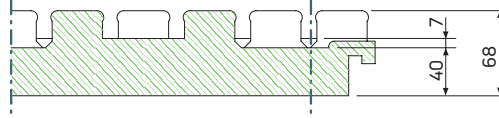
Panel 1100 x 600 H 20

Section A-A



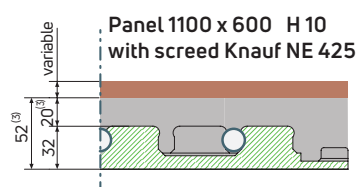
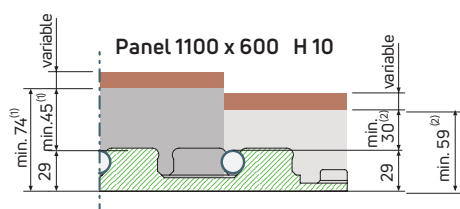
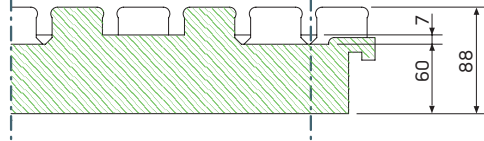
Panel 1100 x 600 H 40

Section A-A



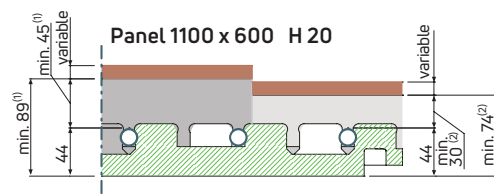
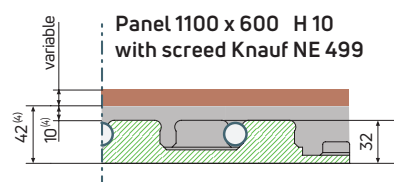
Panel 1100 x 600 H 60

Section A-A

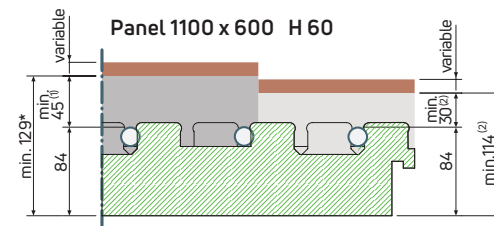
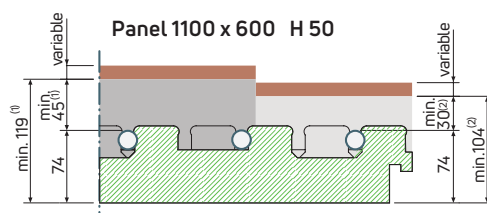
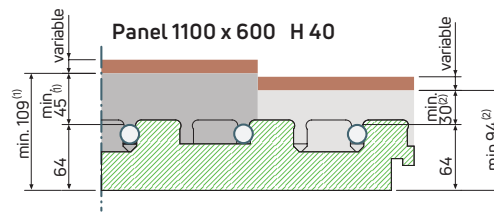
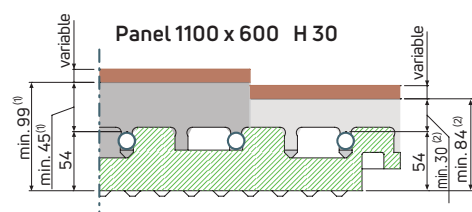


Minimum system clearances for civil buildings (mm)

- (1) Traditional cement screed*
- (2) Self-levelling screed*
- (3) Fluid screed with low thickness Knauf Self-levelling NE 425
- (4) Fluid screed with low thickness Knauf Super-levelling NE 499



Note
The screeds are **not** provided by Emmeti



The effective thickness of the screed and the mode of construction of the same are to be defined with the manufacturer / supplier of the same according to its specifications, depending on the conditions of installation (size and type of installation surface, type floor, etc.) and of the type of slab chosen.

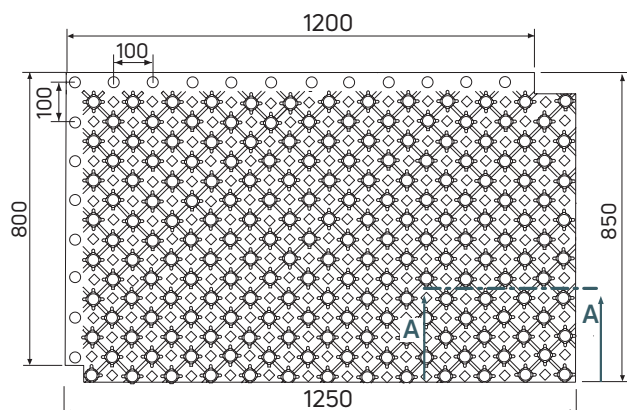
* If the Emmeti Floor system is combined with the Mirai SMI + Febos 4.0 heat pump, it is advisable to increase the thickness of the screed by about 1 cm from the minimum values.

Emmeti Floor - Floor system

Standard Combi Floor

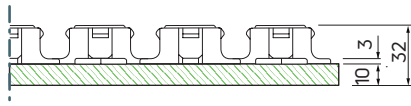
Insulating panel

Models H = 10/20/30



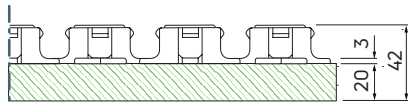
Panel 1200 x 800 H 10

Section A-A



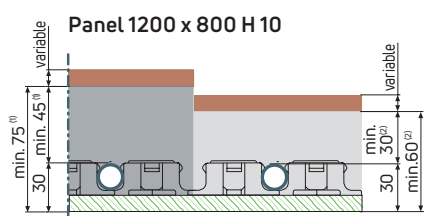
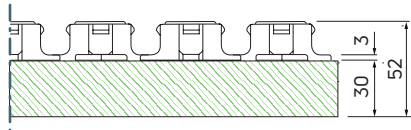
Panel 1200 x 800 H 20

Section A-A

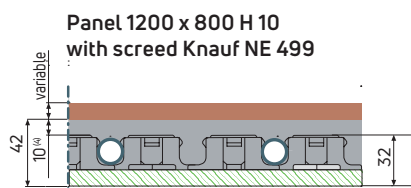
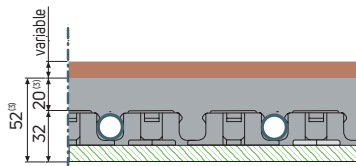


Panel 1200 x 800 H 30

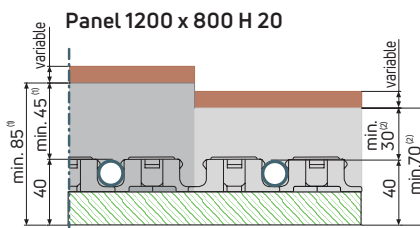
Section A-A



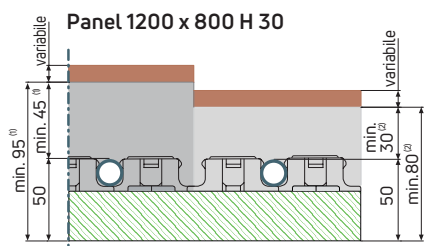
Panel 1200 x 800 H 10
with screed Knauf NE 425



Panel 1200 x 800 H 10
with screed Knauf NE 499



Panel 1200 x 800 H 20



Panel 1200 x 800 H 30

Minimum system clearances for civil buildings (mm)

- (1) Traditional cement screed*
- (2) Self-levelling screed*
- (3) Fluid screed with low thickness Knauf Self-levelling NE 425
- (4) Fluid screed with low thickness Knauf Super-levelling NE 499

The effective thickness of the screed and the mode of construction of the same are to be defined with the manufacturer / supplier of the same according to its specifications, depending on the conditions of installation (size and type of installation surface, type floor, etc.) and of the type of slab chosen.

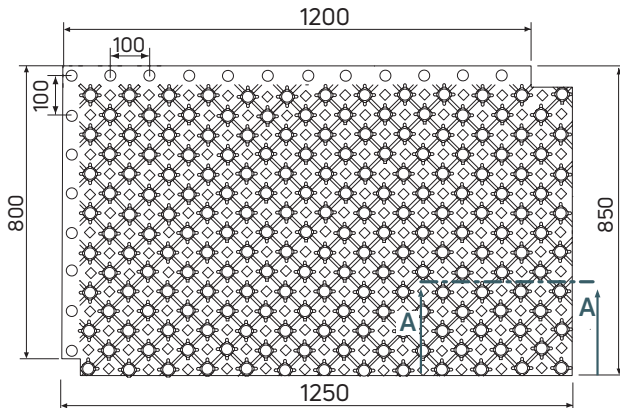
* If the Emmeti Floor system is combined with the Mirai SMI + Febos 4.0 heat pump, it is advisable to increase the thickness of the screed by about 1 cm from the minimum values.

Note: The screeds are **not** provided by Emmeti

Emmeti Floor - Floor system

Standard Combi Floor with graphite Insulating panel

Models H = 10/23/38/45/60



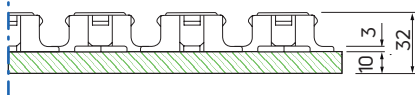
Minimum system clearances for civil buildings (mm)

- (1) Traditional cement screed*
- (2) Self-levelling screed*
- (3) Fluid screed with low thickness Knauf Self-levelling NE 425
- (4) Fluid screed with low thickness Knauf Super-levelling NE 499

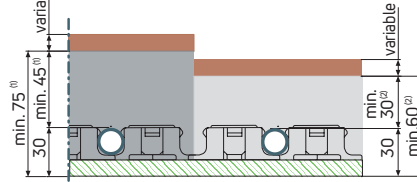
The effective thickness of the screed and the mode of construction of the same are to be defined with the manufacturer / supplier of the same according to its specifications, depending on the conditions of installation (size and type of installation surface, type floor, etc.) and of the type of slab chosen.

Panel 1200 x 800 H 10

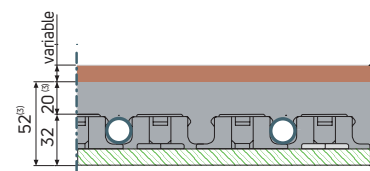
Section A-A



Panel 1200 x 800 H 10

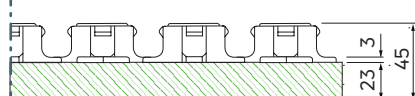


Panel 1200 x 800 H 10
with screed Knauf NE 425

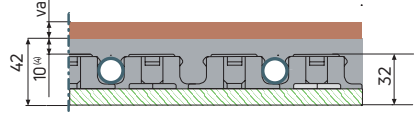


Panel 1200 x 800 H 23

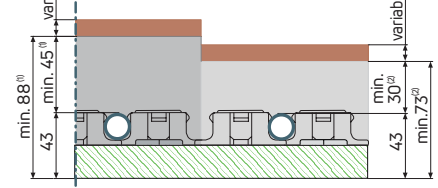
Section A-A



Panel 1200 x 800 H 10
with screed Knauf NE 499

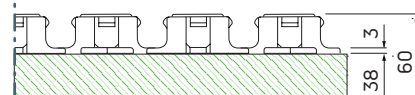


Panel 1200 x 800 H 23

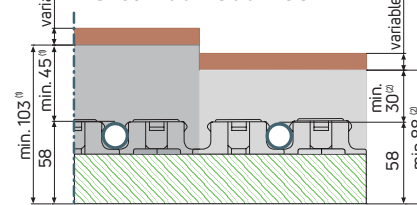


Panel 1200 x 800 H 38

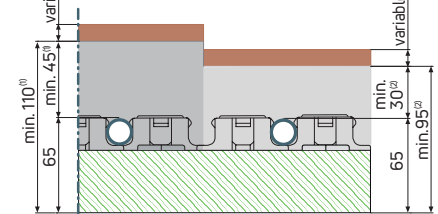
Section A-A



Panel 1200 x 800 H 38

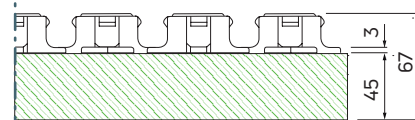


Panel 1200 x 800 H 45

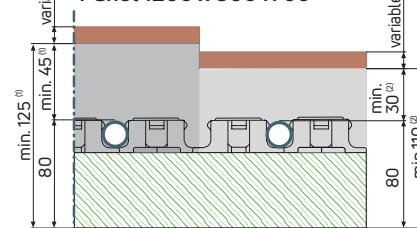


Panel 1200 x 800 H 45

Section A-A

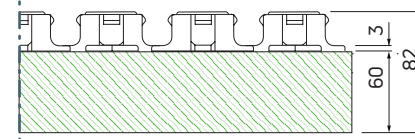


Panel 1200 x 800 H 60



Panel 1200 x 800 H 60

Section A-A



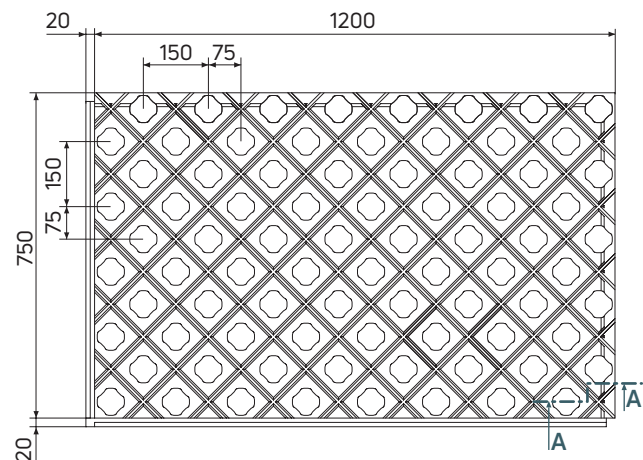
* If the Emmeti Floor system is combined with the Mirai SMI + Febos 4.0 heat pump, it is advisable to increase the thickness of the screed by about 1 cm from the minimum values.

Note: The screeds are **not** provided by Emmeti

Emmeti Floor - Floor system

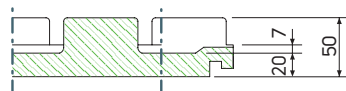
Classic Floor Insulating panel

Models H = 20/30



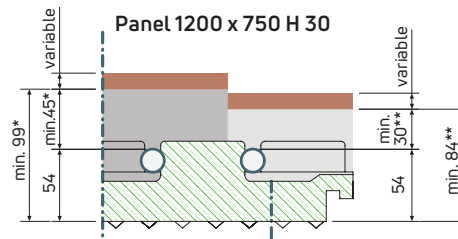
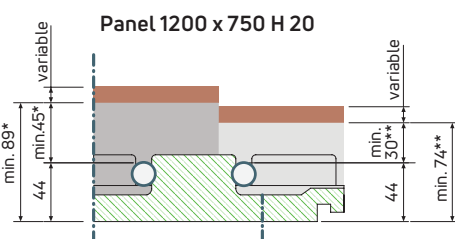
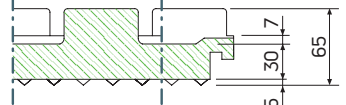
Panel 1200 x 750 H 20

Section A-A



Panel 1200 x 750 H 30

Section A-A



Minimum system clearances for civil buildings (mm)

- * Traditional cement screed
- ** Self-levelling screed

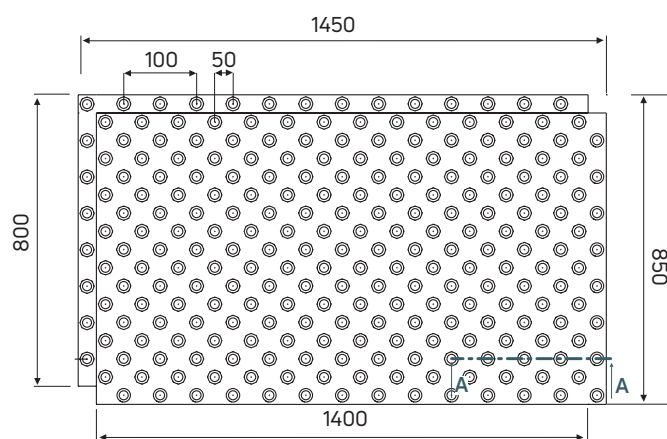
If the Emmeti Floor system is combined with the Mirai SMI + Febos 4.0 heat pump, it is advisable to increase the thickness of the screed by about 1 cm from the minimum values.

Note: The screeds are **not** provided by Emmeti

Step Combi Floor - Step Combi Floor with graphite

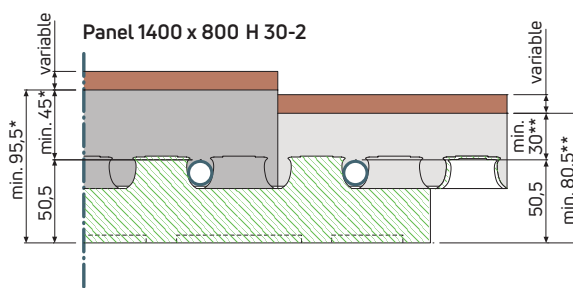
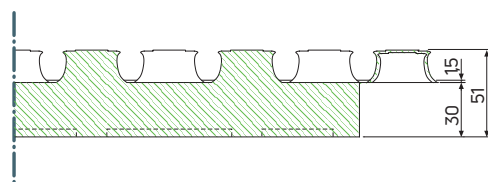
Sound insulation panel

Model H = 30-2



Panel 1400 x 800 H 30-2

Section A-A



Minimum system clearances for civil buildings (mm)

- * Traditional cement screed
- ** Self-levelling screed

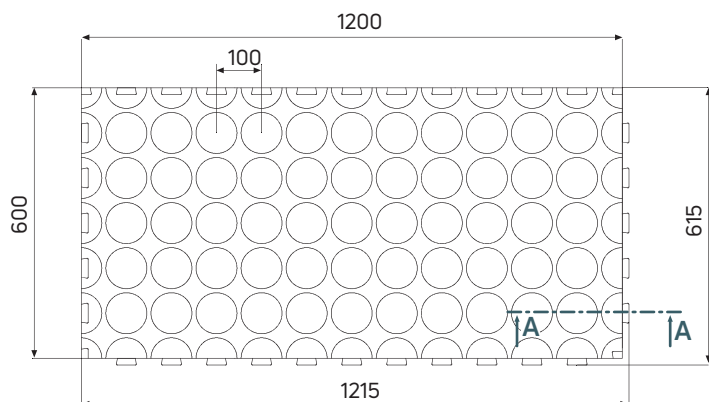
If the Emmeti Floor system is combined with the Mirai SMI + Febos 4.0 heat pump, it is advisable to increase the thickness of the screed by about 1 cm from the minimum values.

Note: The screeds are **not** provided by Emmeti

Emmeti Floor - Floor system

Thin Floor Insulating panel

Model H = 5



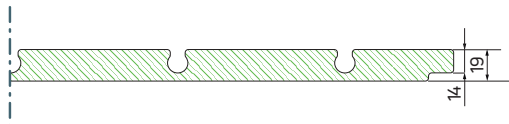
Minimum system clearances for civil buildings (mm)

- * Self-levelling screed
- ** Fluid screed with low thickness Knauf Self-levelling NE 425
- *** Fluid screed with low thickness Knauf Super-levelling NE 499

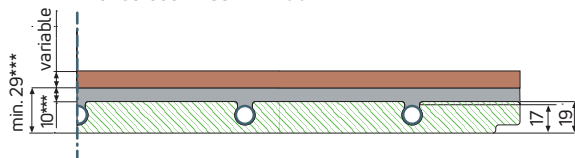
The effective thickness of the screed and the mode of construction of the same are to be defined with the manufacturer / supplier of the same according to its specifications, depending on the conditions of installation (size and type of installation surface, type floor, etc.) and of the type of slab chosen.

Note: The screeds are **not** provided by Emmeti

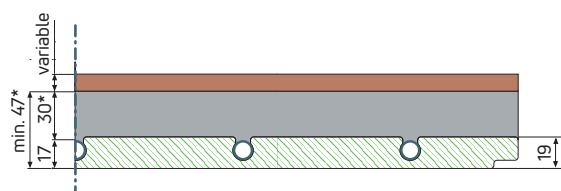
Panel 1200 x 600 H 5
Section A-A



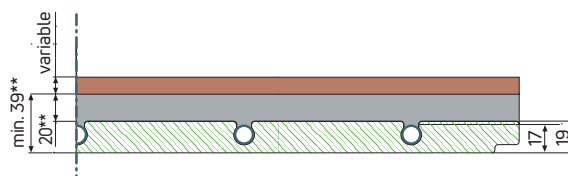
Panel 1200 x 600 H 5
with screed Knauf NE 499



Panel 1200 x 600 H 5



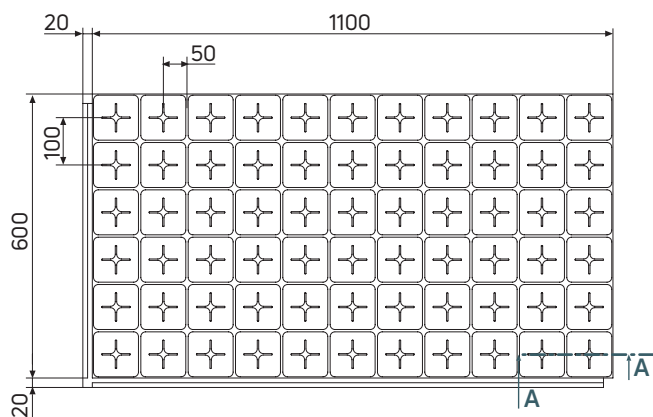
Panel 1200 x 600 H 5
with screed Knauf NE 425



Emmeti Floor - Floor system

Plan Floor Insulating panel

Model H = 30



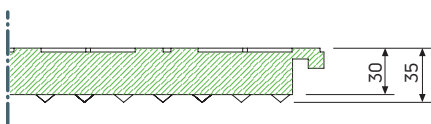
Minimum system clearances for civil buildings (mm)

- * Traditional cement screed
- ** Self-levelling screed

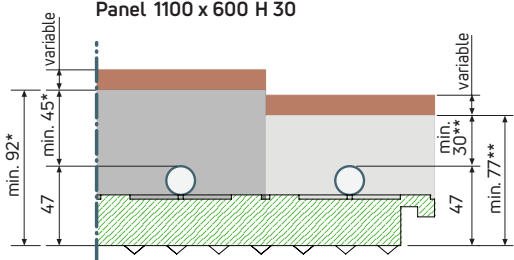
If the Emmeti Floor system is combined with the Mirai SMI + Febos 4.0 heat pump, it is advisable to increase the thickness of the screed by about 1 cm from the minimum values.

Note: The screeds are **not** provided by Emmeti

Panel 1100 x 600 H 30
Section A-A



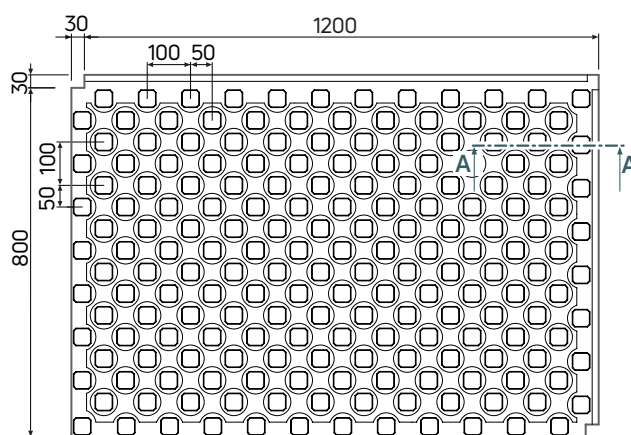
Panel 1100 x 600 H 30



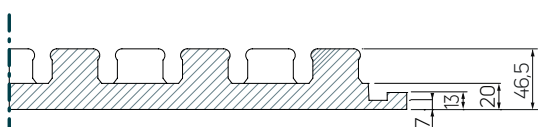
Emmeti Floor - Floor system

Project Emmeti Floor Insulating panel

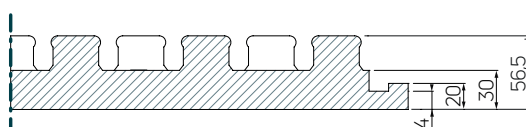
Models H = 20/25/41 mm



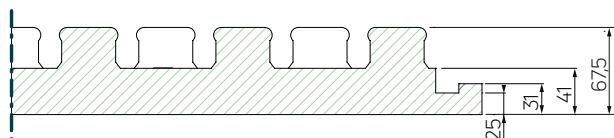
Panel 1200x800 H20 mm
Section A-A



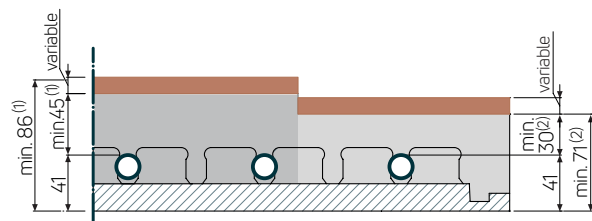
Panel 1200x800 H25 mm
Section A-A



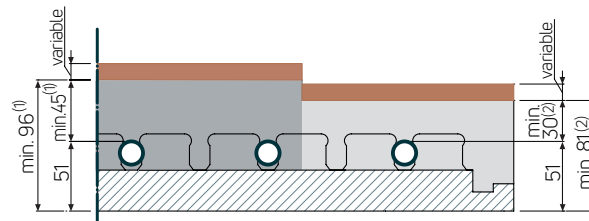
Panel 1200x800 H41 mm
Section A-A



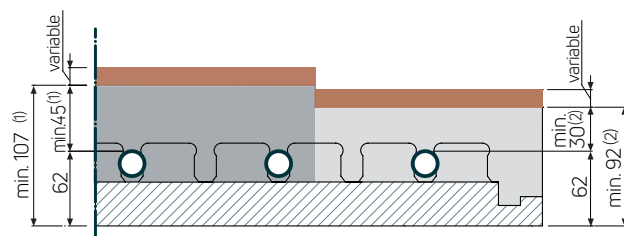
Panel 1200x800 H20 mm



Panel 1200x800 H25 mm



Panel 1200x800 H41 mm



Minimum system clearances for civil buildings (mm)

(1) Traditional cement screed *

(2) Self-levelling screed *

The actual thickness of the screed and the way it is made must be defined with the screed manufacturer/supplier according to their specifications, depending on the installation conditions (size and type of laying surface, type of slab, etc.) and the type of screed chosen.

(*) If the Emmeti Floor system is combined with the Mirai SMI + Febos 4.0 heat pump, it is advisable to increase the thickness of the screed by about 1 cm from the minimum values.

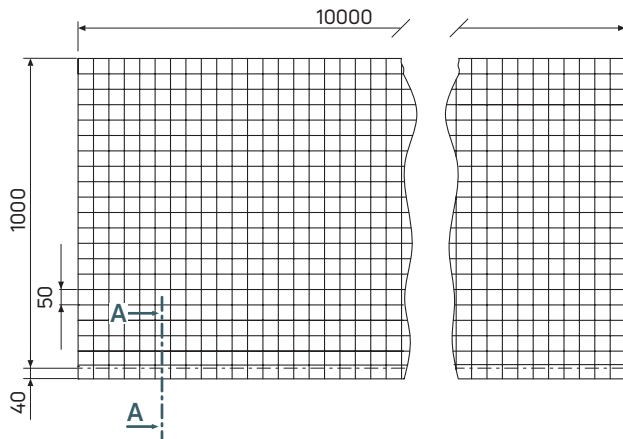
Note: The screeds are **not** provided by Emmeti

Emmeti Floor - Floor system

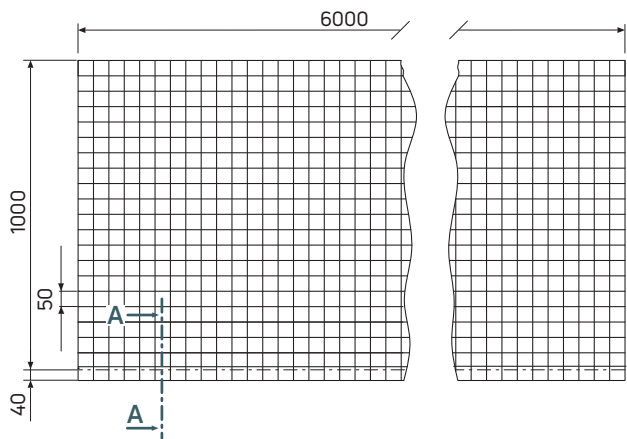
Roll Floor

Insulating panel

Model H 20/30/40/50

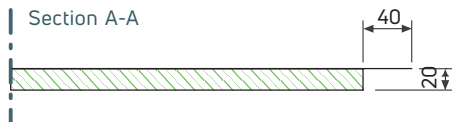


Model H 60



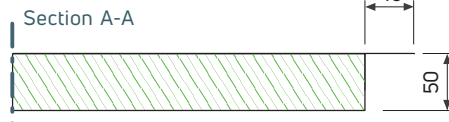
Panel 10000 x 1000 H 20

Section A-A



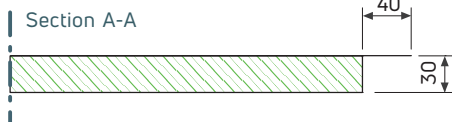
Panel 10000 x 1000 H 50

Section A-A



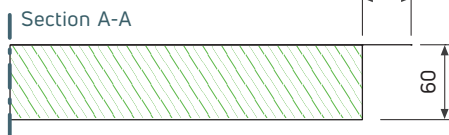
Panel 10000 x 1000 H 30

Section A-A



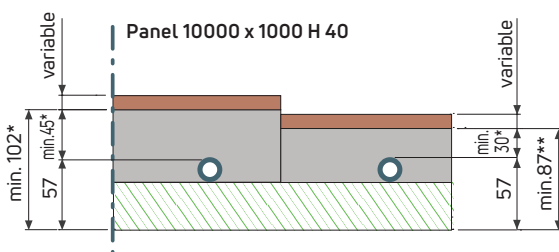
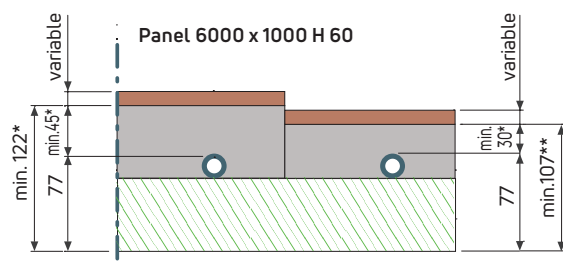
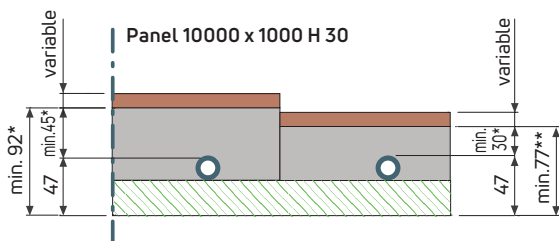
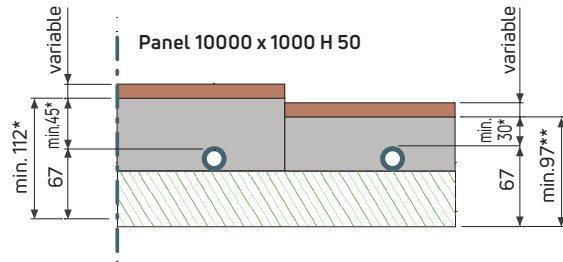
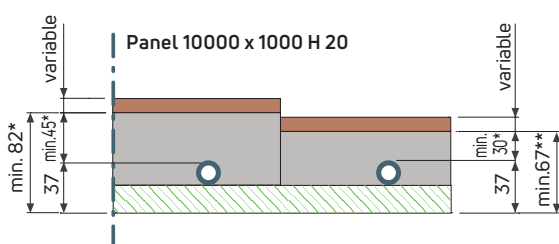
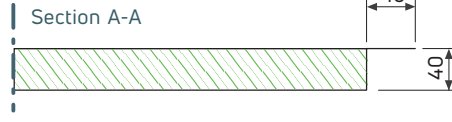
Panel 6000 x 1000 H 60

Section A-A



Panel 10000 x 1000 H 40

Section A-A



Minimum system clearances for civil buildings (mm)

* Traditional cement screed

** Self-levelling screed

If the Emmeti Floor system is combined with the Mirai + Febos 4.0 heat pump, it is advisable to increase the thickness of the screed by about 1 cm from the minimum values.

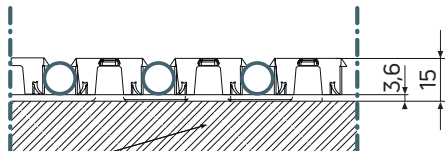
Note: The screeds are **not** provided by Emmeti

Grid Floor - Panels for radiant floor systems

Panel with self-adhesive base / with insulation for DN 12 pipe

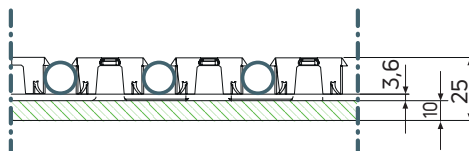
Sections

Panel 1200 x 600 H 0
with self-adhesive base

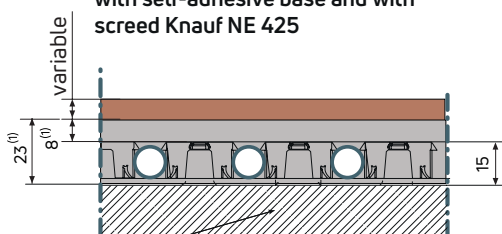


Screed or flooring
existing ceramic or
stone material ⁽³⁾

Panel 1200 x 600 H 10
with insulating panel

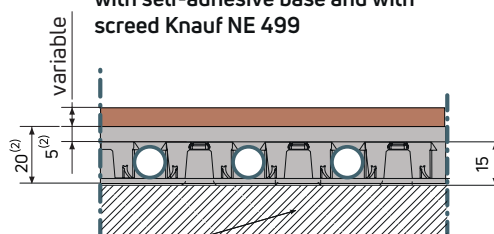


Panel 1200 x 600 H 0
with self-adhesive base and with
screed Knauf NE 425



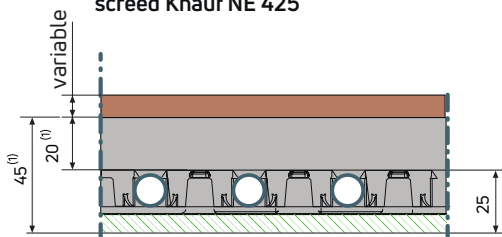
Screed or flooring
existing ceramic or
stone material ⁽³⁾

Pannello 1200 x 600 H 0
with self-adhesive base and with
screed Knauf NE 499

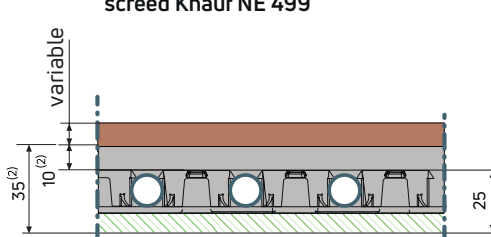


Screed or flooring
existing ceramic or
stone material ⁽³⁾

Panel 1200 x 600 H 10
with insulating panel and with
screed Knauf NE 425



Panel 1200 x 600 H 10
with insulating panel and with
screed Knauf NE 499



- (1) Knauf Autolivellina NE 425 low thickness fluid screed
- (2) Knauf Superlivellina NE 499 low thickness fluid screed
- (3) Existing screed or flooring in ceramic or stone material, the surfaces of which must be treated in accordance with the leveling supplier's instructions

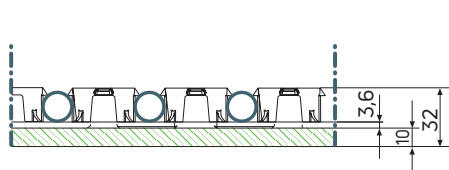
The effective thickness of the screed and the method of making it are to be defined with the manufacturer / supplier of the same according to his specifications, according to the installation conditions (size and type of laying surface, type of floor, etc.) and the type of chosen screed.

Grid Floor - Panels for radiant floor systems

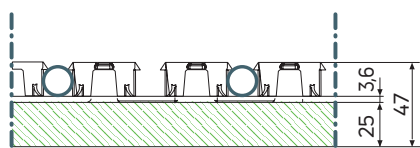
Insulating panel per tubo DN 16-17

Sections

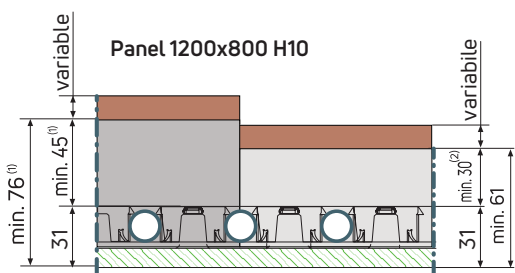
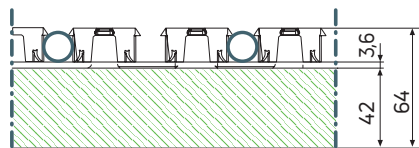
Panel 1200 x 800 H 10



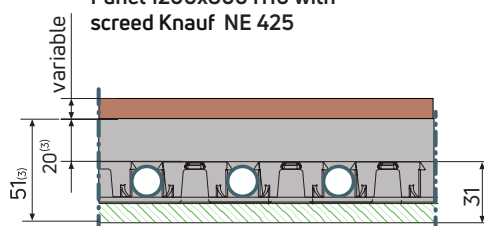
Panel 1200 x 800 H 25



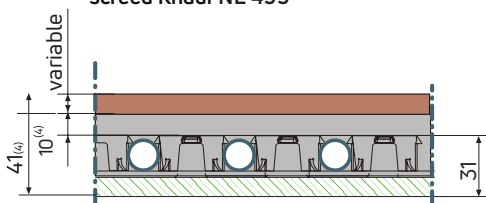
Panel 1200 x 800 H 42



Panel 1200x800 H10 with screed Knauf NE 425



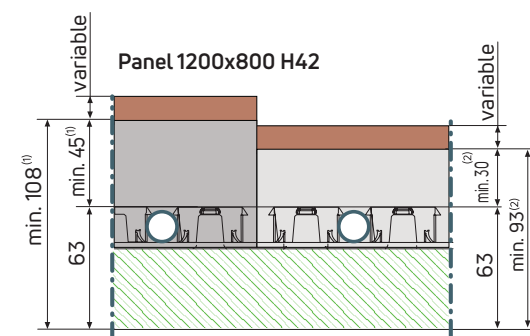
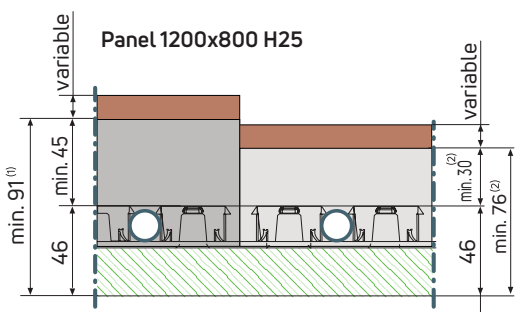
Panel 1200x800 H10 with screed Knauf NE 499



Minimum overall dimensions of the system for civil buildings (mm)

- (1) Traditional cement screed
- (2) Self-leveling screed
- (3) Knauf Autolivellina NE 425 low thickness fluid screed
- (4) Knauf Supertivellina NE 499 low thickness fluid screed

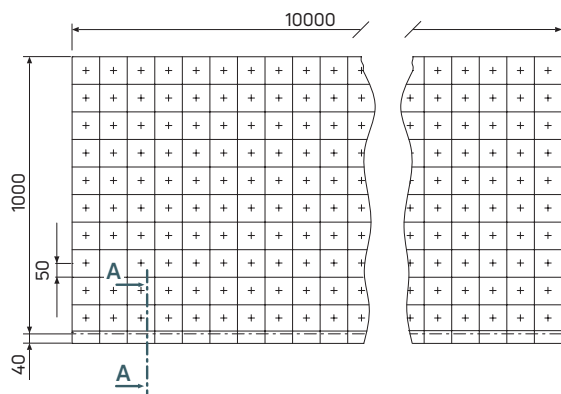
The effective thickness of the screed and the method of making it are to be defined with the manufacturer / supplier of the same according to his specifications, according to the installation conditions (size and type of laying surface, type of floor, etc.) and the type of chosen screed.



Emmeti Floor - Floor system

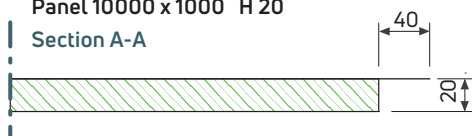
Klettjet

Insulating panel Klettjet EPS-150 Model H 20/30/41



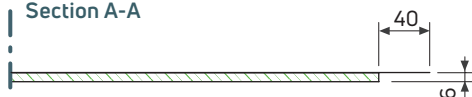
Panel 10000 x 1000 H 20

Section A-A

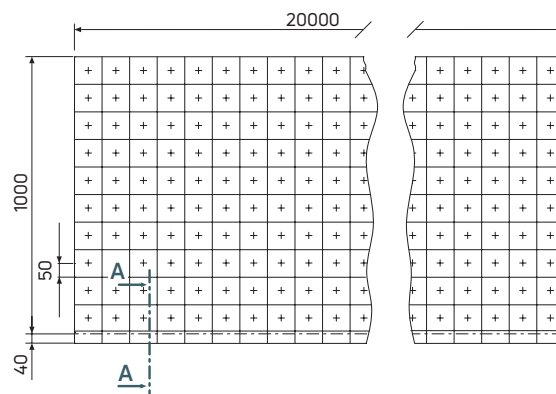


Panel 20000 x 1000 H 6

Section A-A

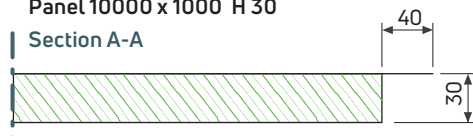


Insulating panel PE Klettjet R Model H 6



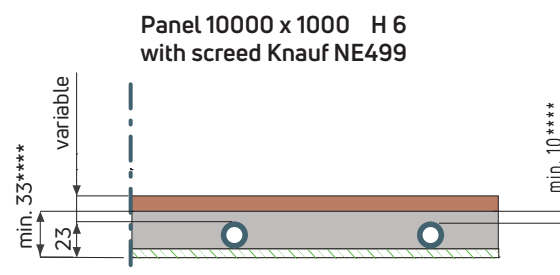
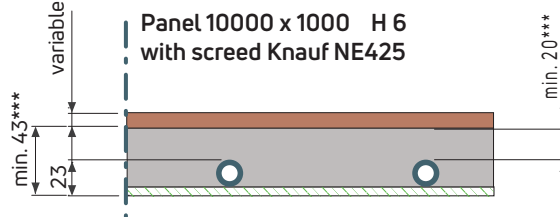
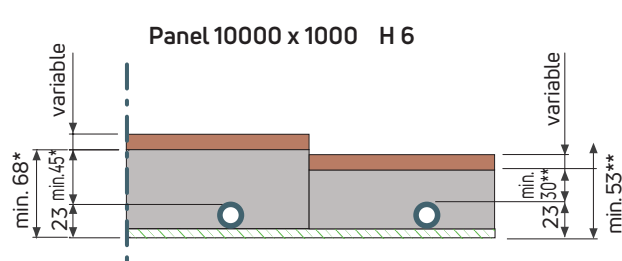
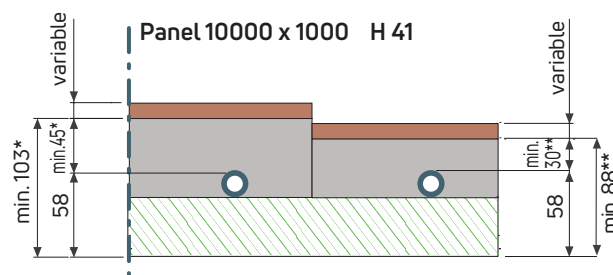
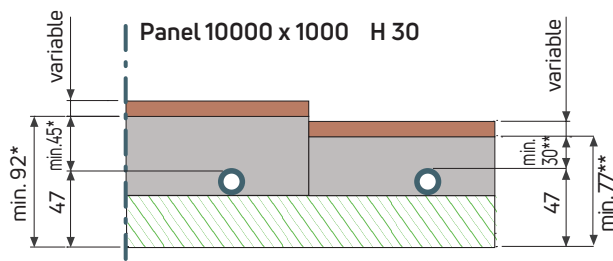
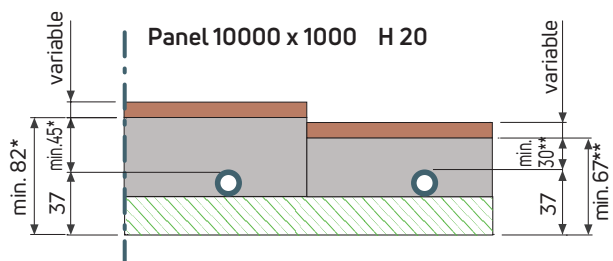
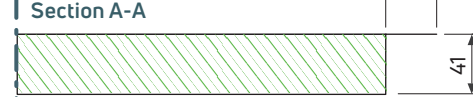
Panel 10000 x 1000 H 30

Section A-A



Panel 10000 x 1000 H 41

Section A-A



Minimum system clearances for civil buildings (mm)

- (1) Traditional cement screed*
- (2) Self-levelling screed*
- (3) Fluid screed with low thickness Knauf Self-levelling NE 425
- (4) Fluid screed with low thickness Knauf Super-levelling NE 499

The effective thickness of the screed and the mode of construction of the same are to be defined with the manufacturer / supplier of the

same according to its specifications, depending on the conditions of installation (size and type of installation surface, type floor, etc.) and of the type of slab chosen.

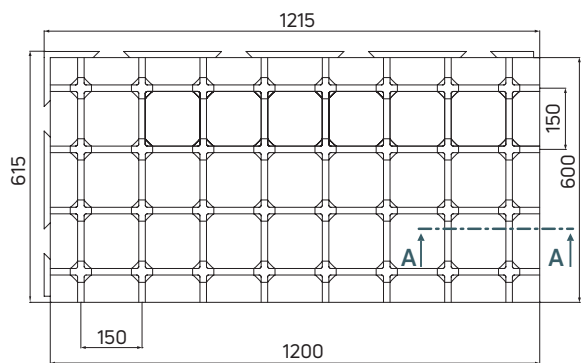
* If the Emmeti Floor system is combined with the Mirai SMI + Febos 4.0 heat pump, it is advisable to increase the thickness of the screed by about 1 cm from the minimum values.

Note: The screeds are **not** provided by Emmeti

Emmeti Floor - Floor system

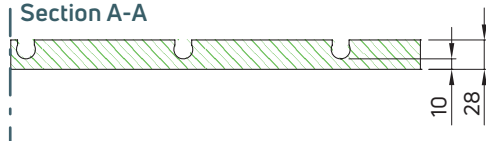
Dry Alu Floor

Insulating panel H = 10

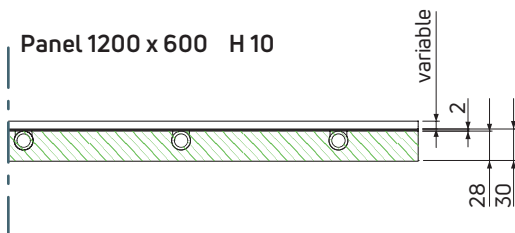


Panel 1200 x 600 H 10

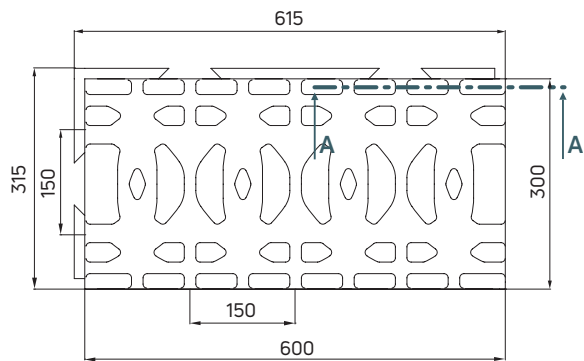
Section A-A



Panel 1200 x 600 H 10

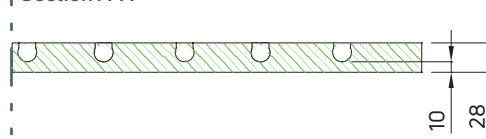


Head insulating panel H = 10

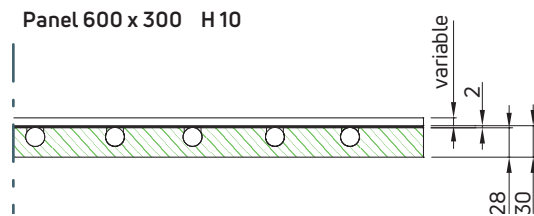


Panel 600 x 300 H 10

Section A-A

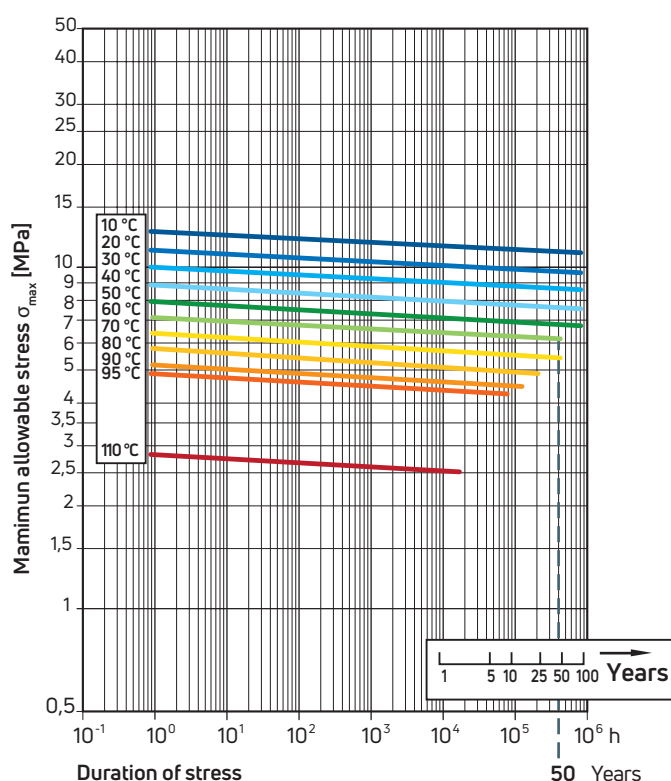


Panel 600 x 300 H 10



Emmeti Floor - Floor system

PE-Xc Penta pipe regression curves



5-layers PE-Xa pipe regression curves

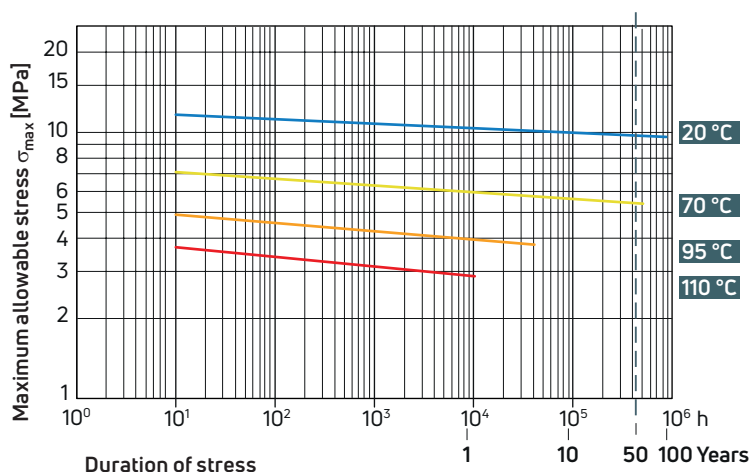


Diagram reading

The maximum allowable stress (σ_{max}) for a duration of 50 years at a certain temperature is identified by intersecting the line (vertical) relating to 50 years with the line relating to the temperature:

$$p_{max} [bar] = \frac{20 \times \sigma_{max} \times S_p}{D - S_p}$$

where:

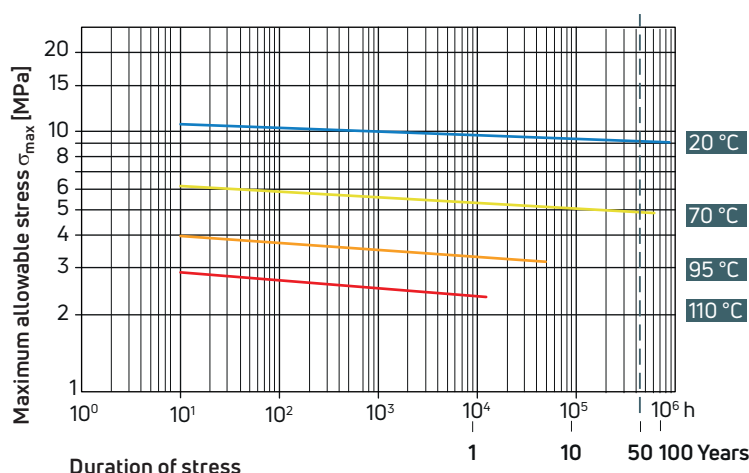
σ_{max} = maximum allowable stress [MPa]

S_p = thickness of pipe [mm]

D = external $\varnothing$ of pipe [mm]

Note the operating pressure (P_{es}), the safety coefficient will be equal to $K_s = P_{max} / P_{es}$

5-layers PE-RT pipe regression curves



Example of reading Pipe regression curves PE-Xa 5 layers and PE-RT

The maximum allowable stress (σ_{max}) for a duration of 50 years at a certain temperature is identified by intersecting the line (vertical) relating to 50 years with the line relating to the temperature:

$$P_{max} [bar] = \frac{20 \times \sigma_{max} \times S_p}{D - S_p}$$

where:

σ_{max} = maximum allowable stress [MPa]

S_p = thickness of pipe [mm]

D = external $\varnothing$ of pipe [mm]

Note the operating pressure (P_{es}), the safety coefficient will be equal to $K_s = P_{max} / P_{es}$

Classification of conditions of use for PE-Xc Penta (UNI EN ISO 21003-1), PE-Xa and PE-Xc (UNI EN ISO 15875-1) and PE-RT (UNI EN ISO 22391-1) pipes

Application class	Design Temperature T_D (°C)	Duration ^b at T_D (years)	T_{max} (°C)	Duration at T_{max} (years)	T_{mal} (°C)	Duration a T_{mal} (hours)	Field of use
1 ^a	60	49	80	1	95	100	Hot water (60 °C)
2 ^a	70	49	80	1	95	100	Hot water (70 °C)
4 ^b	20 + 40 + 60	2,5 20 25	70	2,5	100	100	Underfloor heating and low temperature radiators
5 ^b	20 + 60 + 80	14 25 10	90	1	100	100	High temperature radiators

Note:

T_D design Temperature

T_{max} maximum design temperature for short periods

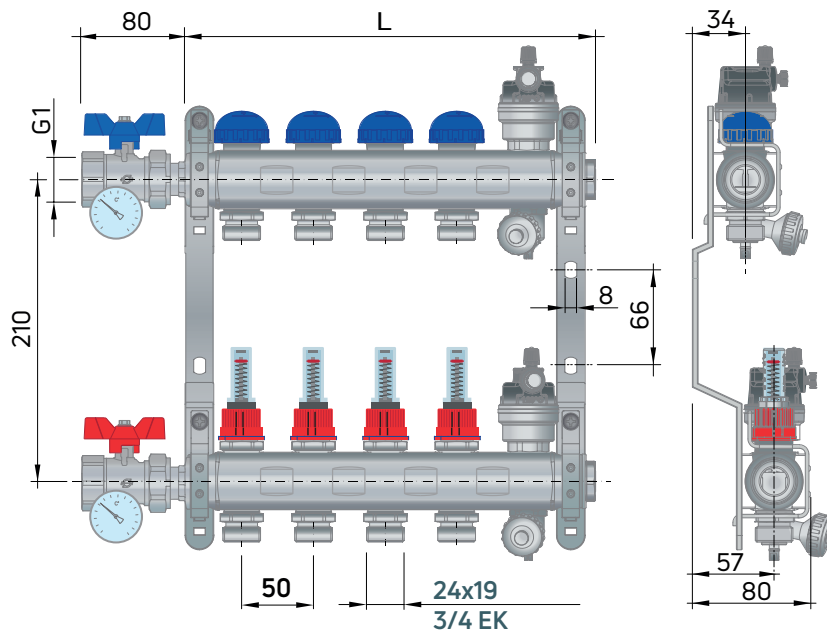
T_{mal} malfunction temperature

a) A Country may select either class 1 or class 2 in conformity with its national regulations.

b): Where more than one design temperature for time and associated temperature appears for any class, they should be aggregated. "Plus cumulative" in the table implies a temperature profile of the mentioned temperature over time (e. g. the design temperature profile for 50 years for class 5 is 20 °C for 14 years followed by 60 °C for 25 years, 80 °C for 10 years, 90 °C for 1 year and 100 °C for 100 h).

Topway S - Bars manifold in stainless steel

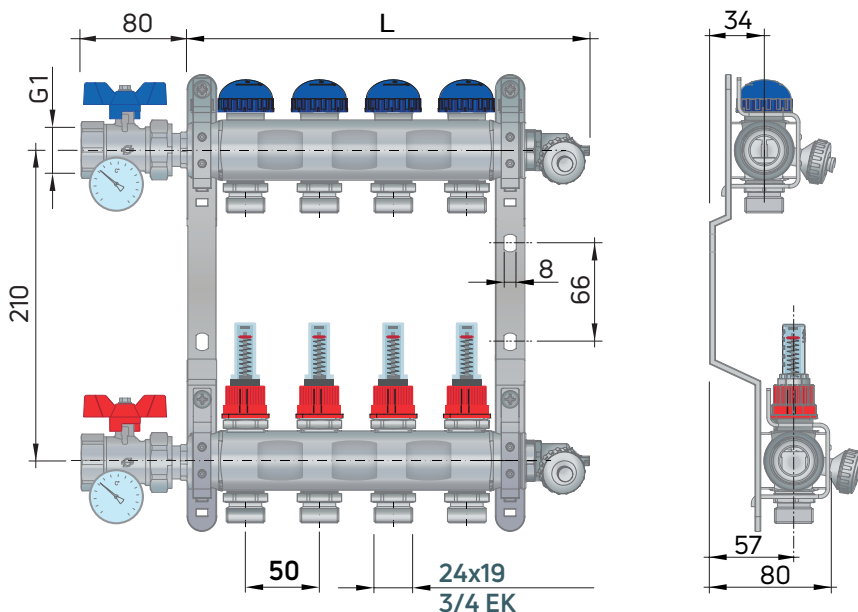
Topway S distribution manifold in stainless steel, with lockshields with flow meters included



Nr. ways	2 ways	3 ways	4 ways	5 ways	6 ways	7 ways	8 ways	9 ways	10 ways	11 ways	12 ways
L [mm]	185	235	285	355	385	435	485	535	585	635	685

Topway S Compact - Compact bars manifold in stainless steel

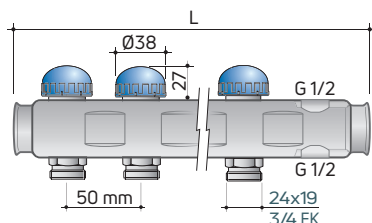
Topway S Compact with lockshields with flow meters included



Nr. ways	2 ways	3 ways	4 ways	5 ways	6 ways	7 ways	8 ways	9 ways	10 ways	11 ways	12 ways
L [mm]	174	224	274	324	374	424	474	524	574	624	674

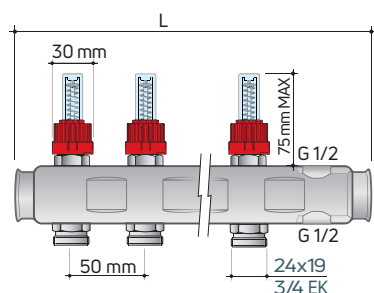
Topway S and Topway S Compact - Stainless steel manifolds, single bars

Topway S return manifold nickel-plated with valves



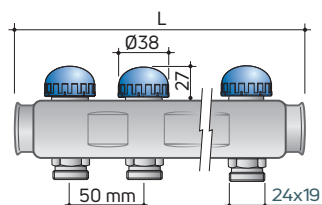
Model		2 ways	3 ways	4 ways	5 ways	6 ways	7 ways	8 ways	9 ways	10 ways	11 ways	12 ways
1"	L [mm]	175	225	275	325	375	425	475	525	575	625	675

Topway S flow manifold nickel-plated, with flow meters



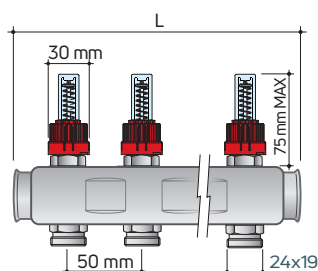
Model		2 ways	3 ways	4 ways	5 ways	6 ways	7 ways	8 ways	9 ways	10 ways	11 ways	12 ways
1"	L [mm]	175	225	275	325	375	425	475	525	575	625	675

Topway S Compact return manifold nickel-plated, with valves, without additional way



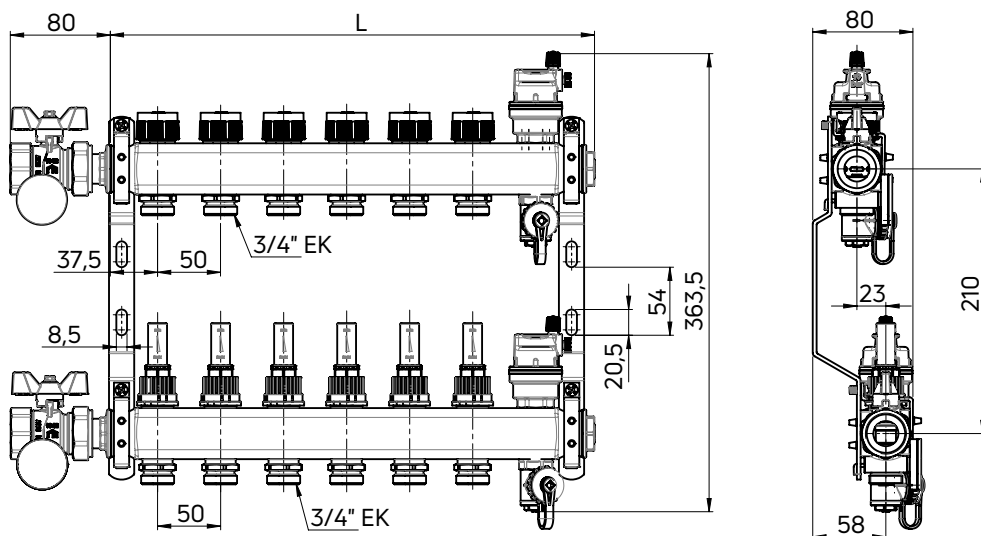
Model		2 ways	3 ways	4 ways	5 ways	6 ways	7 ways	8 ways	9 ways	10 ways	11 ways	12 ways
1"	L [mm]	125	175	225	275	325	375	425	475	525	575	625

Topway S Compact flow manifold nickel-plated, with flow meters, without additional way



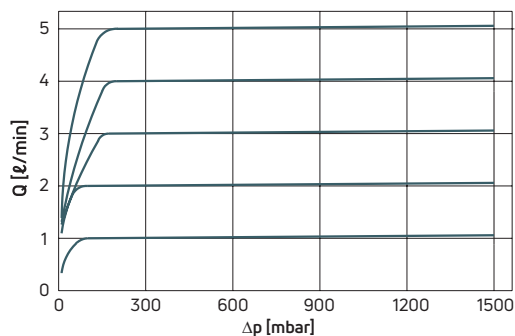
Model		2 ways	3 ways	4 ways	5 ways	6 ways	7 ways	8 ways	9 ways	10 ways	11 ways	12 ways
1"	L [mm]	125	175	225	275	325	375	425	475	525	575	625

Topway S-D - Stainless steel manifold

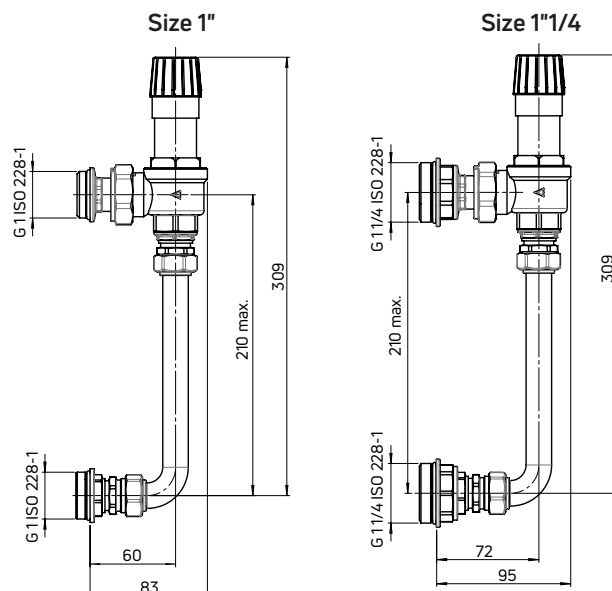
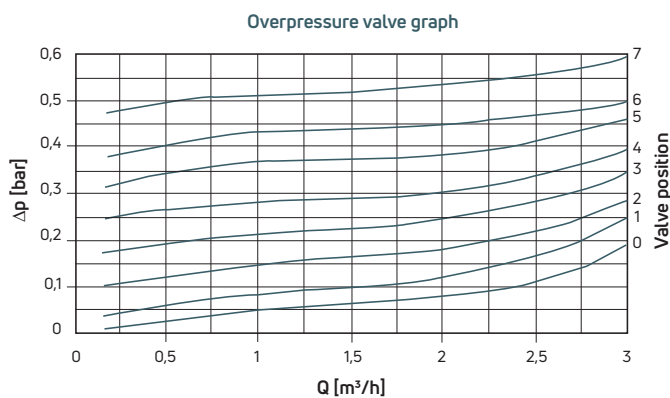


Model	2 ways	3 ways	4 ways	5 ways	6 ways	7 ways	8 ways	9 ways	10 ways	11 ways	12 ways
1" L [mm]	184	234	284	334	384	343	484	534	584	634	684

Dynamic valve diagram

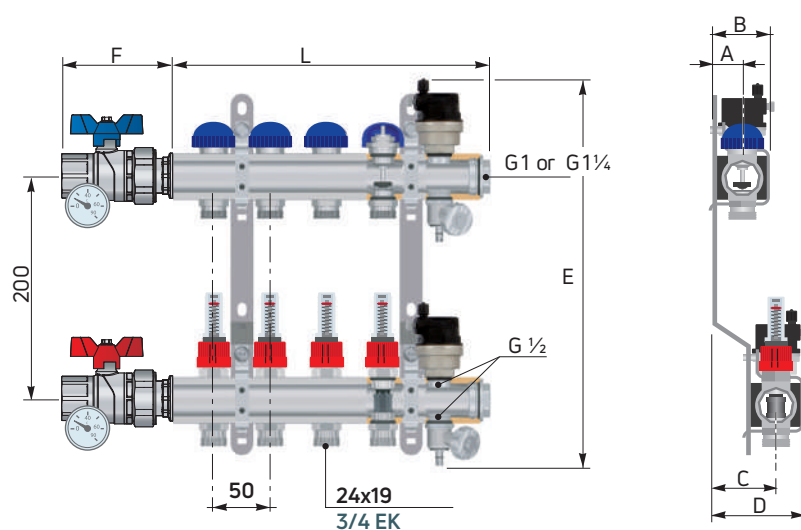


Terminal kit with by-pass



Topway - Brass manifold

Pre-assembled nickel-plated Topway manifold with lockshields with built-in flow meters

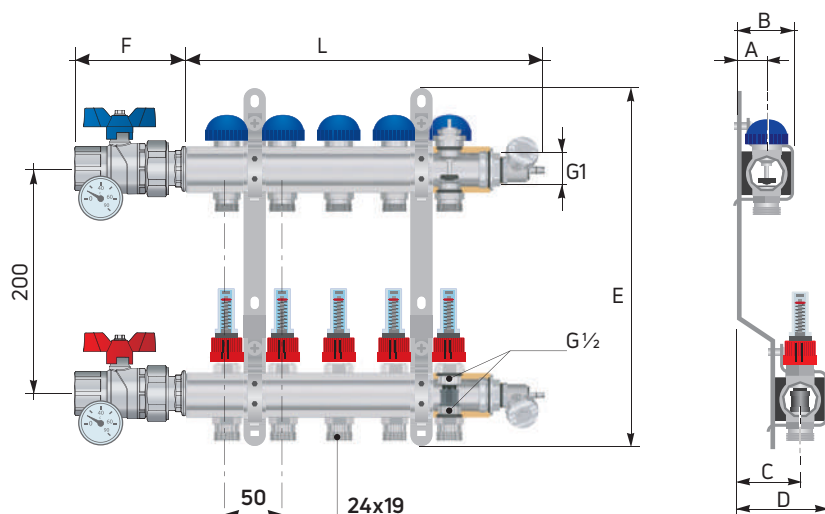


		1"	1 1/4"
A	[mm]	26,5	30,5
B	[mm]	51	58,5
C	[mm]	56,5	60,5
D	[mm]	81	89,5
E	[mm]	361,5	371,5
F	[mm]	97	135

Model		2 ways	3 ways	4 ways	5 ways	6 ways	7 ways	8 ways	9 ways	10 ways	11 ways	12 ways
1"	L [mm]	174	224	274	324	374	424	474	524	574	624	674
1 1/4"	L [mm]	-	-	282	332	382	432	482	532	582	632	682

Topway Compact - Nickel-plated brass compact distribution manifold

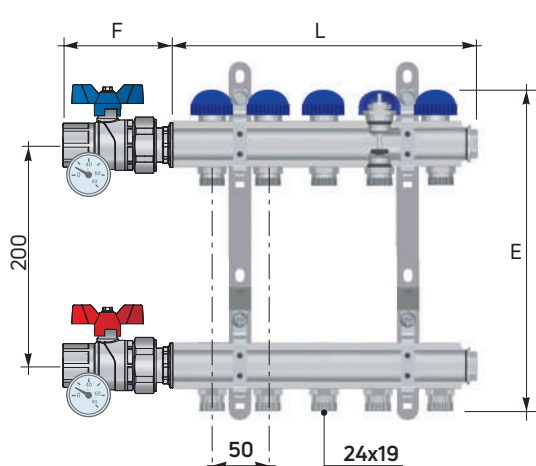
Nickel plated distribution manifold with drain bibcocks



		1"
A	[mm]	26,5
B	[mm]	51
C	[mm]	56,5
D	[mm]	81
E	[mm]	323
F	[mm]	97

Model		2 ways	3 ways	4 ways	5 ways	6 ways	7 ways	8 ways	9 ways	10 ways	11 ways	12 ways
1"	L mm	165,5	215,5	265,5	315,5	365,5	415,5	465,5	515,5	565,5	615,5	665,5

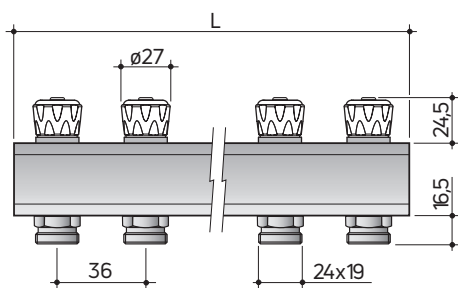
Topway R - Brass manifold for radiators



		1"	1 1/4"
A	[mm]	26,5	30,5
B	[mm]	51	58,5
C	[mm]	56,5	60,5
D	[mm]	81	89,5
E	[mm]	323	364
F	[mm]	97	135

Model		2 ways	3 ways	4 ways	5 ways	6 ways	7 ways	8 ways	9 ways	10 ways	11 ways	12 ways
1"	L [mm]	124	174	224	274	324	374	424	474	524	574	624
1 1/4"	L [mm]	-	-	232	282	332	382	432	482	532	582	632

Topway M - Distribution manifold with taps

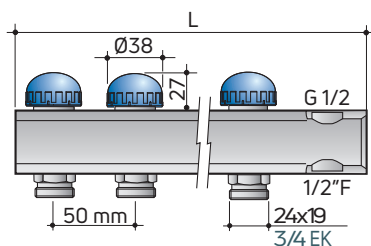


Model		4 ways	5 ways	6 ways
3/4"	L [mm]	157	193	229

Note: takeoff 36 mm

Topway - Brass manifolds, single bars

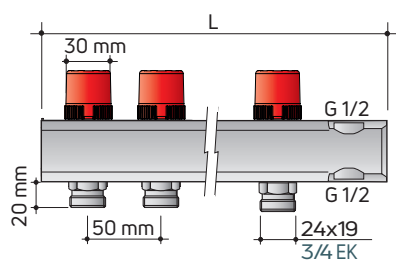
Topway return manifold nickel plated, with valves



Model	2 ways	3 ways	4 ways	5 ways	6 ways	7 ways	8 ways	9 ways	10 ways	11 ways	12 ways
1" L [mm]	164	214	264	314	364	414	464	514	564	614	664
1"1/4 L [mm]	170	220	270	320	370	420	470	520	570	620	670

Note: takeoff 50 mm

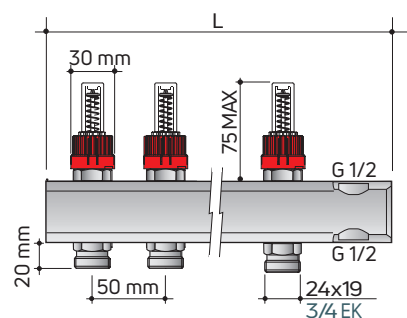
Topway nickel-plated flow manifold, with lockshields



Model	2 ways	3 ways	4 ways	5 ways	6 ways	7 ways	8 ways	9 ways	10 ways	11 ways	12 ways
1" L [mm]	164	214	264	314	364	414	464	514	564	614	664
1"1/4 L [mm]	170	220	270	320	370	420	470	520	570	620	670

Note: takeoff 50 mm

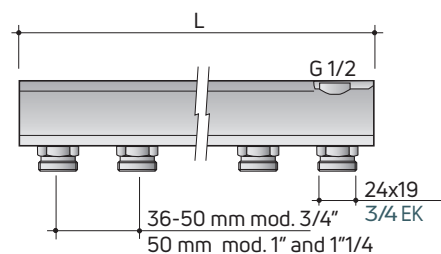
Topway nickel-plated flow manifold, with flow meters



Model	2 ways	3 ways	4 ways	5 ways	6 ways	7 ways	8 ways	9 ways	10 ways	11 ways	12 ways
1" L [mm]	164	214	264	314	364	414	464	514	564	614	664
1"1/4 L [mm]	170	220	270	320	370	420	470	520	570	620	670

Note: takeoff 50 mm

Topway nickel-plated distribution manifold, with takeoffs



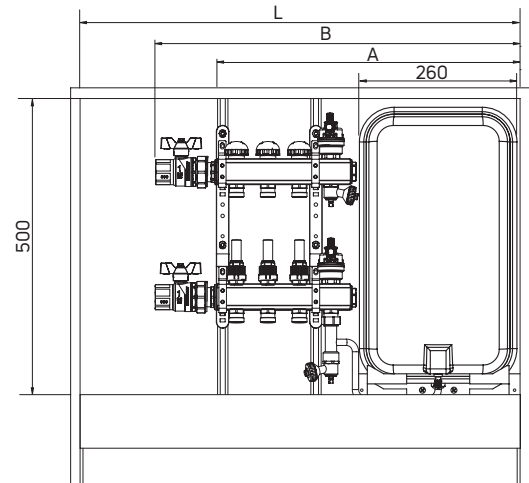
Model	2 ways	3 ways	4 ways	5 ways	6 ways	7 ways	8 ways	9 ways	10 ways	11 ways	12 ways
3/4" L [mm]	85	121	157	193	229	265	301	337	373	409	445
3/4" L [mm]	103	153	203	253	303	353	403	453	503	553	603
1" L [mm]	114	164	214	264	314	364	414	464	514	564	614
1"1/4 L [mm]	-	-	220	270	320	370	420	470	520	570	620

Note: takeoff 50 mm

Topway S / Topway - Distribution manifolds

Kit expansion vessel for connection to distribution manifolds Topway in Metalbox Plus cabinet

Distribution module in metal cabinet



No. of ways recommended of Topway manifolds 1":

- with expansion tank 8 liters in Metalbox Plus for 80 and 120 mm brick thickness
- with expansion tank 10 liters in Metalbox Plus for 120 mm brick thickness

L [mm]		N° Ways	A [mm]	B 1 [mm]	B 2 [mm]
500		2	430	-	-
600	1 2	2	430	530	540
700	1 2	2	430	530	540
700	1 2	3	480	580	590
850	1 2	4	530	630	640
850	1 2	5	580	680	690
850	1 2	6	630	730	740
1000	1 2	7	680	780	790
1000	1 2	8	730	830	840
1000	1 2	9	780	880	890
1200	1 2	10	830	930	940
1200	1 2	11	880	980	990
1200	1 2	12	930	1030	1040

1 With kit straight Progress ball valves 1"

2 With kit right-angle Progress ball valves 1"

No. of ways recommended of Topway manifolds 1 1/4":

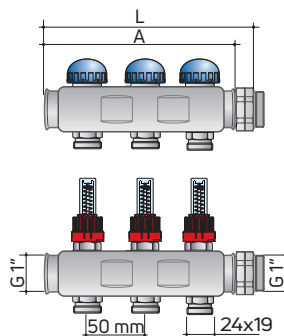
- with expansion tank 8 or 10 liters in Metalbox Plus for 120 mm brick thickness

L [mm]		N° Ways	A [mm]	B 1 [mm]	B 2 [mm]
500		2	430	-	-
600	1 2	2	430	565	550
700	1 2	2	430	565	550
850	1 2	3	480	615	600
850	1 2	4	530	665	650
850	1 2	5	580	715	700
1000	1 2	6	630	735	720
1000	1 2	7	680	815	800
1000	1 2	8	730	865	850
1200	1 2	9	780	915	900
1200	1 2	10	830	965	950
1200	1 2	11	880	1015	1000
1200	1 2	12	930	1065	1050

1 With kit straight Progress ball valves 1 1/4"

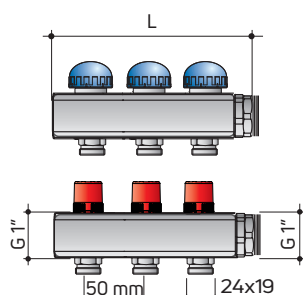
2 With kit right-angle Progress ball valves 1 1/4"

Extension kit for Topway S manifolds



Model	L [mm]	A [mm]
2 ways, 24x19	141	124
3 ways, 24x19	191	174
4 ways, 24x19	241	224

Extension kit for Topway 1" manifolds

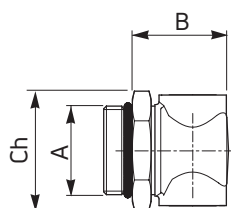


Model	L [mm]
2 ways, 24x19	130
3 ways, 24x19	180
4 ways, 24x19	230

Topway S / Topway - Collettori di distribuzione

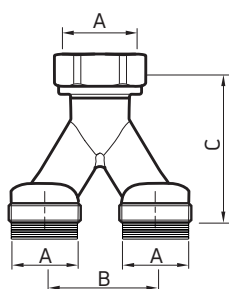
Additional way kit for Topway S and Topway manifolds

Dimension	A	B [mm]	Ch [mm]
1" for Topway S	G 1"	36	38
1" for Topway	G 1"	36	38
1 1/4" for Topway	G 1 1/4"	48	38



Splitter fitting

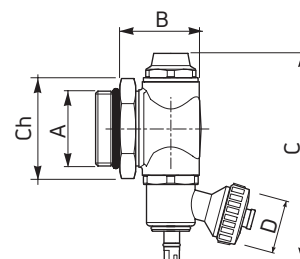
for Topway / Topway S manifolds with 24x19 or 3/4" Eurocone takeoffs



Model	A	B [mm]	C [mm]
24x19	24x19	36	58
3/4" Eurocone	3/4" Ek	36	49,5

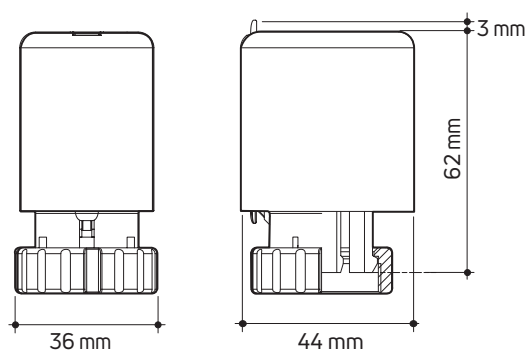
Terminal with manual vent valve and swivel bibcock

Dimension	A	B [mm]	C [mm]	D	Ch [mm]
1"	G 1	36	92	3/4"	38



Control T - Electrothermic head

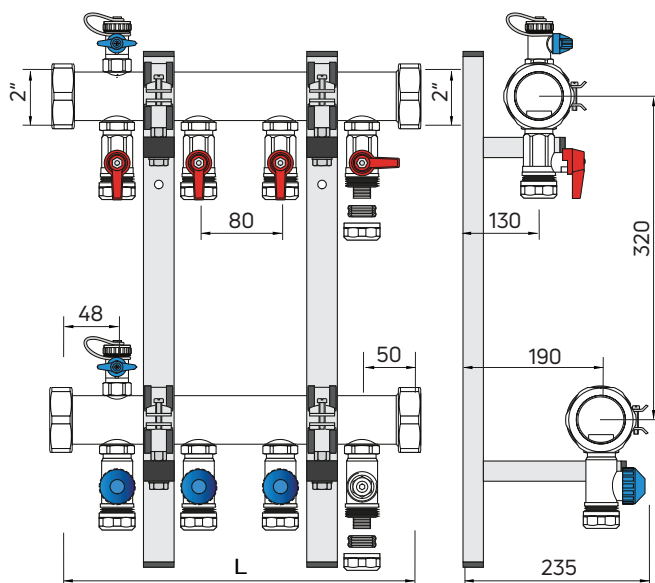
Dimensions



Emmeti Industrial Floor - Industrial Floor system

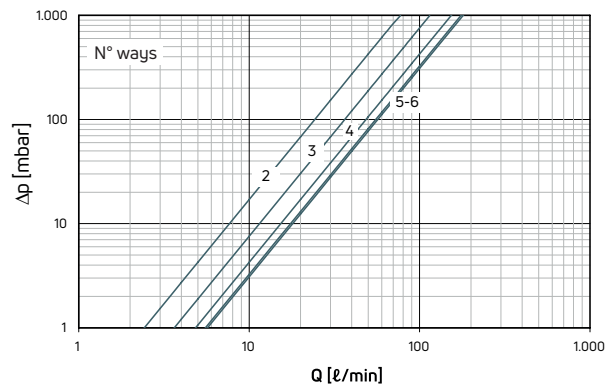
Industrial Floor distribution manifold

Dimensional and performance data

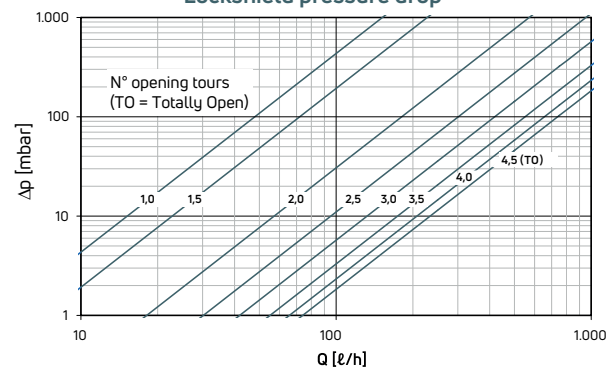


N° ways	L [mm]
3+3	258
4+4	338
5+5	418
6+6	498

Flow bar+ return bar pressure drop

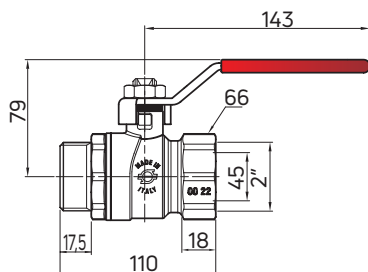


Lockshield pressure drop

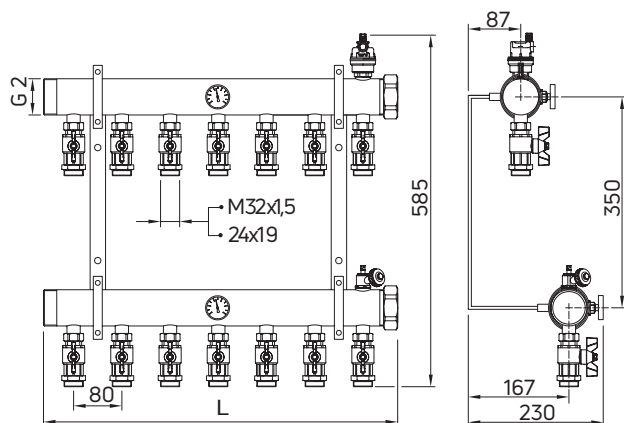


2" ball valve

Dimensional data



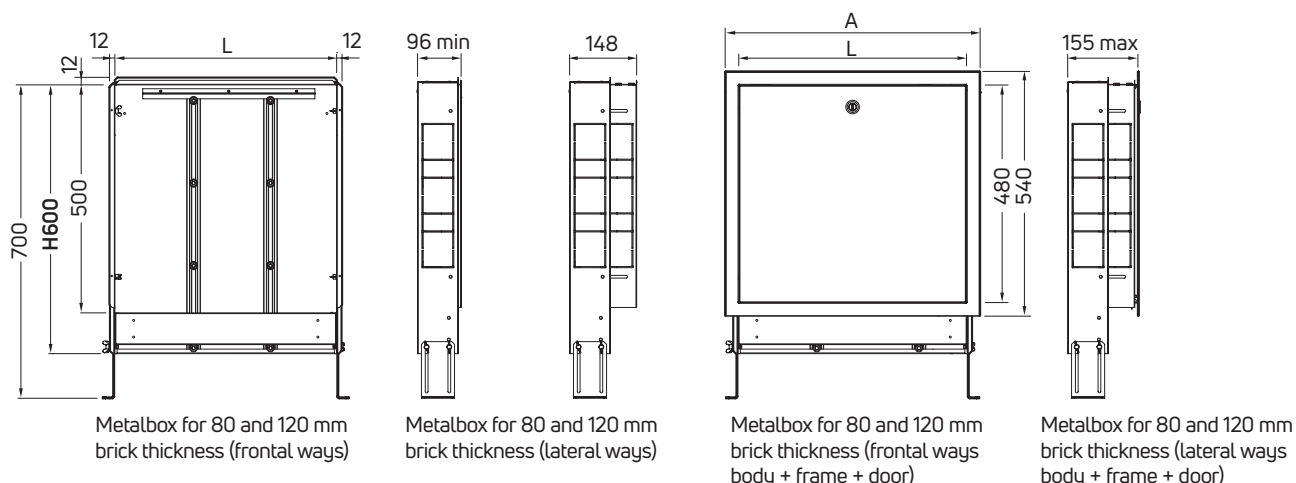
Industrial floor manifold



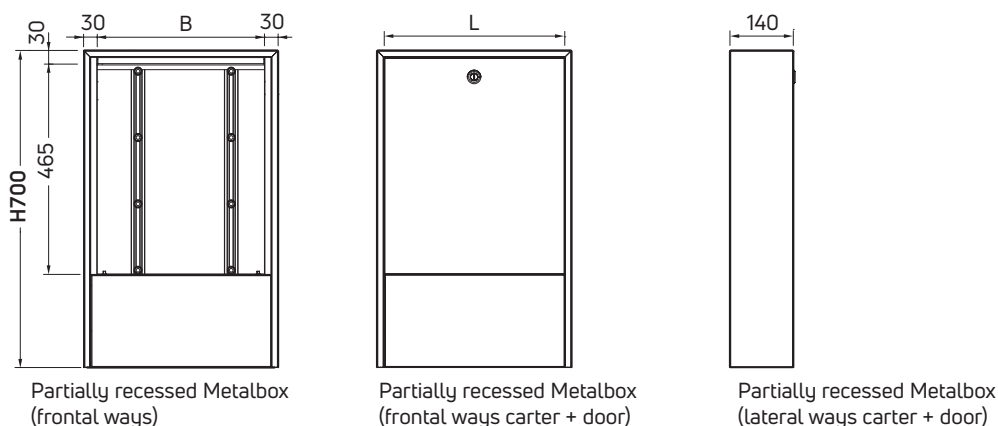
N. ways	5	6	7	8	9	10	11	12	13	14	15
L [mm]	430	510	590	670	750	830	910	990	1070	1150	1230

Metalbox Plus e Metalbox - Box for manifolds and distribution modules

Metalbox Plus: built-in cabinet for manifolds, regulation groups, under boiler kit and accounting modules (H600)



Metalbox: external manifolds cabinet (H700)



Metalbox: built-in cabinet for Modular Firstbox - Energy Combibox Floor HIU (H850)

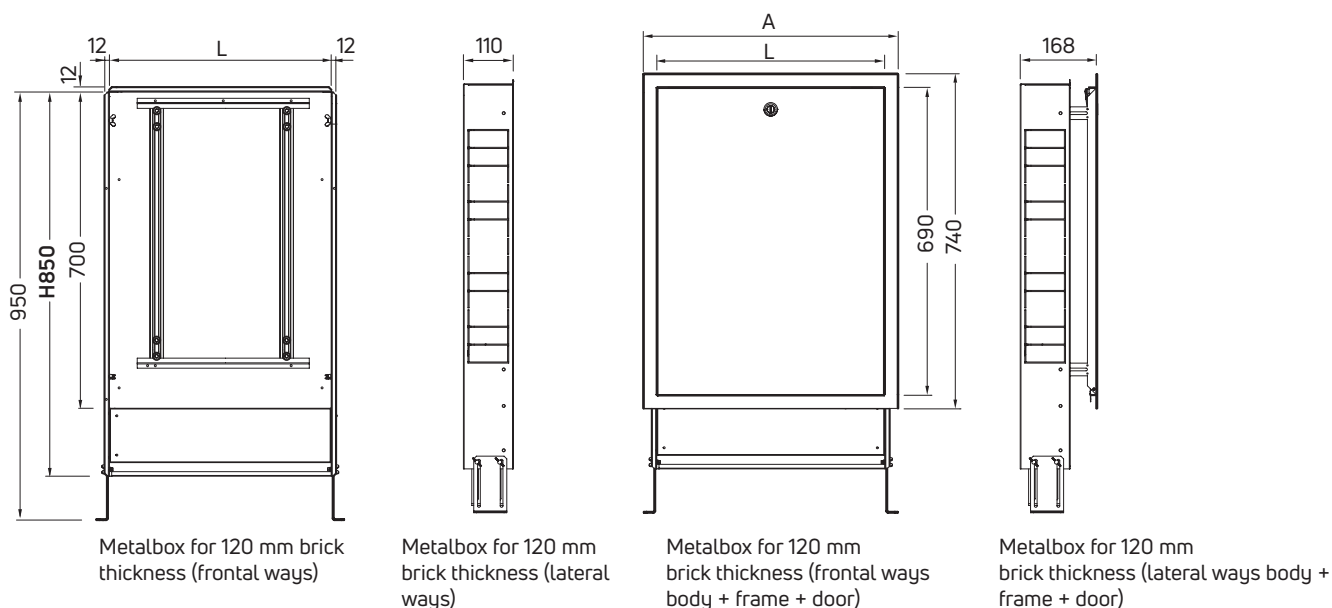


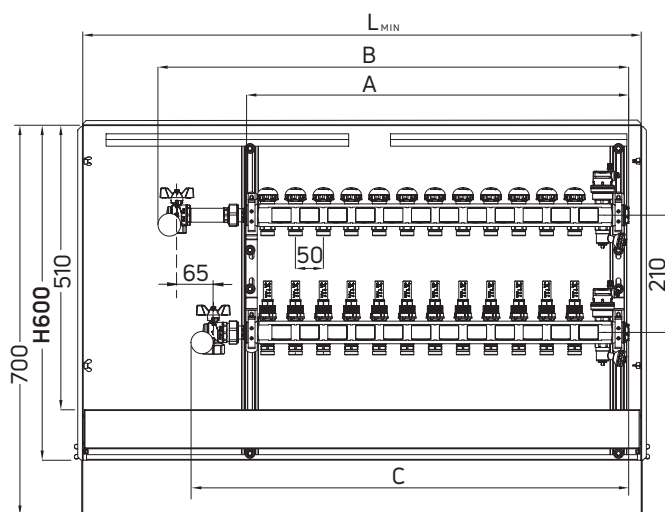
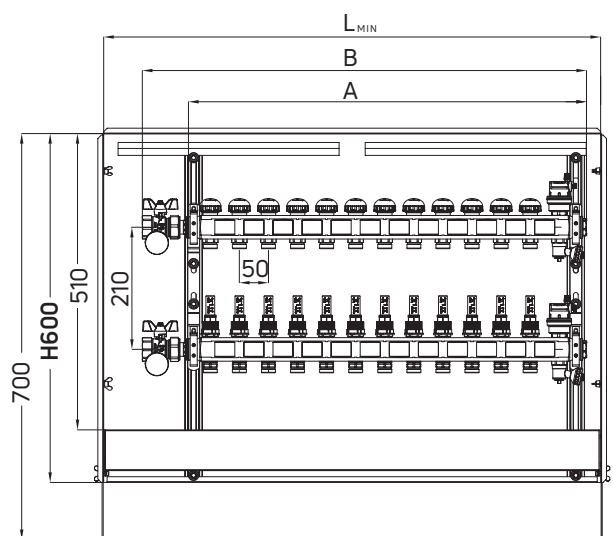
Table dimensions Metalbox Plus manifolds cabinet

Sizes [mm]	H 600/H700/H850	H 600	H 600/H700/H850	H 600/H700/H850	H 600/H700/H850	H 600/H700/H850
L	500	600	700	850	1000	1200
A	560	660	760	910	1060	1260
B	470	/	670	820	970	1170

Metalbox Plus e Metalbox - Box for manifolds and distribution modules

Topway S manifolds + accessories. Dimensions in cabinet

With Progress valves + thermometers



In combination with Topway S manifolds in metal cabinet

N. ways	A [mm]	B [mm]	L _{MIN} [mm]
2	184	264	500
3	234	314	500
4	284	364	500
5	334	414	500
6	384	464	500
7	434	514	600
8	484	564	600
9	534	614	700
10	584	664	700
11	634	714	850
12	684	764	850

Note: L_{MIN} inclusive of fittings pressing dimensions:

- with 1" straight Progress valve kit with unions;
- with 1" straight Progress valves kit with thermometers and unions.

In combination with Topway S manifolds in metal cabinet

N. ways	A [mm]	B [mm]	C [mm]	L _{MIN} [mm]
2	184	344	279	500
3	234	394	329	500
4	284	444	379	500
5	334	494	429	600
6	384	544	479	600
7	434	594	529	700
8	484	644	579	700
9	534	694	629	850
10	584	744	679	850
11	634	794	729	850
12	684	844	779	1000

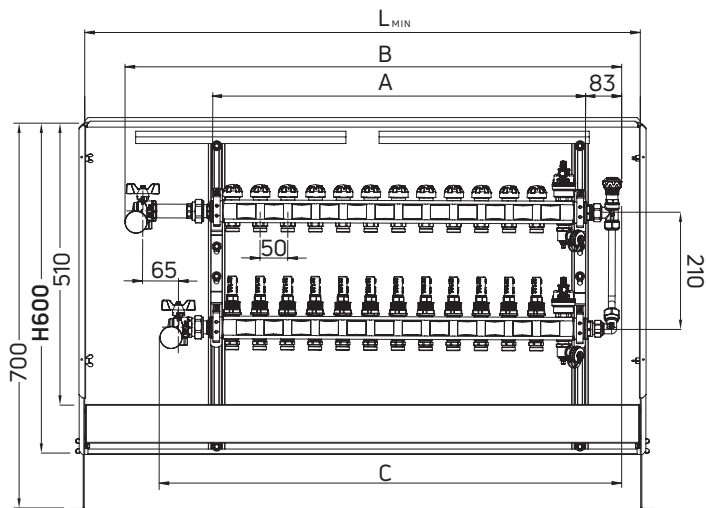
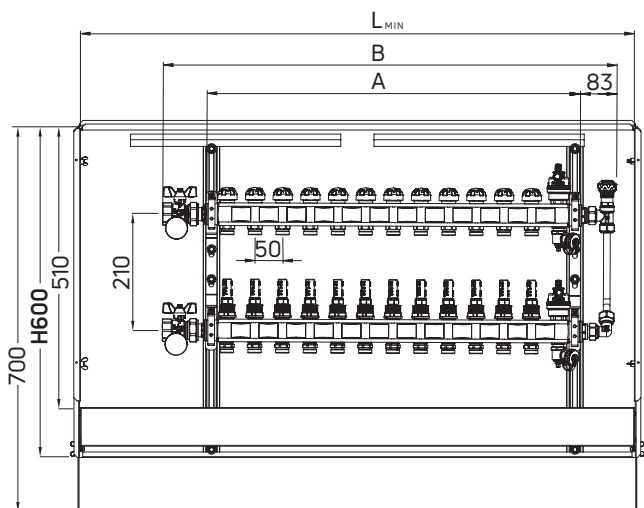
Note: L_{MIN} inclusive of fittings pressing dimensions:

- with Progress angle valve kit with unions
- with Progress angle valve kit with unions and thermometers

Metalbox Plus e Metalbox - Box for manifolds and distribution modules

Topway S manifolds + accessories. Dimensions in cabinet

With Progress valves + thermometers and by-pass terminal kit



Topway S manifold combination in metal cabinet

N. ways	A [mm]	B [mm]	L _{MIN} [mm]
2	175	337	500
3	225	387	500
4	275	437	600
5	325	487	600
6	375	537	700
7	425	587	700
8	475	637	850
9	525	687	850
10	575	737	850
11	625	787	1000
12	675	837	1000

Note: L_{MIN} inclusive of fittings pressing dimensions:

- with 1" straight Progress valve kit with unions
- with 1" straight Progress valve kit with unions and thermometers

Topway S manifold combination in metal cabinet

N. ways	A [mm]	B [mm]	C [mm]	L _{MIN} [mm]
2	174	415	350	500
3	224	465	400	600
4	274	515	450	600
5	324	565	500	700
6	374	615	550	700
7	424	665	600	850
8	474	715	650	850
9	524	765	700	850
10	574	815	750	1000
11	624	865	800	1000
12	674	915	850	1000

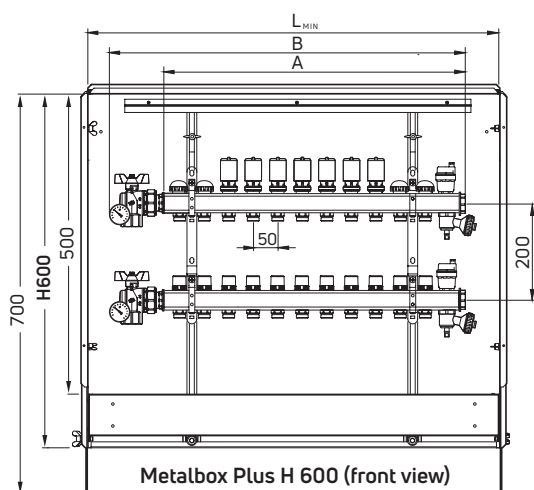
Note: L_{MIN} inclusive of fittings pressing dimensions:

- with Progress angle valve kit 1" with unions
- with Progress 1" angle valve kit with unions and thermometers

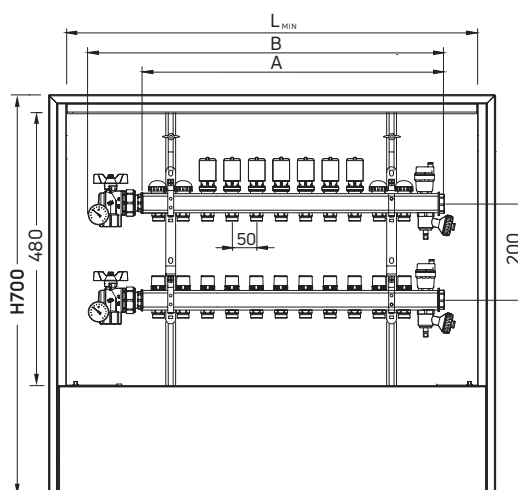
Metalbox Plus e Metalbox - Box for manifolds and distribution modules

Topway manifolds (all versions) + accessories. Dimensions in cabinet

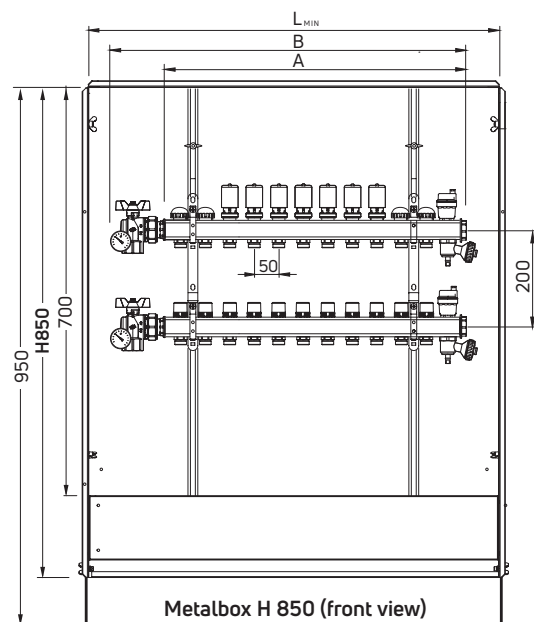
With Progress valves + thermometers



Metalbox Plus H 600 (front view)



External Metalbox H 700 (front view)



Metalbox H 850 (front view)

Combination of Topway 1" manifolds in metal cabinet

N. ways	A [mm]	B ¹ [mm]	B ² [mm]	L _{MIN} [mm]
2	172	270	280	500
3	222	320	330	500
4	272	370	380	500
5	322	420	430	500
6	372	470	480	600
7	422	520	530	600
8	472	570	580	700
9	522	620	630	700
10	572	670	680	850
11	622	720	730	850
12	672	770	780	1000

Note: L_{MIN} inclusive of fittings pressing overall dimensions

¹ With straight Progress valve kit 1" with thermometers and unions

² With angle Progress valve kit 1" with thermometers and unions

Combination of Topway 1 1/4" manifolds in metal cabinet

N. ways	A [mm]	B ¹ [mm]	B ² [mm]	L _{MIN} [mm]
2	182	316	300	500
3	232	366	350	600
4	282	416	400	600
5	332	466	450	700
6	382	516	500	700
7	432	566	550	850
8	482	616	600	850
9	532	666	650	850
10	582	716	700	1000
11	632	766	750	1000
12	682	816	800	1000

Note: L_{MIN} inclusive of fittings pressing overall dimensions

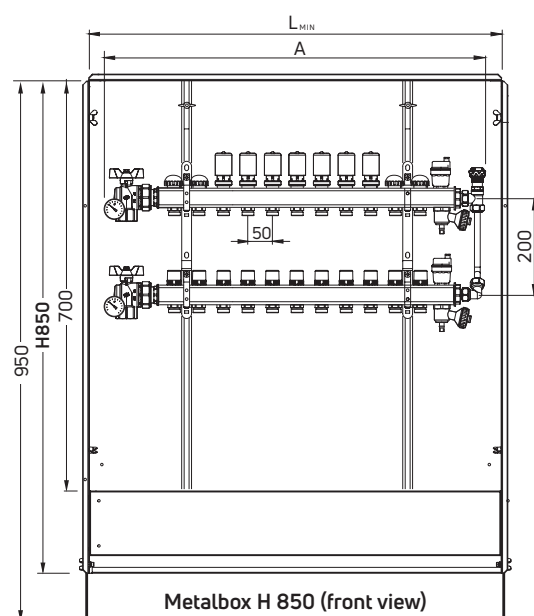
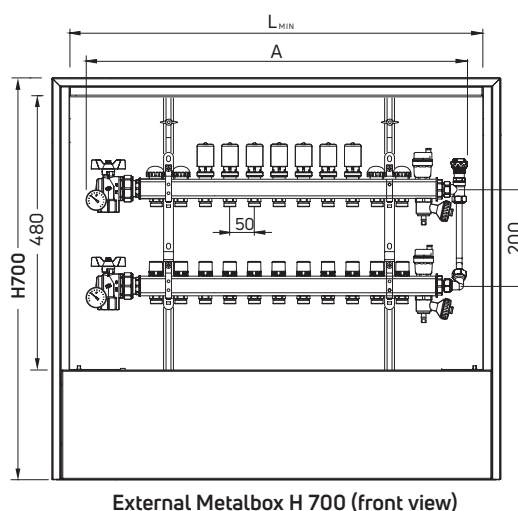
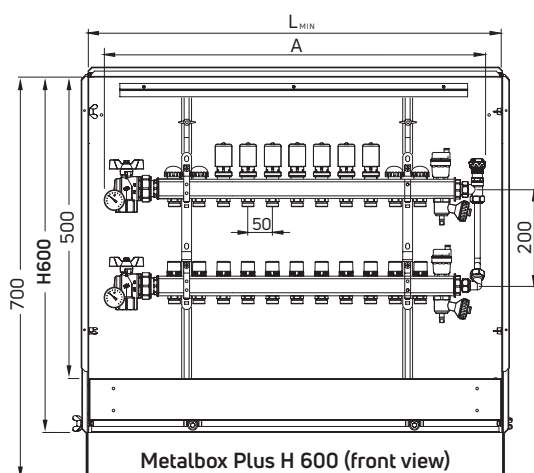
¹ With straight Progress valve kit 1 1/4" with thermometers and unions

² With angle Progress valve kit 1 1/4" with thermometers and unions

Metalbox Plus e Metalbox - Box for manifolds and distribution modules

Topway manifolds (all versions) + accessories. Dimensions in cabinet

With Progress valves + thermometers and by-pass terminal kit



Combination of Topway 1" manifolds in metal cabinet

N. ways	A ¹ [mm]	A ² [mm]	L _{MIN} ¹ [mm]	L _{MIN} ² [mm]
2	357	367	500	500
3	407	417	500	500
4	457	467	600	600
5	507	517	600	600
6	557	567	700	700
7	607	617	700	700
8	657	667	850	850
9	707	717	850	850
10	757	757	850	850
11	807	817	1000	1000
12	857	867	1000	1000

Note: L_{MIN} inclusive of fittings pressing overall dimensions

- ¹ With straight Progress valve kit 1" with thermometers and unions
- ² With angle Progress valve kit 1" with thermometers and unions

Combination of Topway 1 1/4" manifolds in metal cabinet

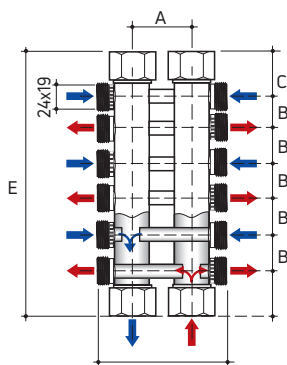
N. ways	A ¹ [mm]	A ² [mm]	L _{MIN} ¹ [mm]	L _{MIN} ² [mm]
2	415	395	600	500
3	465	445	600	600
4	515	495	700	600
5	565	545	850	700
6	615	595	850	700
7	665	645	850	850
8	715	695	850	850
9	765	745	1000	850
10	815	795	1000	1000
11	865	845	1000	1000
12	915	895	1000	1000

Note: L_{MIN} inclusive of fittings pressing overall dimensions

- ¹ With straight Progress valve kit 1 1/4" with thermometers and unions
- ² With angle Progress valve kit 1 1/4" with thermometers and unions

Mixer - Steel coplanar manifold

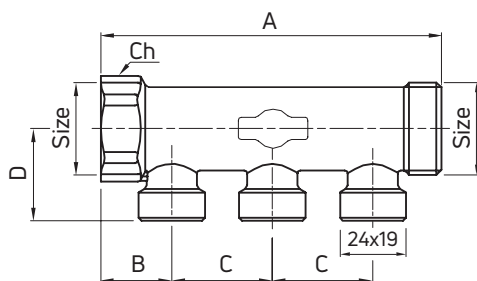
Mixer Steel coplanar manifold



Size	N. ways	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]
3/4"	4 x 4	55	36	37	125	182
3/4"	6 x 6	55	36	37	125	254
3/4"	8 x 8	55	36	37	125	326

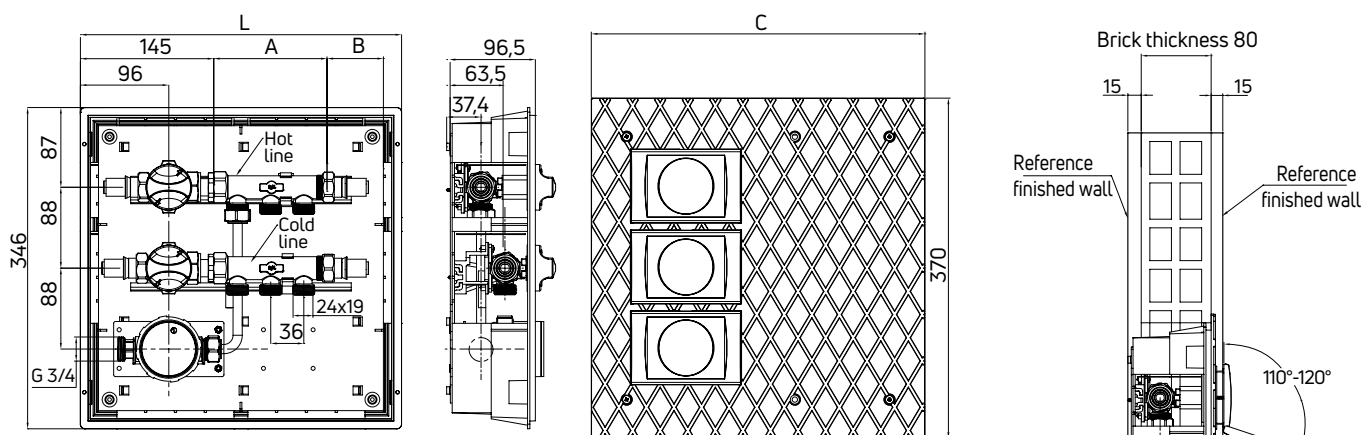
Modular - Brass manifold

Brass manifold takeoffs 36 mm



Size	N. ways	DN	A [mm]	B [mm]	C [mm]	D [mm]	CH [mm]	PN bar	9
G 3/4"	2	20	85	24,5	36	29	31	10	185
G 3/4"	3	20	121	24,5	36	29	31	10	230
G 3/4"	4	20	157	24,5	36	29	31	10	330
G 1"	2	25	86	25,5	36	33	38	10	240
G 1"	3	25	122	25,5	36	33	38	10	325
G 1"	4	25	158	25,5	36	33	38	10	410

Hydrobox - Recessed box for water



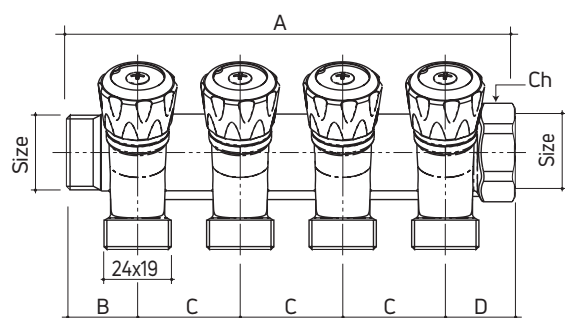
Hydrobox Basic

Recessed box for water with ball valves and retractable knobs

Box model	L [mm]	N. ways	A [mm]	B [mm]	C [mm]
310 x 310	350	2	85	100	363
		3	121	64	
		4	157	28	
460 x 310	500	2	85	252	513
		3	121	216	
		4	157	180	
		2 + 3	215	122	
		3 + 3	251	86	
		3 + 4	287	50	
		4 + 4	323	14	

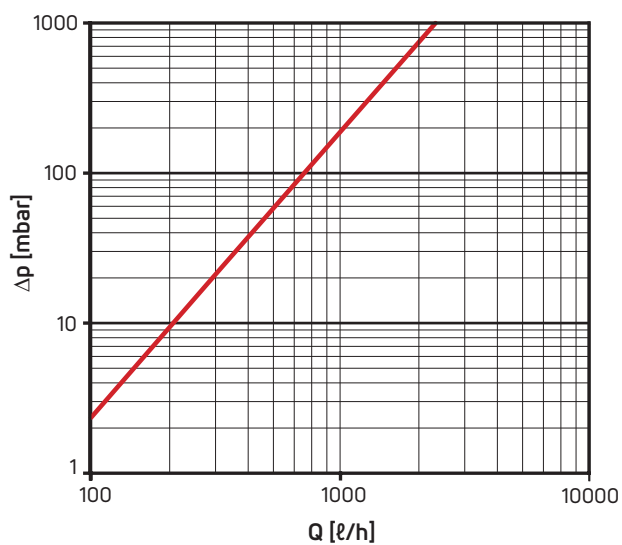
Multiplex - Brass manifold with taps

Brass manifold with isolating taps



Size	N° ways	A [mm]	B [mm]	C [mm]	D [mm]	CH [mm]
G 3/4"	2	86	25	36	24,5	31
G 3/4"	3	122	25	36	24,5	31
G 3/4"	4	158	25	36	24,5	31
G 1"	2	92	27	36	27,5	37
G 1"	3	128	27	36	27,5	37
G 1"	4	164	27	36	27,5	37

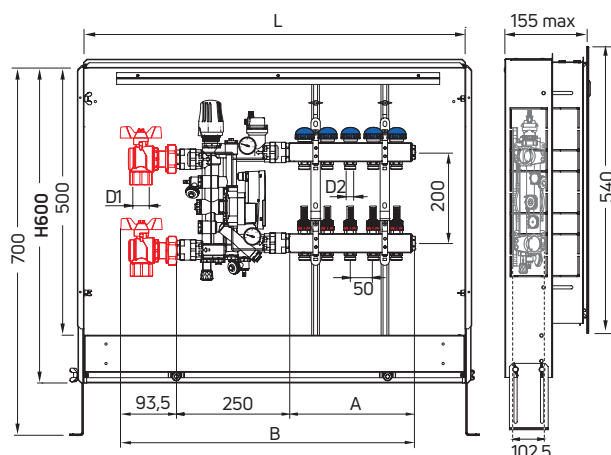
Single way pressure drop (Kv max) with fully open tap



Floor Control Unit S - Regulation group

Floor Control Unit S Low (L)

Low-temperature control and distribution unit

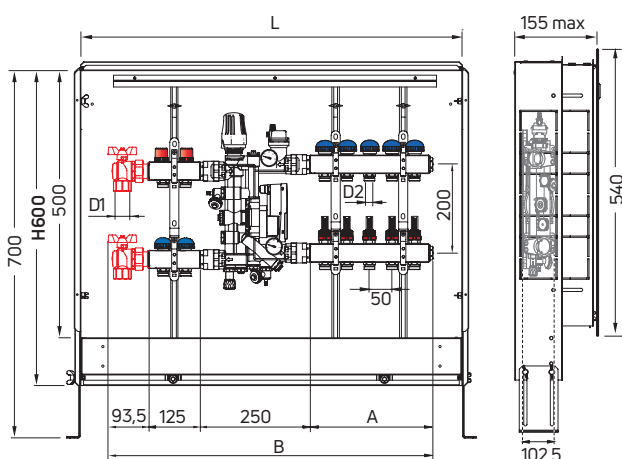


Model	N. ways HIGH temp.	N. ways LOW temp.	A [mm]	B [mm]	L [mm]	D1	D2
3L	—	3	184	528	600	Rp 1"	24x19
4L	—	4	234	578	700 (*)		
5L	—	5	284	628	850		
6L	—	6	334	678	850		
7L	—	7	384	728	850		
8L	—	8	434	778	1000		
9L	—	9	484	828	1000		
10L	—	10	534	878	1000 (*)		
11L	—	11	584	928	1200		
12L	—	12	634	978	1200		
13L	—	13	684	1028	1200 (*)		

(*) Only compatible with Progress 1" angle valve kit

Floor Control Unit S High+Low (2H + L)

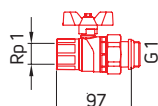
Control and distribution unit with 2-ways
high temperature + low temperature



Model	N. ways HIGH temp.	N. ways LOW temp.	A [mm]	B [mm]	L [mm]	D1	D2
2H + 3L	2	3	184	653	850	Rp 1"	24x19
2H + 4L	2	4	234	703	850		
2H + 5L	2	5	284	753	850		
2H + 6L	2	6	334	803	1000		
2H + 7L	2	7	384	853	1000 (*)		
2H + 8L	2	8	434	903	1200		
2H + 9L	2	9	484	953	1200		
2H + 10L	2	10	534	1003	1200		
2H + 11L	2	11	584	1053	1200		
2H + 12L	2	12	634	1103	1200		
2H + 13L	2	13	684	1153	1200 (*)		

(*) Only compatible with Progress 1" angle valve kit

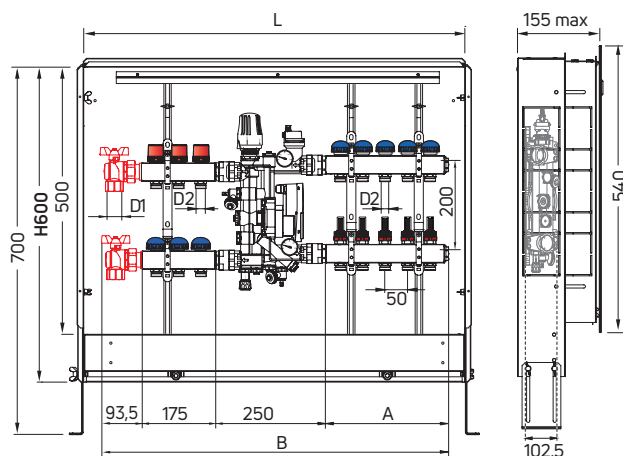
Straight Progress 1" valve kit with pipe union



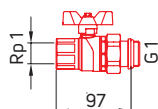
Floor Control Unit S - Regulation group

Floor Control Unit S High+Low (3H + L)

3-ways control and distribution unit
high temperature + low temperature



Straight Progress 1" valve kit with pipe union

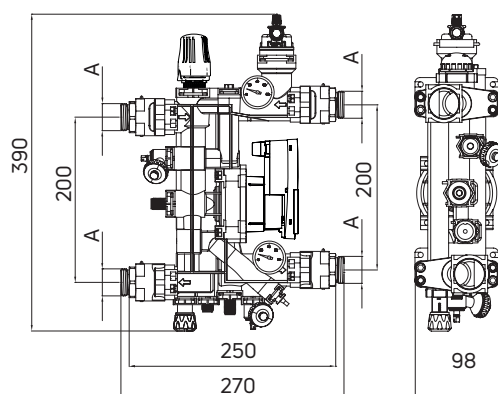


Model	N. ways HIGH temp.	N. ways LOW temp.	A [mm]	B [mm]	L [mm]	D1	D2
3H + 3L	3	3	184	703	850	Rp 1"	24x19
3H + 4L	3	4	234	753	850		
3H + 5L	3	5	284	803	1000		
3H + 6L	3	6	334	853	1000 (*)		
3H + 7L	3	7	384	903	1200		
3H + 8L	3	8	434	953	1200		
3H + 9L	3	9	484	1003	1200		
3H + 10L	3	10	534	1053	1200		
3H + 11L	3	11	584	1103	1200		
3H + 12L	3	12	634	1153	1200 (*)		

(*) Only compatible with Progress 1" angle valve kit

Mixing Unit M3V

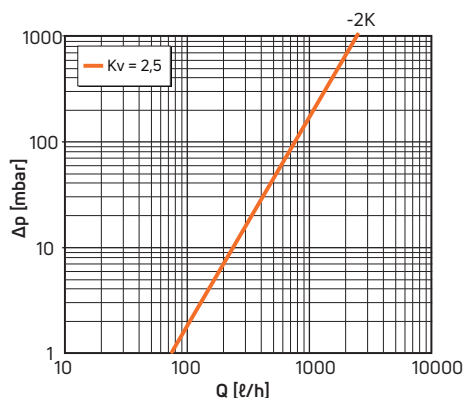
Mixing unit for low-temperature systems



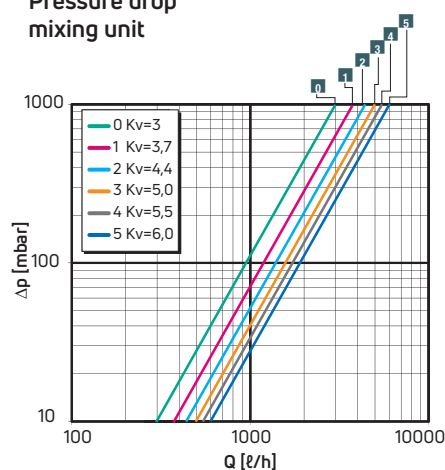
Model	A
1"	G 1
1" 1/4	G 1 1/4

Mixing group pressure drops

Mixing valve pressure losses in Floor Control Unit S
and Mixing Unit M3V



Pressure drop mixing unit



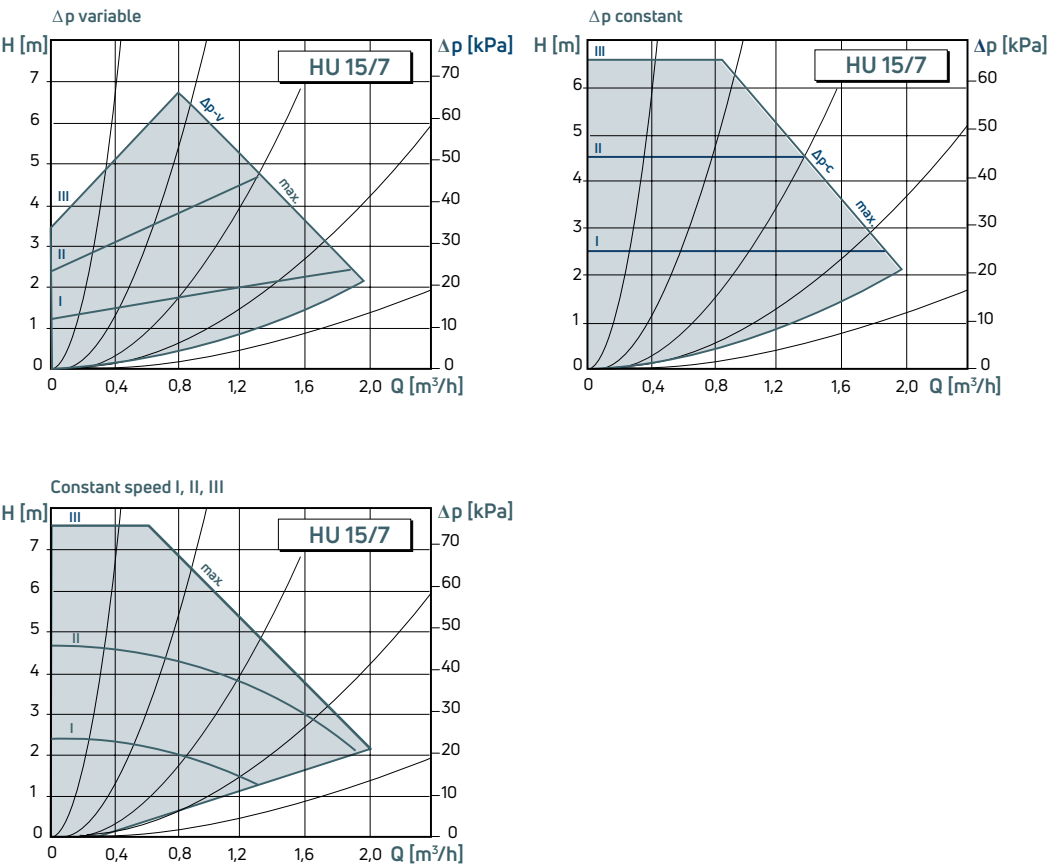
0 ... 5

Position
valve of
calibration
and
by-pass.

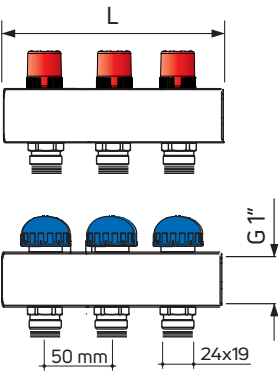
Performance
measured at -2K

Floor Control Unit S - Regulation group

Wilo Para HU 15/7 Circulator Diagram



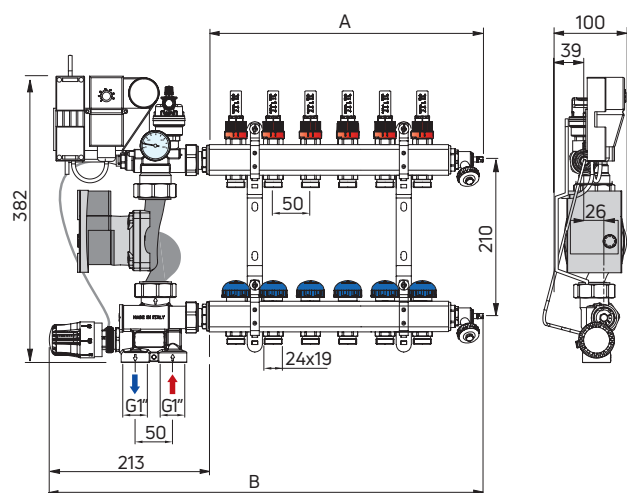
High temperature accessory kit



Model	L [mm]
2 ways, 24x19	125
3 ways, 24x19	175
4 ways, 24x19	225

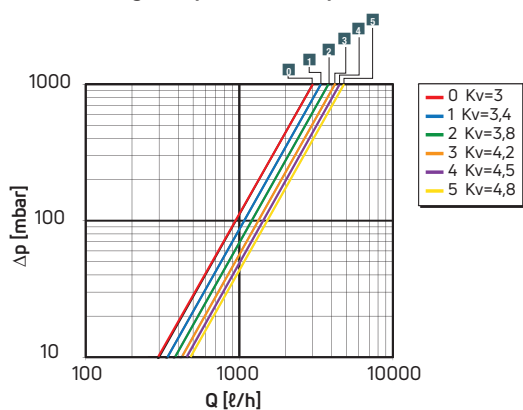
TM3-R Mixing Unit - Regulation group

TM3-R Mixing Unit Regulation group



Model	A [mm]	B [mm]
2 ways	160	373
3 ways	210	423
4 ways	260	473
5 ways	310	523
6 ways	360	573
7 ways	410	623
8 ways	460	673
9 ways	510	723
10 ways	560	773
11 ways	610	823
12 ways	660	873

Mixing unit pressure drop



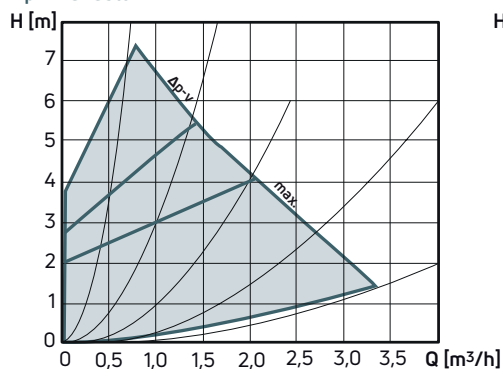
0 ... 5

Setting valve and by-pass position.

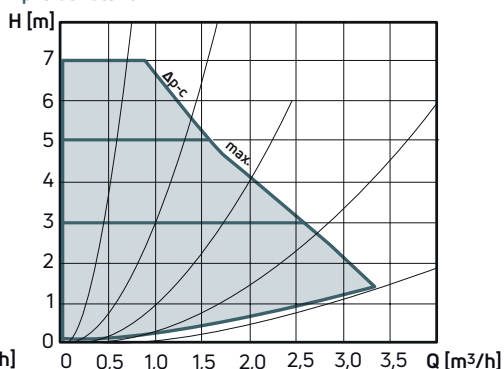
Performance measured at -2K

Wilo Para 25/7 circulator hydraulic performance diagrams

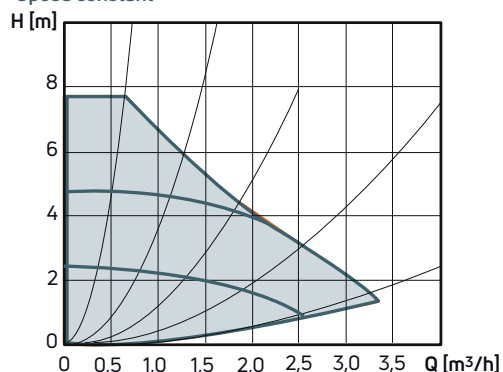
Δp-v Variable



Δp-c Constant



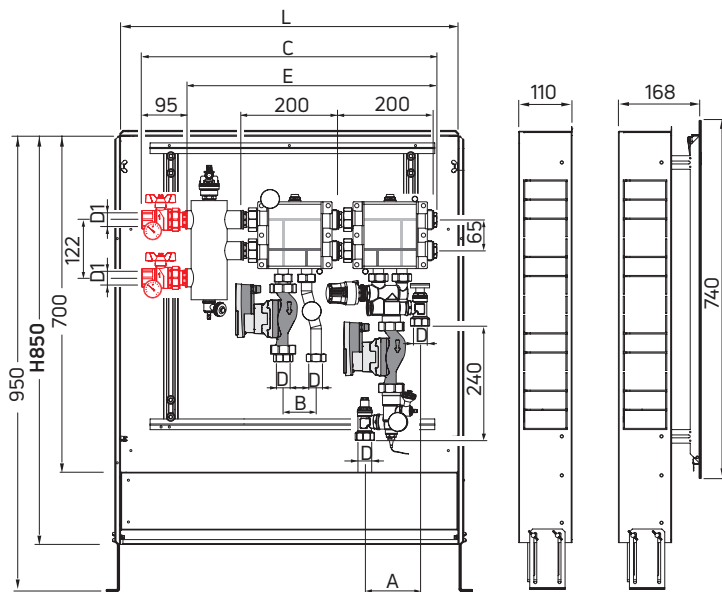
Speed constant



Modular Firstbox - For High-Low temperature systems

Modular Firstbox

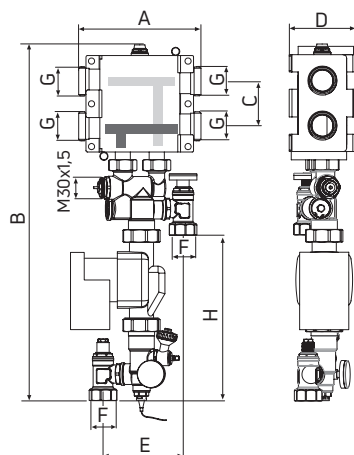
Recessed distribution modules
for High / Low temperature systems



Model	A [mm]	B [mm]	C [mm]	D	D1	E [mm]	L [mm]
1A	min 110 max 120	min 60 max 70	420	G 1	Rp 1	325	500
2H	min 110 max 120	min 60 max 70	620	G 1	Rp 1	525	700
3H	min 110 max 120	min 60 max 70	820	G 1	Rp 1	725	1000
1B	min 110 max 120	min 60 max 70	420	G 1	Rp 1	325	500
2B	min 110 max 120	min 60 max 70	620	G 1	Rp 1	525	700
3L	min 110 max 120	min 60 max 70	820	G 1	Rp 1	725	1000
1A + 1B	min 110 max 120	min 60 max 70	620	G 1	Rp 1	525	700
1A + 2B	min 110 max 120	min 60 max 70	820	G 1	Rp 1	725	1000
2H + 1B	min 110 max 120	min 60 max 70	820	G 1	Rp 1	725	1000

Modular Firstbox

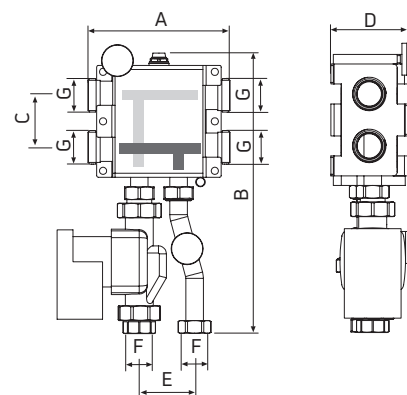
Single distribution modules for low temperature systems



Model	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F	G	H [mm]
1B	178	516	65	96	min 110 max 120	G 1 F	G 1 ¼ M G 1 F	240

Modular Firstbox

Single distribution modules for high temperature systems

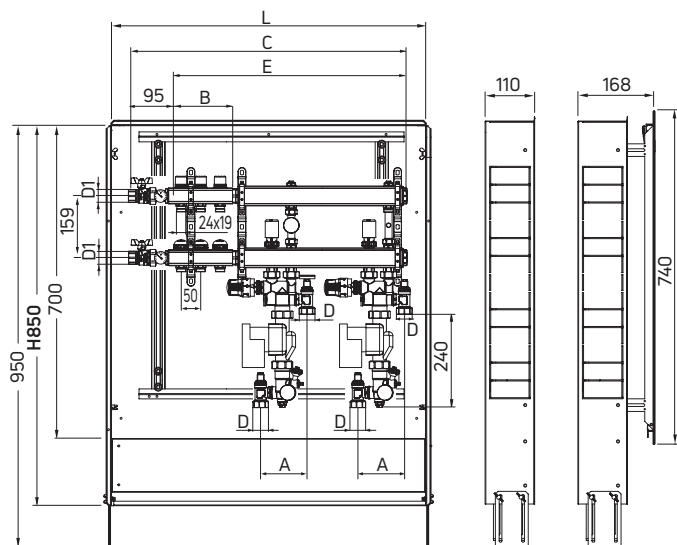


Model	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F	G
1A	178	351	65	96	min 60 max 70	G 1 F	G 1 ¼ M G 1 F

Modular Firstbox - For Low temperature systems

Modular Firstbox

Recessed distribution system for low temperature systems with connections for high temperature terminals

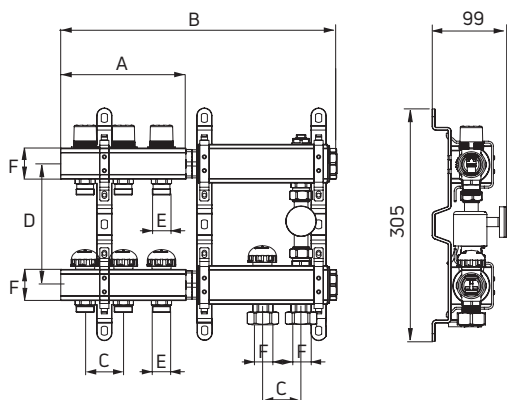


Model	A [mm]	B [mm]	C [mm]	D	D1	E [mm]	L [mm]
2H + 1B	min 110 max 120	114	420	G 1	Rp 1	325	500
3H + 1B	min 110 max 120	164	470	G 1	Rp 1	375	700
2H + 2B	min 110 max 120	114	670	G 1	Rp 1	565	850
3H + 2B	min 110 max 120	164	720	G 1	Rp 1	625	850

Modular Firstbox

Distribution system single module

Single distribution module for low temperature systems, with auxiliary connections for high temperature terminals

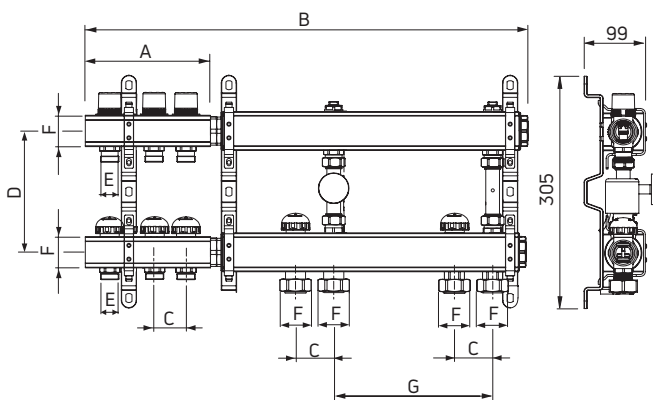


Model	A [mm]	B [mm]	C [mm]	D [mm]	E	F
2H	114	325	50	159	24x19	G 1
3H	164	375	50	159	24x19	G 1

Modular Firstbox

Distribution system double module

Double distribution module for low temperature systems, with auxiliary connections for high temperature terminals

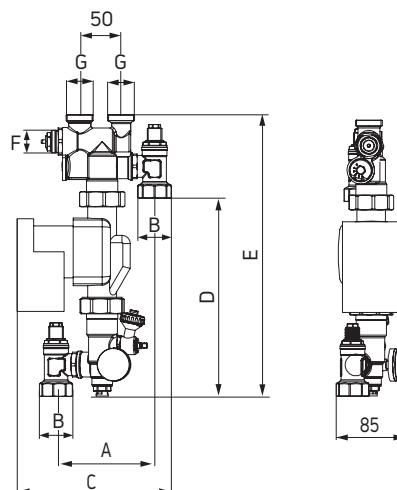


Model	A [mm]	B [mm]	C [mm]	D [mm]	E	F	G [mm]
2H	114	565	50	159	24x19	G 1	250
3H	164	625	50	159	24x19	G 1	250

Modular Firstbox

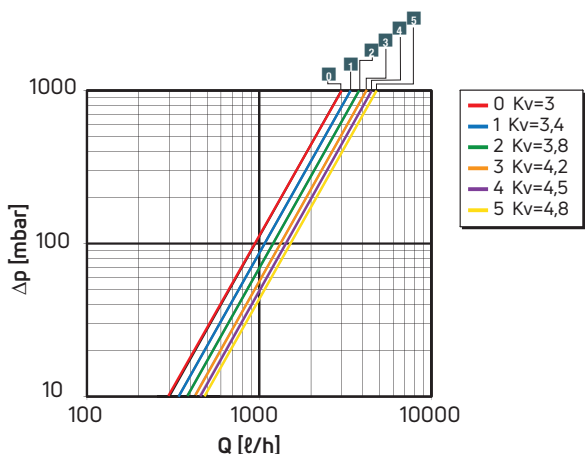
Regulation group with electronic circulator pump

Model	A [mm]	B	C [mm]	D [mm]	E [mm]	F	G
1B	min 110 max 120	G 1	190	240	340	M30x1,5	G 1



Modular Firstbox - Underboiler Kit

Mixing unit pressure drop

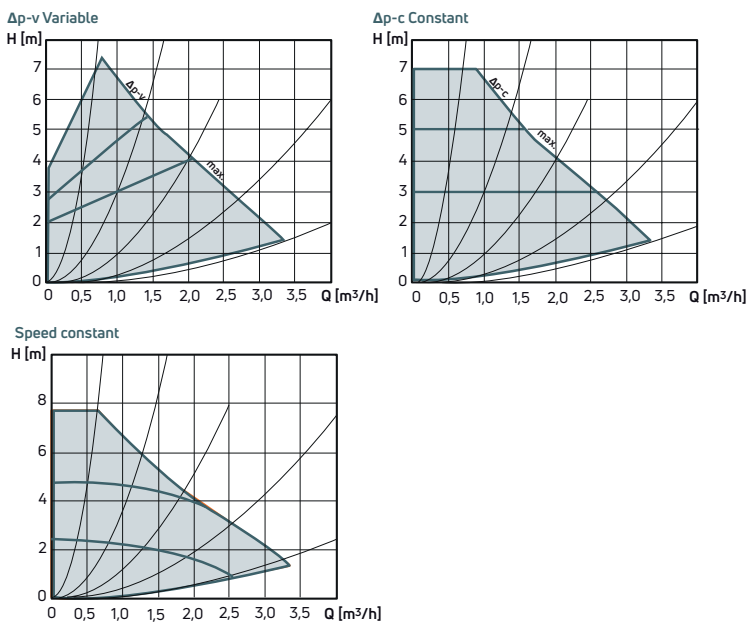


0 ... 5

Valve position of calibration and by-pass.

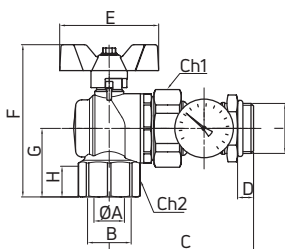
Performance measured at -2K

Wilo Para 25/7 circulator hydraulic performance diagrams

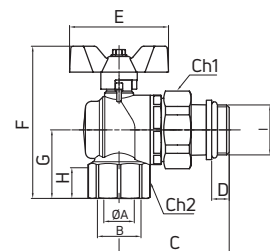


Progress valve kit for Modular Firstbox

Angled with thermometer holder union and thermometers



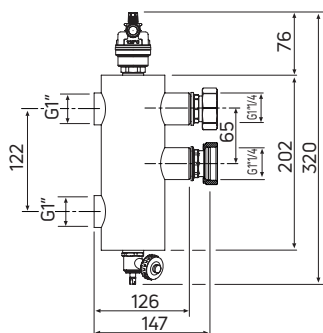
DN [mm]	ØA [mm]	B	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I	Ch1 [mm]	Ch2 [mm]	g
25	25	Rp 1	95	10,5	65	99,5	45	22	1"	47	38	800



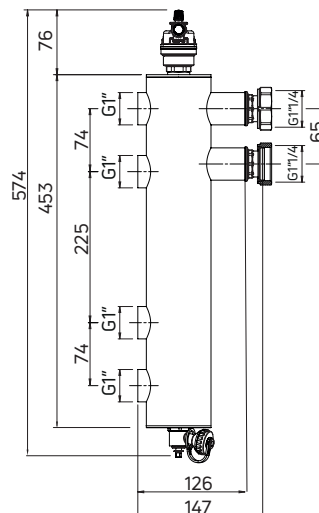
DN [mm]	ØA [mm]	B	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I	Ch1 [mm]	Ch2 [mm]	9
25	25	Rp 1	73,5	11,5	65	99,5	45	22	1"	47	38	688

Open manifold for Modular Firstbox

Open manifold 2" 1/2 - takeoff 65 mm 2+2 ways

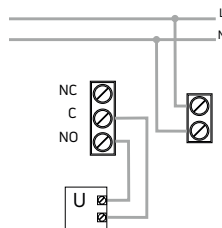
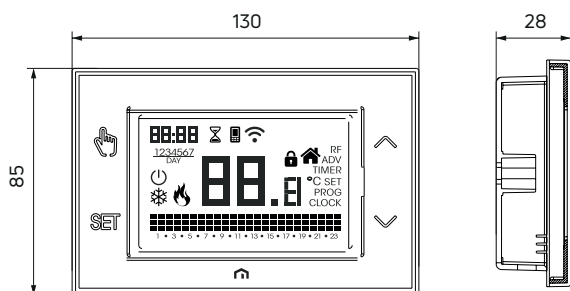


Open manifold 2"1/2 - takeoff 65 mm 4+2 ways

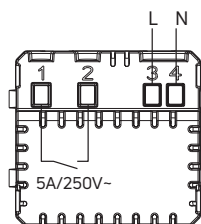
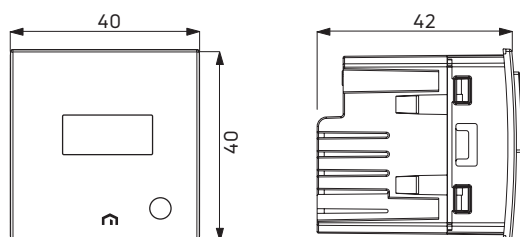


Sintesi - Chronothermostats and Thermostats

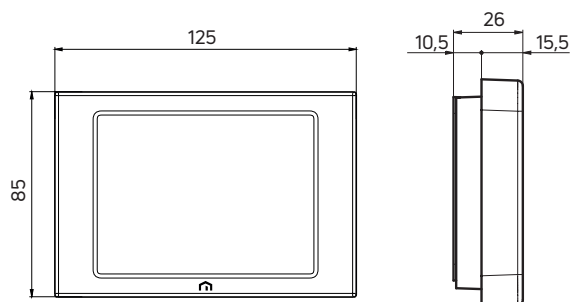
Sintesi Wall Wi-Fi and Sintesi Wall Wi-Fi RF



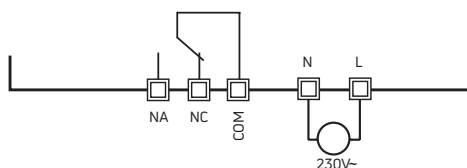
Sintesi Mini Wi-Fi



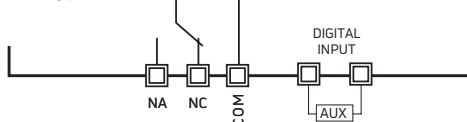
Sintesi Thermostats and chronothermostats



Power supply 230 V

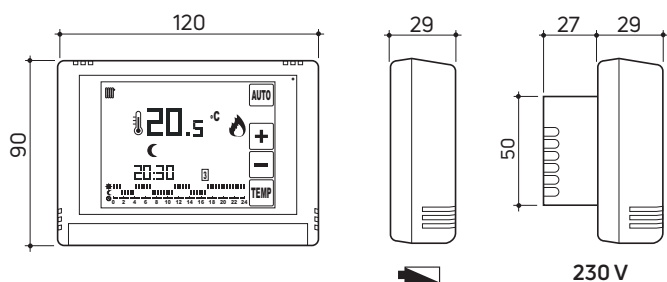


Battery powered



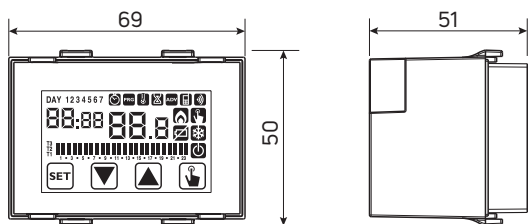
Smarty - Touch Screen Chronothermostat / Thermostat

Dimensions (mm)

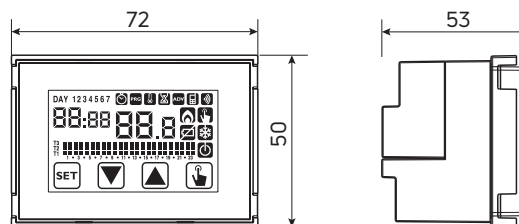


Touch screen Chronothermostat - Recessed

Dimensions (mm) model 230 V

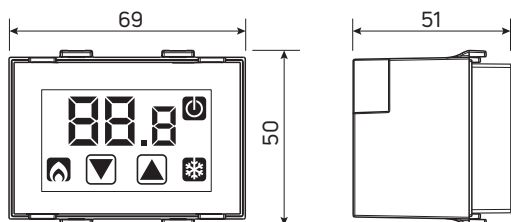


Dimensions (mm) battery model

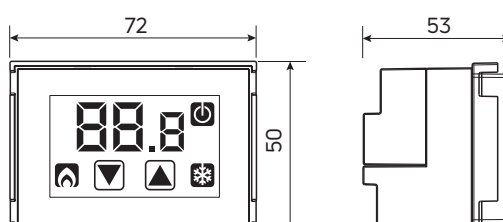


Touch screen Thermostat - Recessed

Dimensions (mm) model 230 V

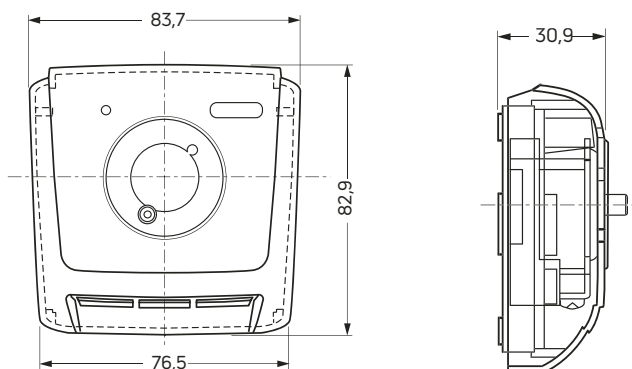


Dimensions (mm) battery model



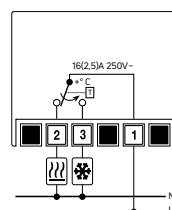
Termec EVO - Room thermostat

Dimensional data

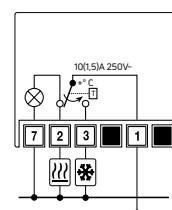


Wiring diagrams

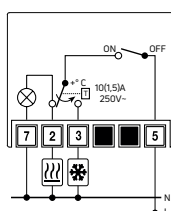
3 contacts



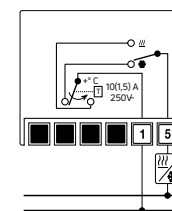
3 contacts with warning light



3 contacts with warning light + on/off switch

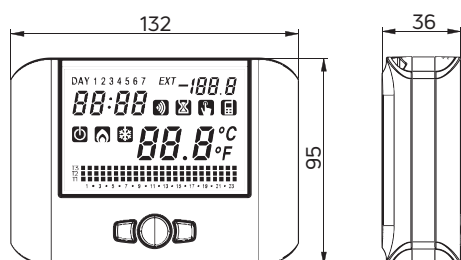


2 contacts with indicator light + comm. summer/winter

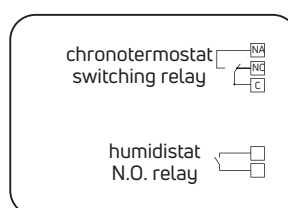


Chronothermostat with humidistat - Wall mounted

Dimensions (mm)

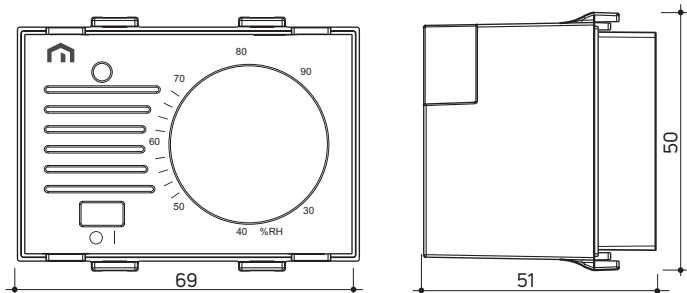


Wiring diagram

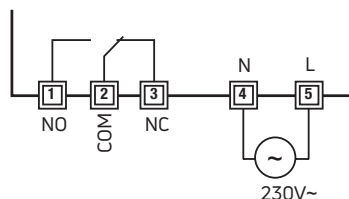


Built-in electronic humidistat

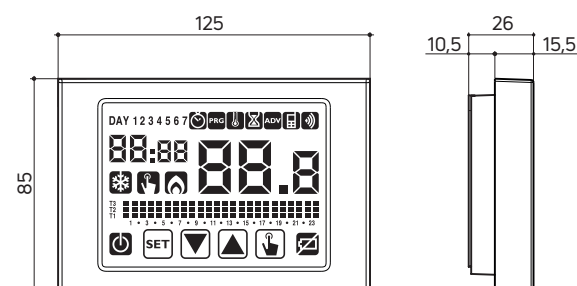
Dimensions (mm)



Connection diagrams



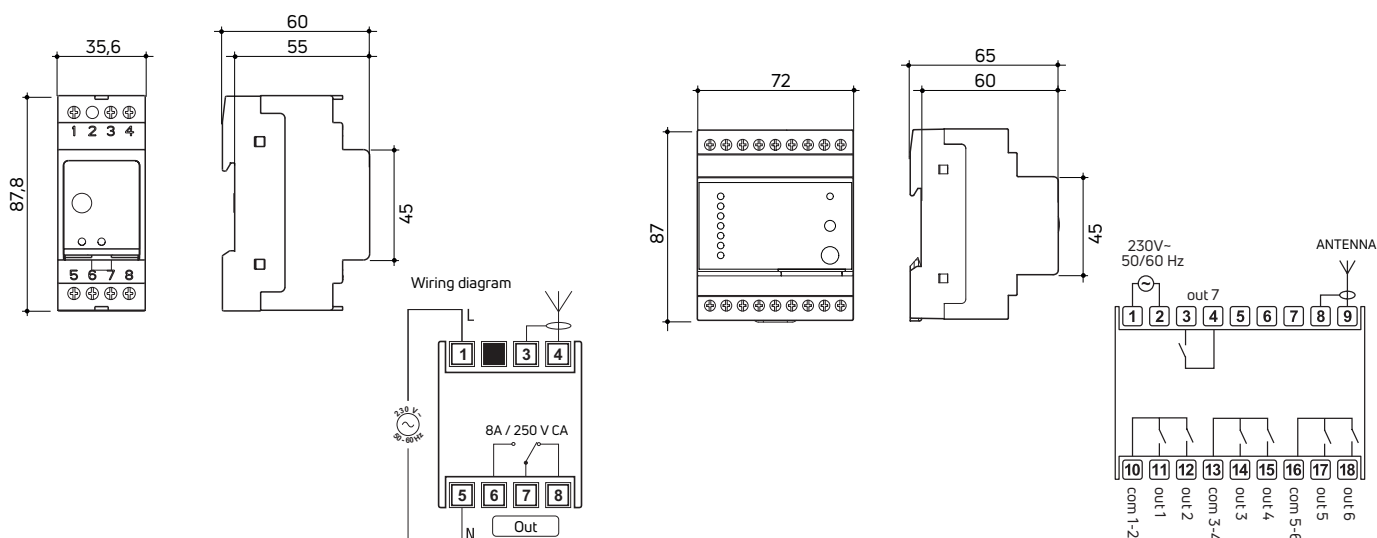
Radio frequency chronothermostat



DIN bar radiofrequency actuator

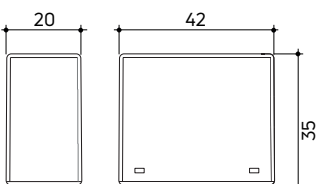
DIN bar radio frequency actuator
one channel with fixed delay

6-channel DIN rail radio frequency actuator, with
additional channel, with adjustable delay

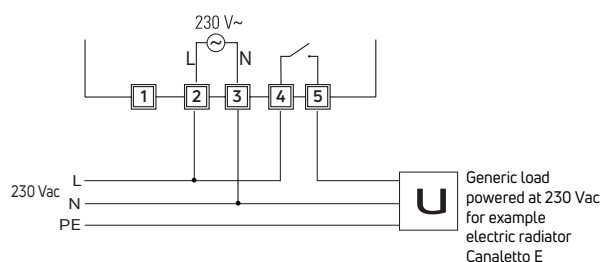


Built-in radiofrequency actuator

Dimensions [mm]

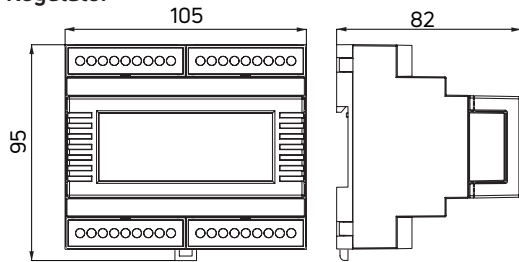


Wiring diagram for controlling a 230 Vac load

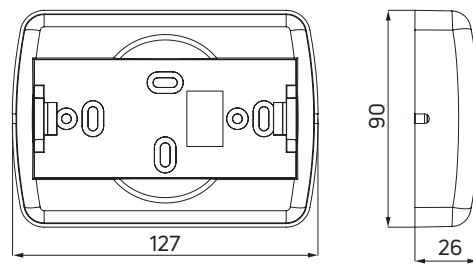


RCE - Emmeti Climatic Regulator for mixing groups

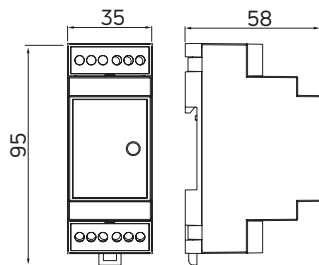
Regulator



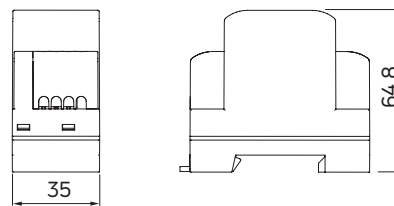
Wall plaque



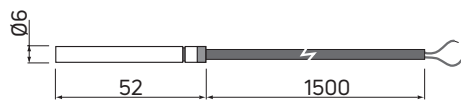
Converter



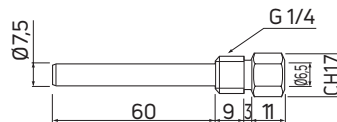
Transformer



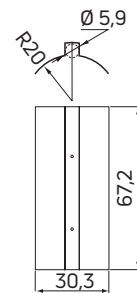
Temperature probe



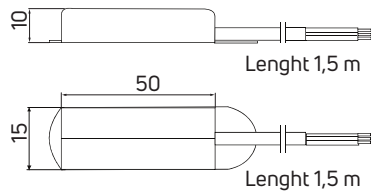
Steel pocket for NTC probes



Probe holder



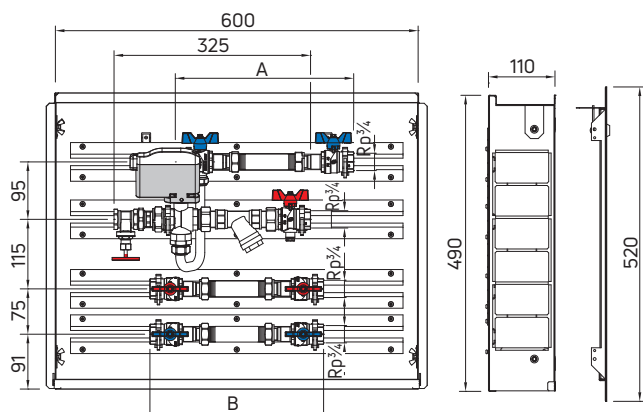
Condensating probe



Energy Box Compact - Accounting

Energy Box Compact with 4-way zone valve

Heating/cooling metering, with or without domestic water, 4-way zone valve



Model	A [mm]	B [mm]
DN 15 (*)	290	290
DN 20 (**)	310	290
DN 20/DN 20 (***)	310	310

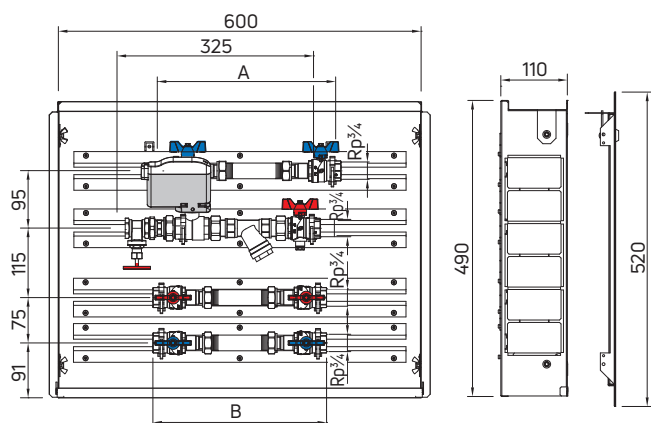
(*) Arrangement for installation of DN15 energy meter (G 3/4 connections) and DN15 volumetric meters (G 3/4 connections)

(**) Arrangement for installation of DN20 energy meter (G 1 connections) and DN15 volumetric meters (G 3/4 connections)

(***) Arrangement for installation of DN20 energy meter (G 1 connections) and DN20 volumetric meters (G 1 connections)

Energy Box Compact with 2-way zone valve

Heating/cooling metering, with or without domestic hot water, 2-way zone valve



Model	A [mm]	B [mm]
DN 15 (*)	290	290
DN 20 (**)	310	290
DN 20/DN 20 (***)	310	310

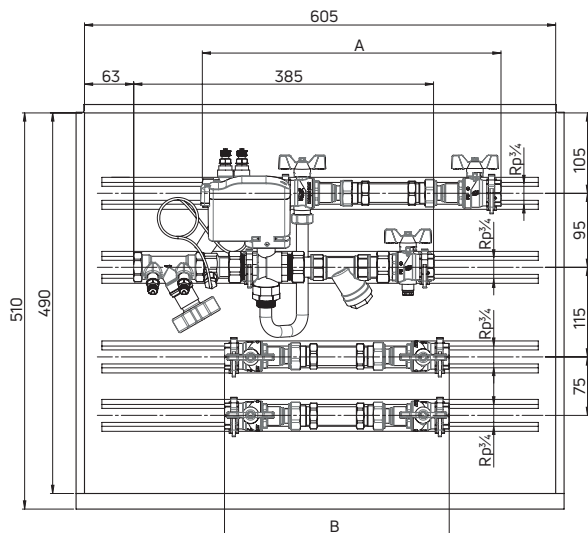
(*) Arrangement for installation of DN15 energy meter

(**) Arrangement for installation of DN20 energy meter

(***) Arrangement for installation of DN20 energy meter (G 1 connections) and DN20 volumetric meters (G 1 connections)

Energy Box Compact with 4-way zone valve and dynamic balancing kit

Heating/cooling metering, with or without domestic hot water, 4-way zone valve and dynamic balancing kit



Model	A [mm]	B [mm]
DN 15 (*)	384	290
DN 20 (**)	404	290
DN 20/DN 20 (***)	404	310

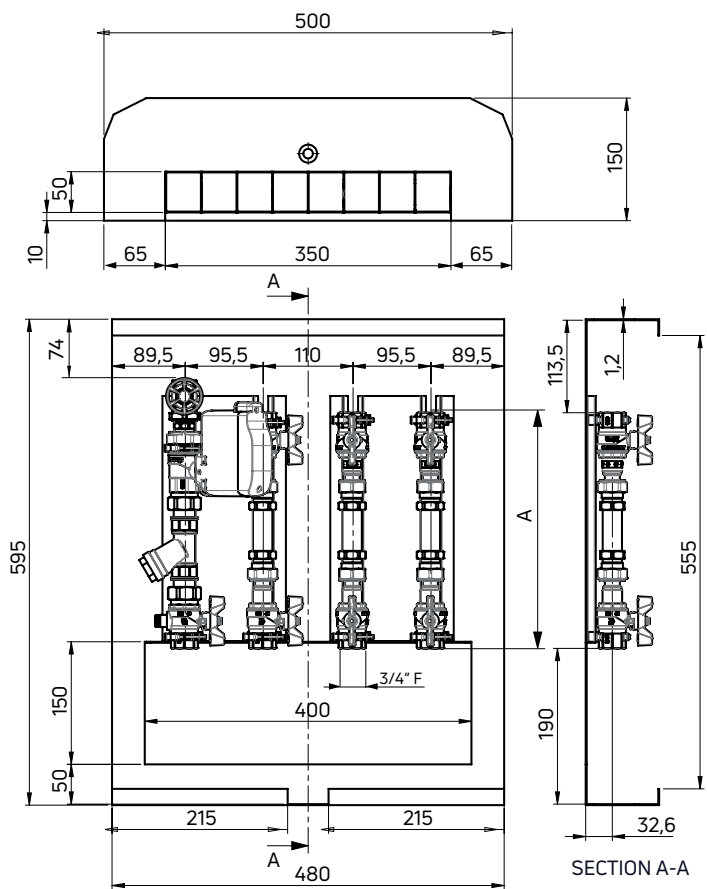
(*) Arrangement for installation of DN15 energy meter

(**) Arrangement for installation of DN20 energy meter

(***) Arrangement for installation of DN20 energy meter (G 1 connections) and DN20 volumetric meters (G 1 connections)

Energy Box V - Accounting

Dimensions

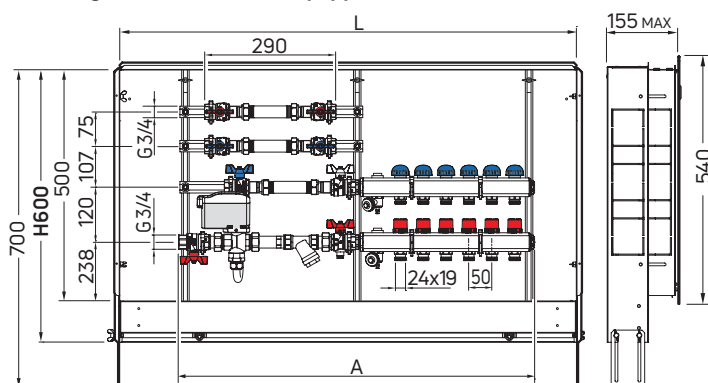


Model	A [mm]
DN 15 (*)	290
DN 20 (**)	310

(*) prepared for installation of energy meter or volumetric meter DN15 (3/4" connections)

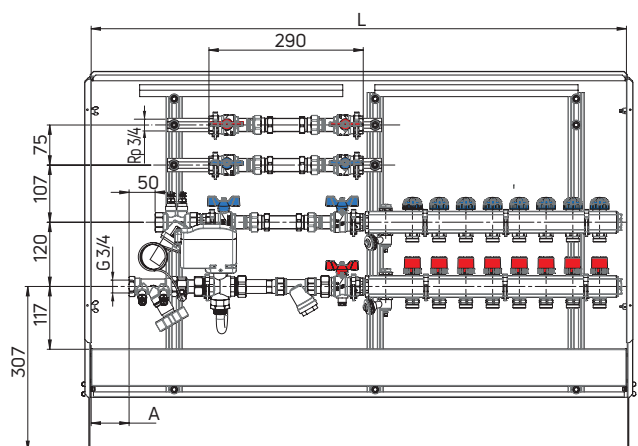
(**) prepared for installation of energy meter or volumetric meter DN20 (1" connections)

Metering with 1" manifolds equipped with valves and lockshields



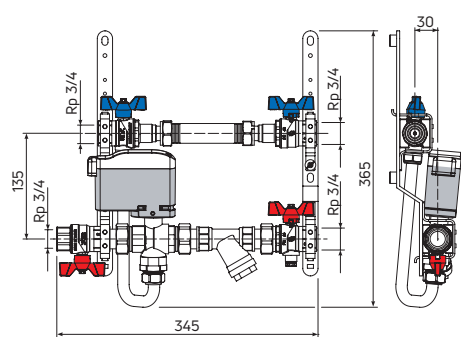
L [mm]	N. ways	A [mm]
700	2	580
850	3	630
850	4	680
850	5	730
1000	6	780
1000	7	830
1000	8	880
1200	9	930
1200	10	980
1200	11	1030
1200	12	1080

Metering with 1" manifolds equipped with valves and lockshields with dynamic balancing kit

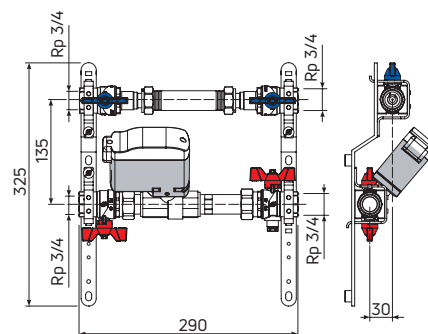


L [mm]	N. ways	A [mm]
700	2	70
850	3	170
850	4	120
850	5	70
1000	6	170
1000	7	120
1000	8	70
1200	9	120
1200	10	170
1200	11	120
1200	12	70

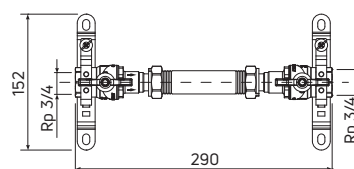
Single heating/cooling metering module with 4-way zone valve with By-pass passage



Single heating/cooling metering module with 2-way zone valve



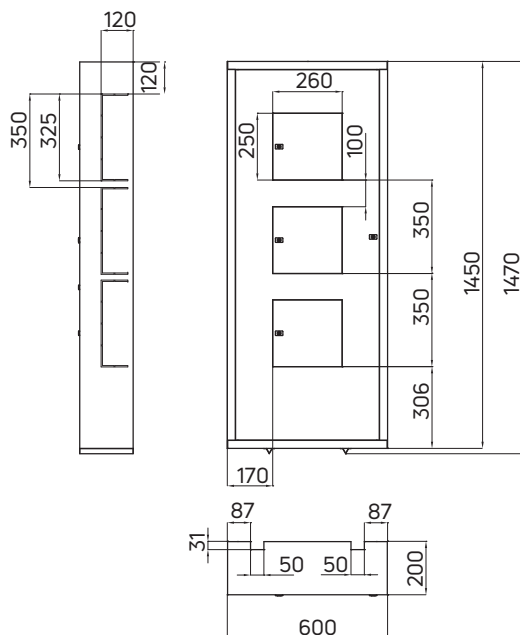
Single module of
accounting
sanitary water



Energy Wall - Cabinets for accounting

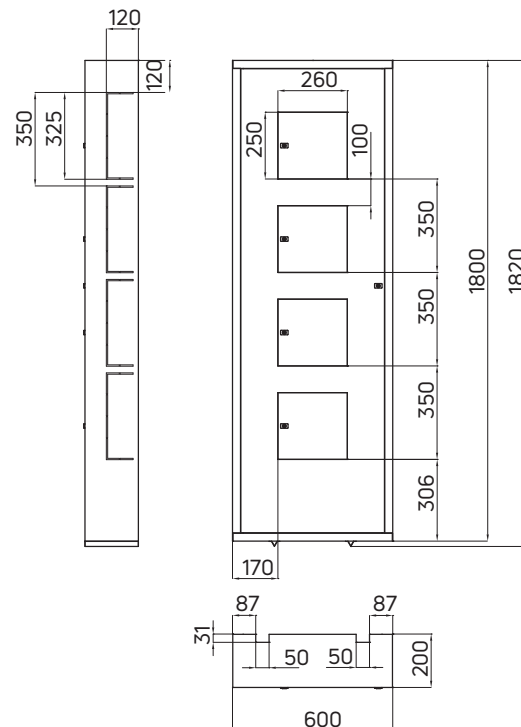
Energy Wall

Cabinet for metering groups, model max 3 users



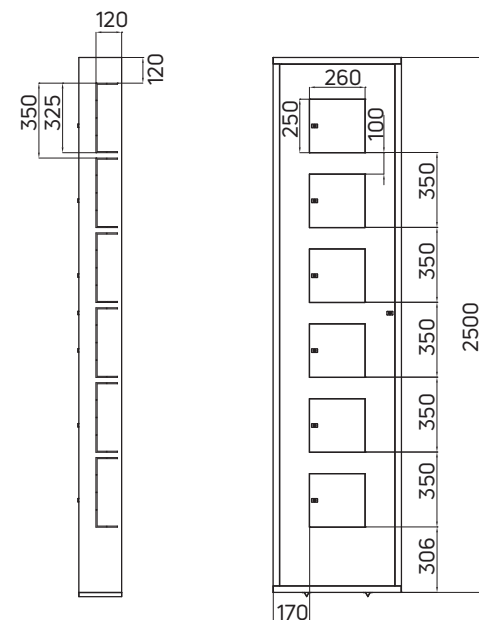
Energy Wall

Cabinet for metering groups, model max 4 users



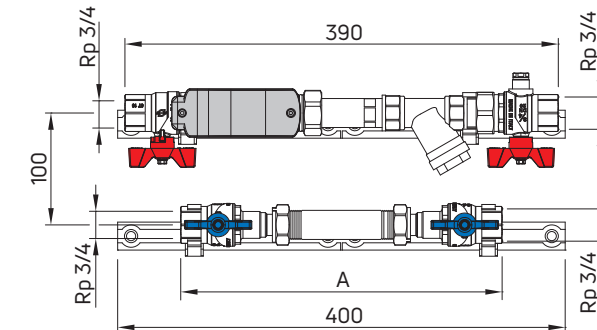
Energy Wall

Cabinet for metering groups, model max 6 users



Energy Wall

Heating/cooling groups for Energy Wall

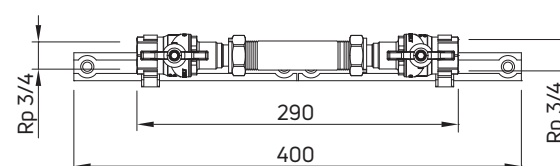


Model	A [mm]
DN15 (*)	290
DN20 (**)	310

(*) Arrangement for installation of DN15 energy meter
 (**) Arrangement for installation of DN20 energy meter

Energy Wall

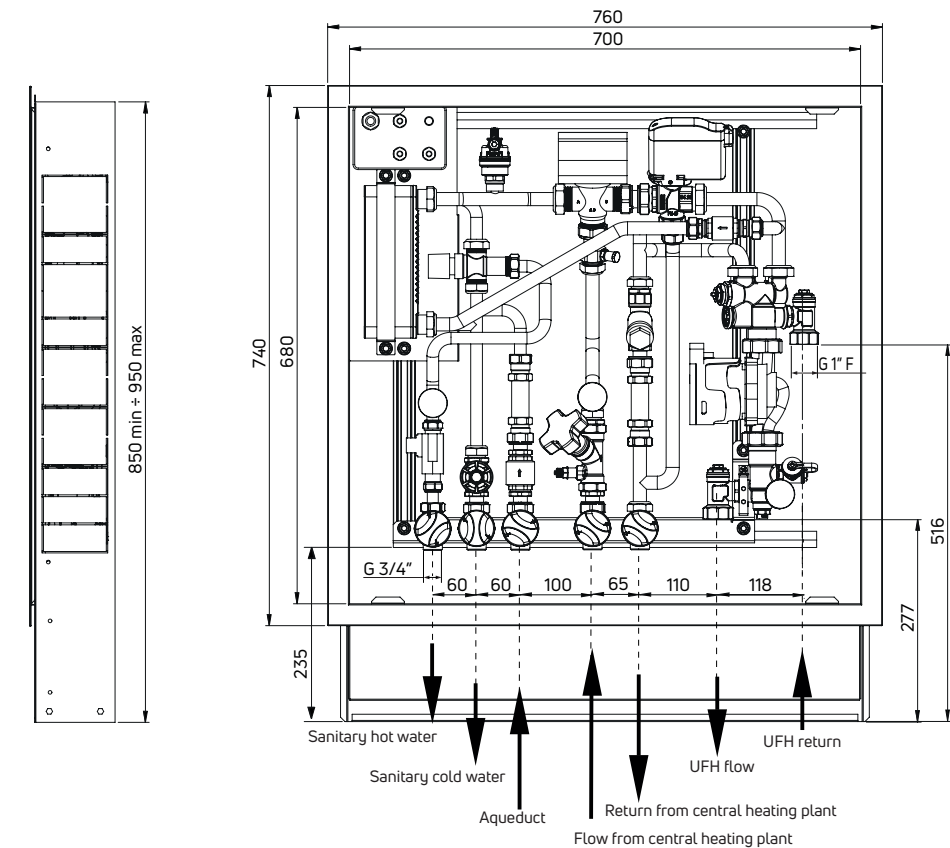
Hot and cold line for Energy Wall



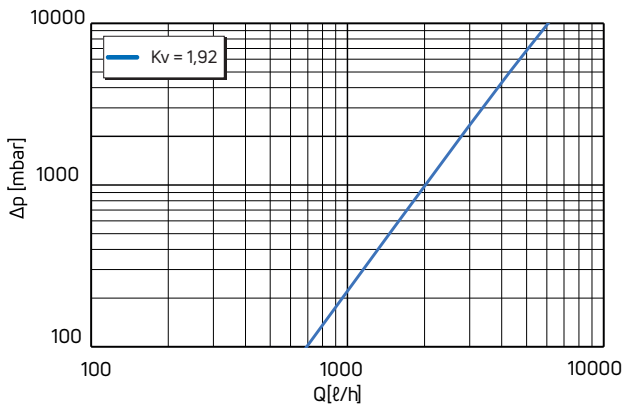
Energy Combibox Floor HIU - Accounting

Energy Combibox Floor HIU

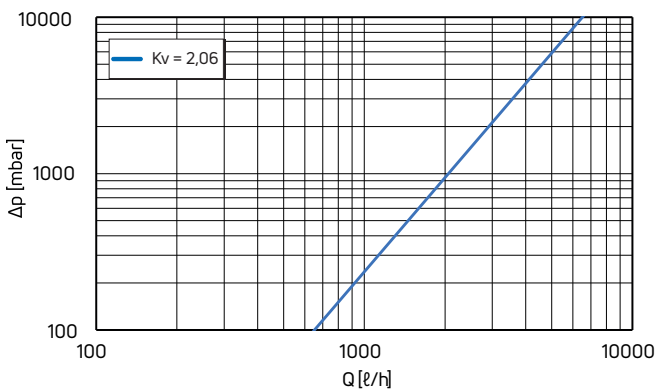
Built-in modules for metering thermo-sanitary consumption with instantaneous production of domestic hot water



Heating circuit pressure drop with DN15 energy meter installed ($Q_p=1,5 \text{ m}^3/\text{h}$)

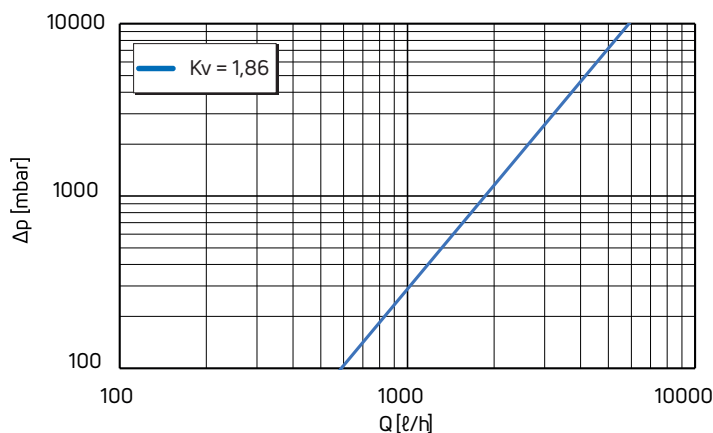


Primary circuit pressure losses in domestic hot water production with DN15 energy meter installed ($Q_p=1,5 \text{ m}^3/\text{h}$)

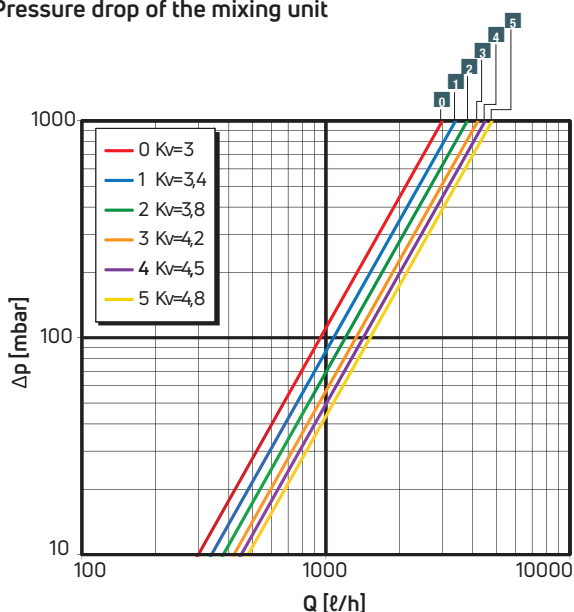


Energy Combibox Floor HIU - Accounting

Pressure drops under by-pass conditions.



Pressure drop of the mixing unit

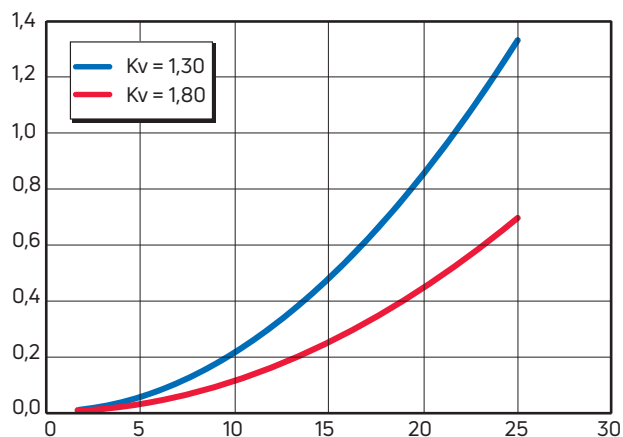


0 5

Position of control valve and by-pass.

Performance measured at -2K

Pressure losses of the thermostatic mixing valve for domestic water.



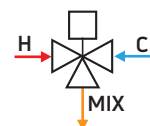
K_v max: 1,8*

K_v min: 1,3*

*values obtained under the following conditions: $T_H=45^\circ\text{C}$

$T_C=15^\circ\text{C}$

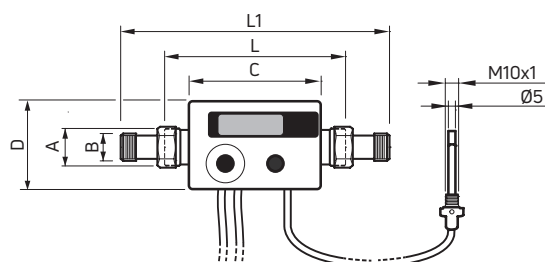
$\Delta p_{H-MIX} = \Delta p_{C-MIX}$



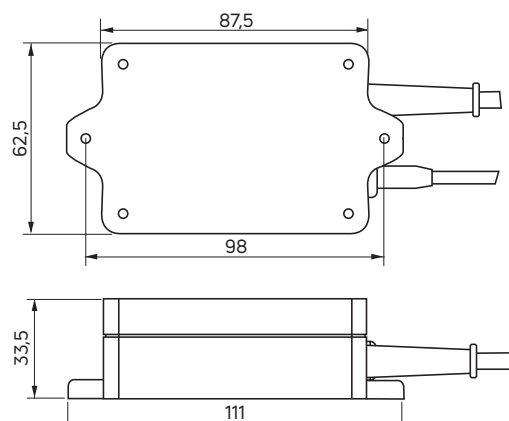
Accessories - Accounting

EVO energy meter

Models DN15 and DN20



230 Vac power supply for EVO energy meter



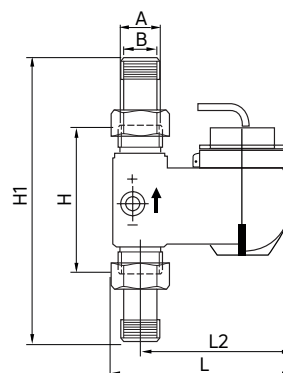
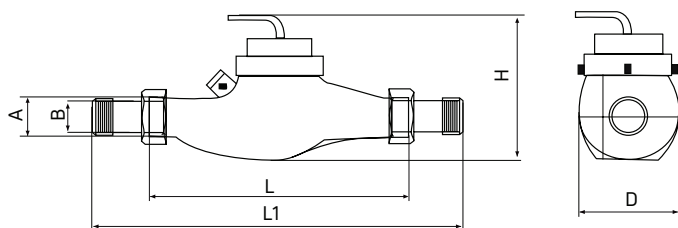
Size		DN15	DN20
Connections	A	3/4"	1"
	B	1/2"	3/4"
Lenght	L [mm]	110	130
Length with fittings	L1 [mm]	190	228
Dimensions electronic unit	C [mm]	110	110
	D [mm]	75	75
Total height	[mm]	84,5	87

NB: the union fittings are not supplied with the instrument.

Threaded energy meter for high flow rates

Models DN25, DN32 and DN40 horizontal installation

Models DN25, DN32 and DN40 vertical installation

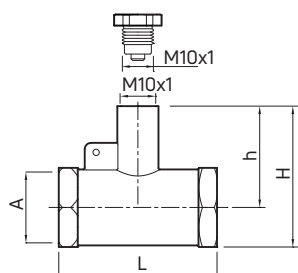


Size		Horizontal installation			Vertical installation		
		DN25	DN32	DN40	DN25	DN32	DN40
Connections	A	1"1/4	1"1/2	2"	1"1/4	1"1/2	2"
	B	1"	1"1/4	1"1/2	1"	1"1/4	1"1/2
Length	L [mm]	260	260	300	169	183	226
Length with fittings	L1 [mm]	374	374	434	-	-	-
Length from axis	L2 [mm]	-	-	-	143	156	190
Height	H [mm]	137	137	163	150	150	200
Height with fittings	H1 [mm]	-	-	-	268	268	338
Depth	[mm]	100	100	135	98	101	139

NB: the union fittings are not supplied with the instrument.

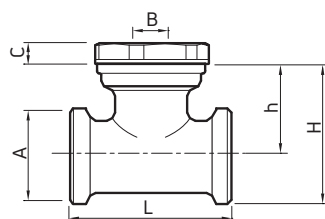
Accessories - Accounting

Probe holder Tee group for DN15 and DN20 meters



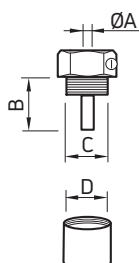
Size	DN15	DN20
A	1/2"	3/4"
h [mm]	32	35
H [mm]	45	48
L [mm]	50	50

Probe holder Tee group for DN25 meter



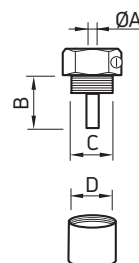
Size	DN25
A	1"
B	M10x1
C [mm]	5
L [mm]	72
h [mm]	36
H [mm]	57

Probe holder kit for DN32 and DN40 meters



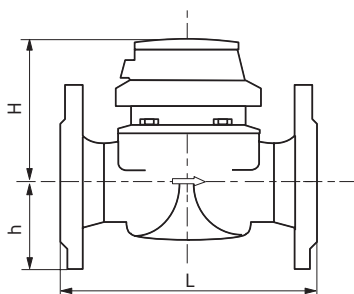
Size	DN32 and DN40
ØA [mm]	6,8
B [mm]	40
C	1/2"
D	1/2"

Probe holder kit for DN50 and DN65 meters



Size	DN50 and DN65
ØA [mm]	6,8
B [mm]	40
C	1/2"
D	1/2"

Flanged energy meter for high flow rates DN50, DN65, DN80, DN125 and DN150

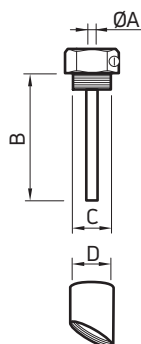


Dimensional data flowmeter

Size	mm	50	65	80	100	125	150
Nominal flow rate q_p	m ³ /h	25	40	63	100	160	250
Minimum flow rate q_i	m ³ /h	0,6	1	1,6	2,5	4	6
Maximum capacity q_s	m ³ /h	31	50	79	125	200	313
Operating pressure PN	bar	16					
Maximum operating temperature	°C	130					
L	mm	200	200	225	250	250	300
H	mm	187	197	219	229	257	357
h	mm	72	83	95	105	120	135
Pulse value	ℓ/imp	100	100	100	100	100	1000
Weight	kg	9,9	10,6	13,3	15,6	18,1	40,1

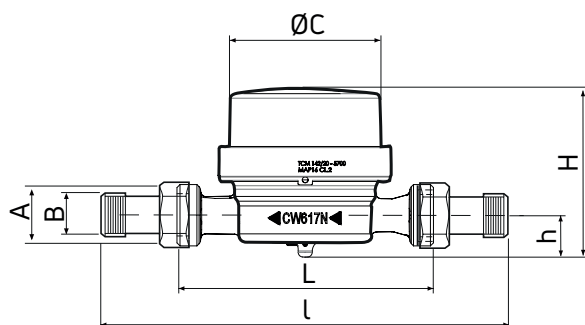
Accessories - Accounting

Probe holder kit for meters DN50, DN65, DN80, DN125 and DN150



Size	DN50, DN65	DN80, DN100, DN125	DN150
ØA [mm]	6,8	6,8	6,8
B [mm]	40	85	120
C	1/2"	1/2"	1/2"
D	1/2"	1/2"	1/2"

Volumetric counter Models DN15 and DN20



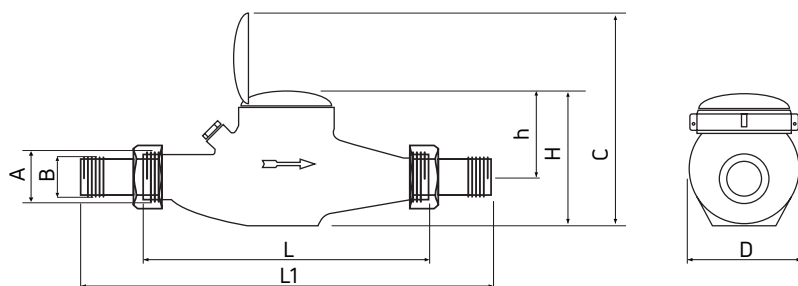
Model	A	B	ØC [mm]	H [mm]	h [mm]	L [mm]	l [mm]	Weight [kg]
DN15	3/4"	1/2"	65	74	11,7	110	190	0,35
DN20	1"	3/4"	65	74	11,7	130	228	0,45

NB: the union fittings are not supplied with the instrument.

Accessories - Accounting

Volumetric hot water meter

Models DN25, DN32 and DN40

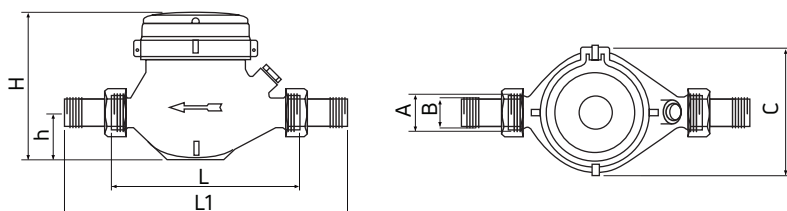


Model	A	B	L [mm]	L1 [mm]	H [mm]	h [mm]	C [mm]	D [mm]	Weight [kg]
DN25	1"1/4	1"	260	374	123	80	200	100	2,6
DN32	1"1/2	1"1/4	260	374	123	80	200	100	2,7
DN40	2"	1"1/2	300	434	149	103	226	135	5,1

NB: nozzle fittings are not included with the instrument.

Volumetric cold water meter

Models DN25, DN32 and DN40

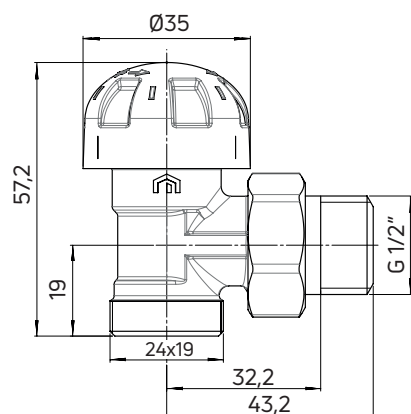


Model	A	B	L [mm]	L1 [mm]	H [mm]	h [mm]	C [mm]	Weight [kg]
DN25	1"1/4	1"	260	374	123	43	97	2,3
DN32	1"1/2	1"1/4	260	374	123	43	97	2,4
DN40	2"	1"1/2	300	434	143	46	130	7,7

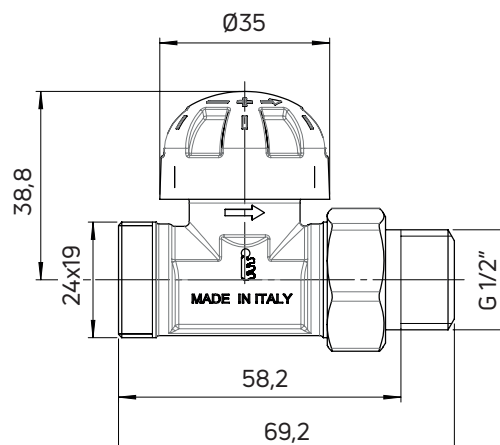
NB: nozzle fittings are not included with the instrument.

Poker Plus - Thermostatic valve

Angle valve

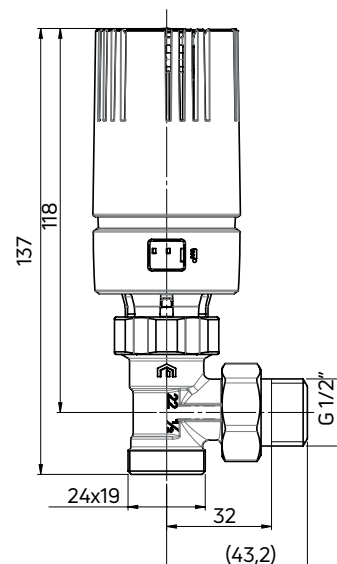
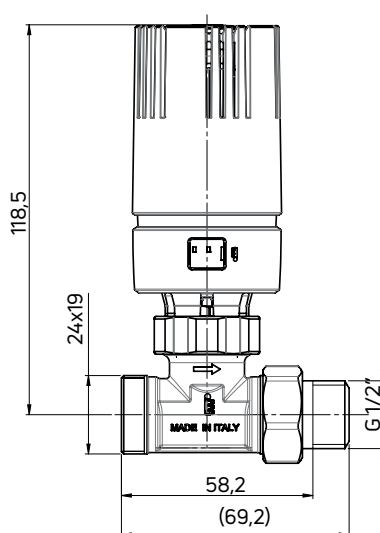


Straight valve

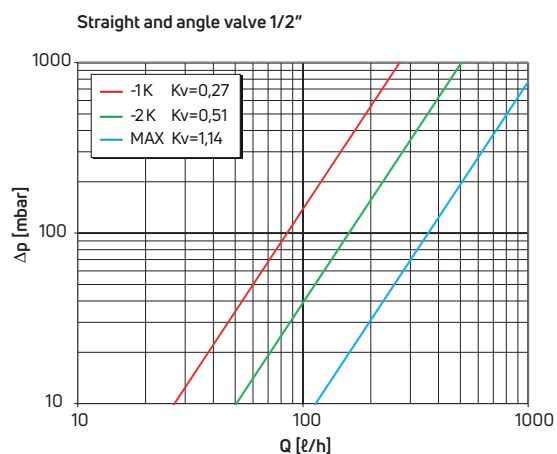


SensorEVO2 - Thermostatic valve

SensorEVO2 + Poker Plus valves

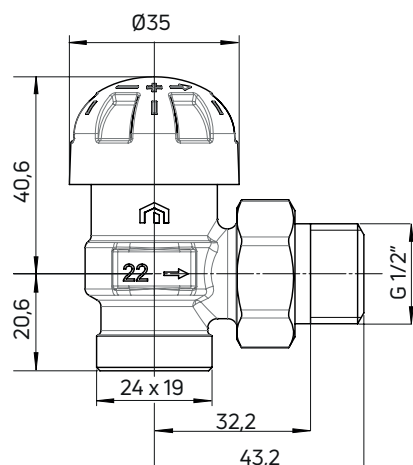


Pressure losses Poker Plus valves combined with SensorEVO2 thermostatic head

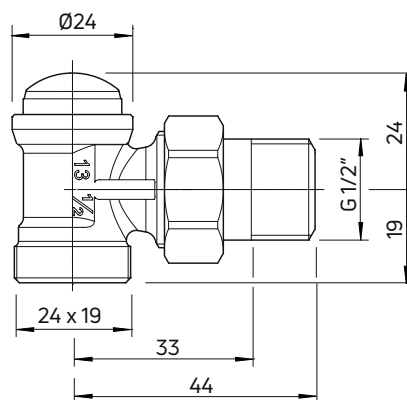


Full-D - Dynamic thermostatic valve and lockshield kit

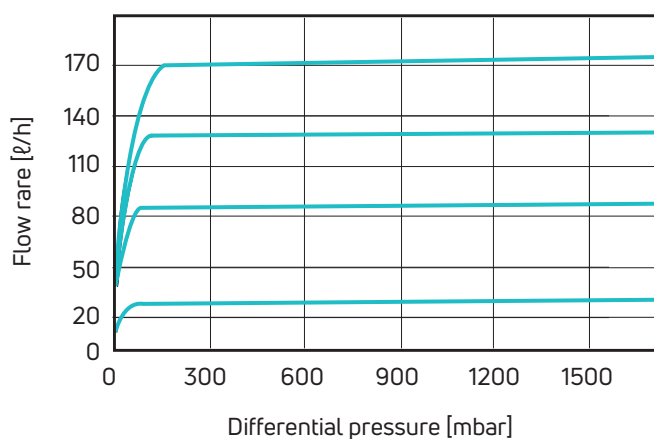
Valve



Lockshield

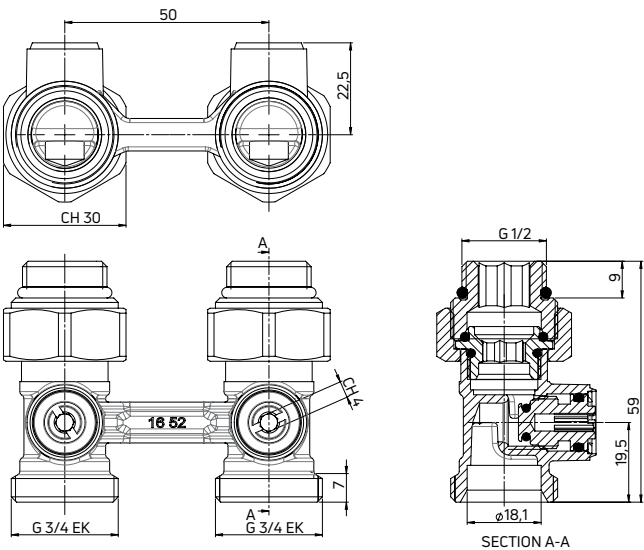


Regulation curve Full-D dynamic thermostatic valve with mounted thermostatic head (deviation -2 K)

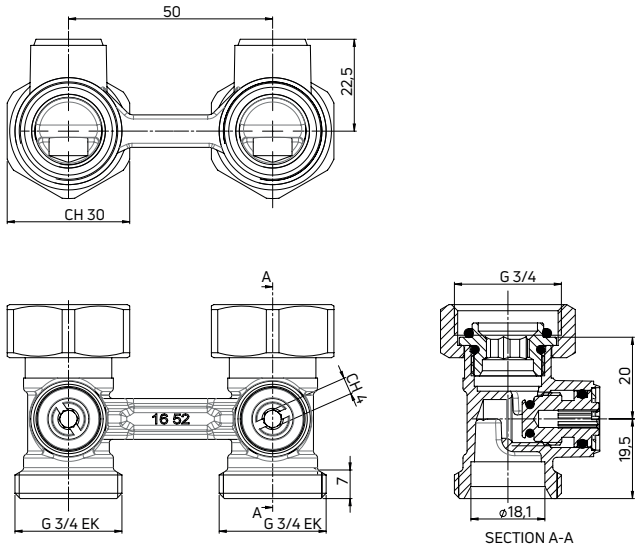


H valves

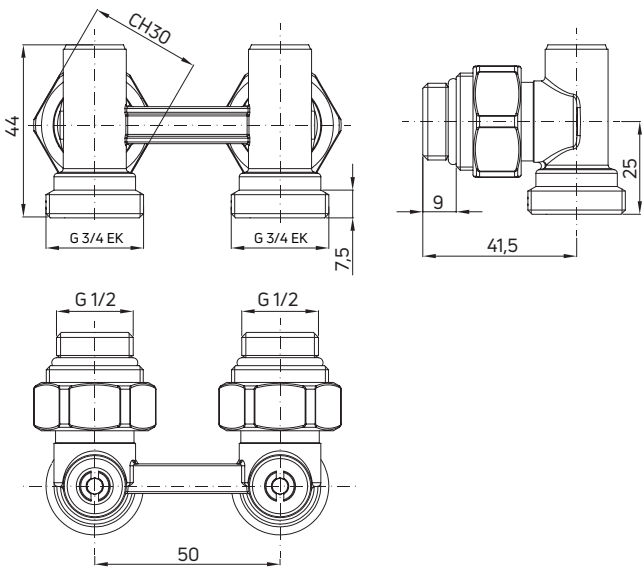
Straight H-hand valve with adapter



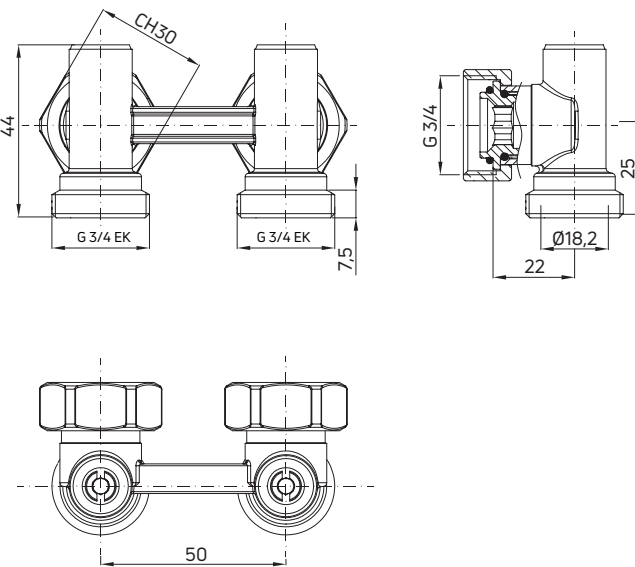
Straight H-hand valve



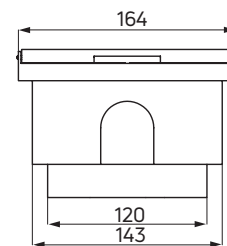
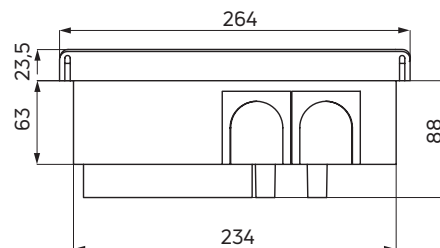
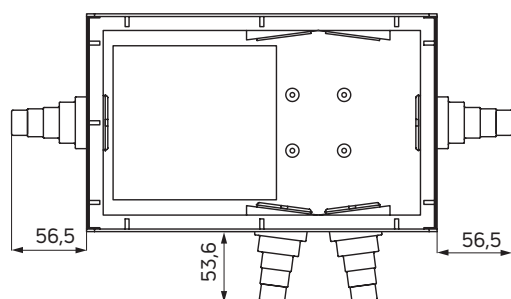
Manual angle H valve with adapter



Manual angle H valve



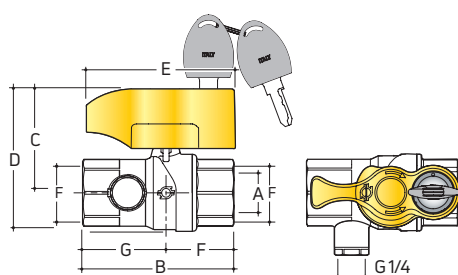
Built-in box for valve - With gas manifold first inlet



Futurgas with lock - Ball valves

Futurgas

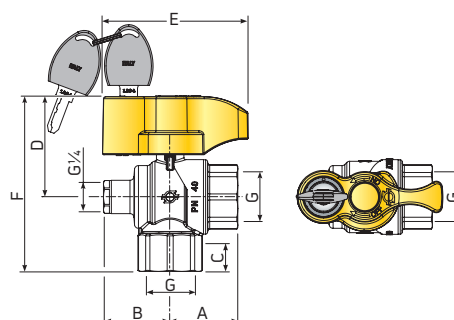
Female-Female with G 1/4 pressure connection and key lock



Size	DN [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]
3/4"	20	33,5	41,5	18,3	51	74	Rp 3/4	75
1"	25	40	49	22	57	74	Rp 1	89

Futurgas

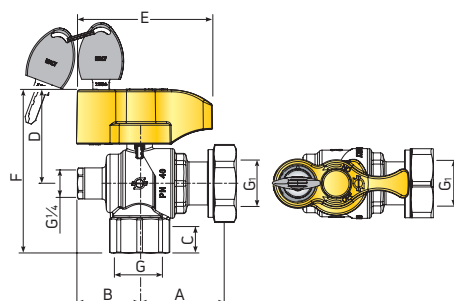
Angled Female-Female with G 1/4 pressure port and key lock



Size	DN [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]
3/4"	20	34,5	30	18,3	51	74	89	Rp 3/4
1"	25	41,5	34,5	22	57	74	102	Rp 1

Futurgas

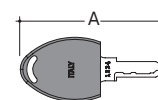
Swivel female-nut with G 1/4 pressure point and key lock



Size	DN [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	G1
Rp 3/4 x G 1	20	52,8	30	18,3	51	74	89	Rp 3/4	G 1
Rp 1 x G 1 1/4	25	58,2	34,5	22	57	74	102	Rp 1	G 1 1/4

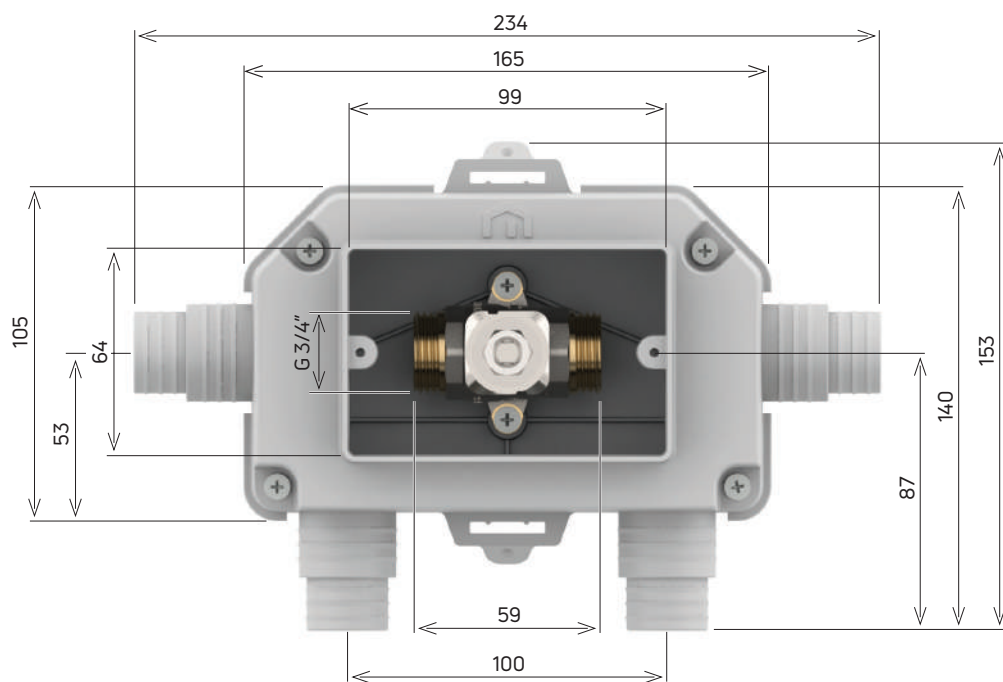
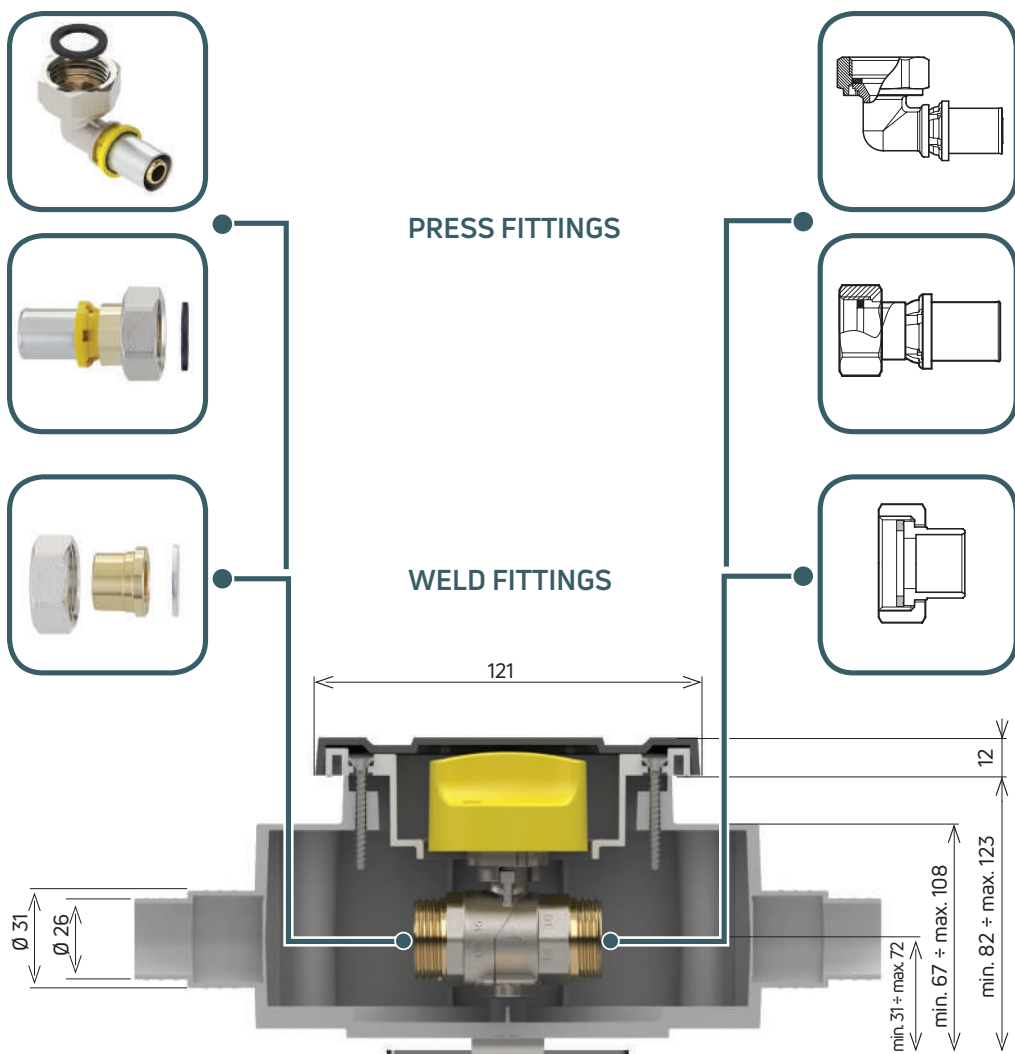
Futurgas

Master key

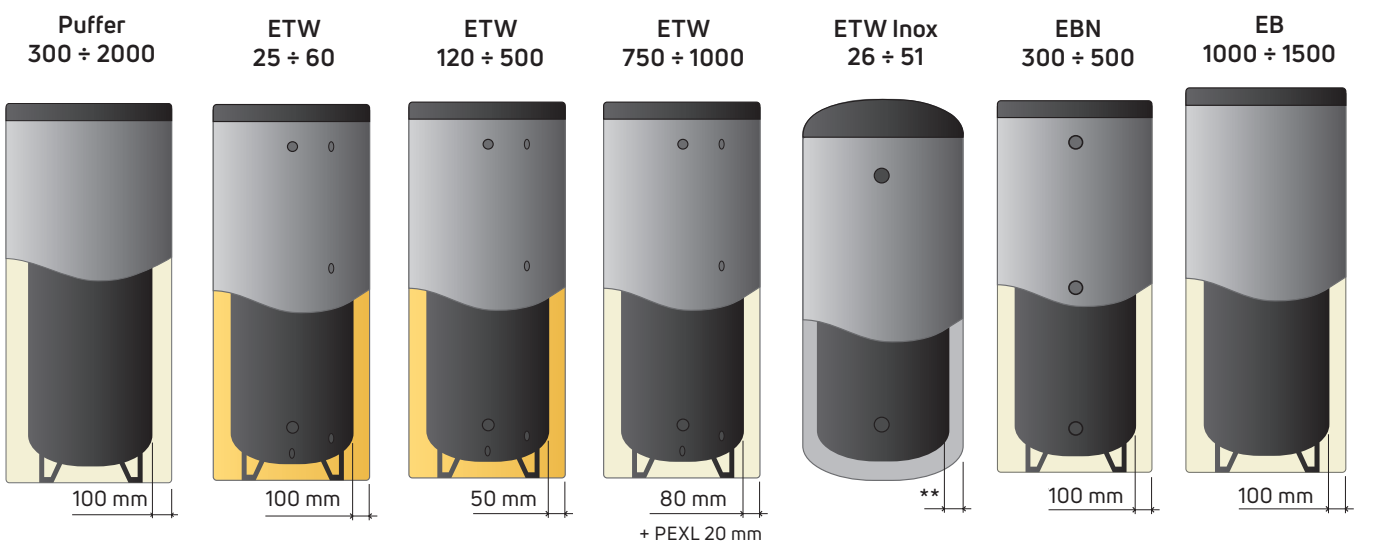
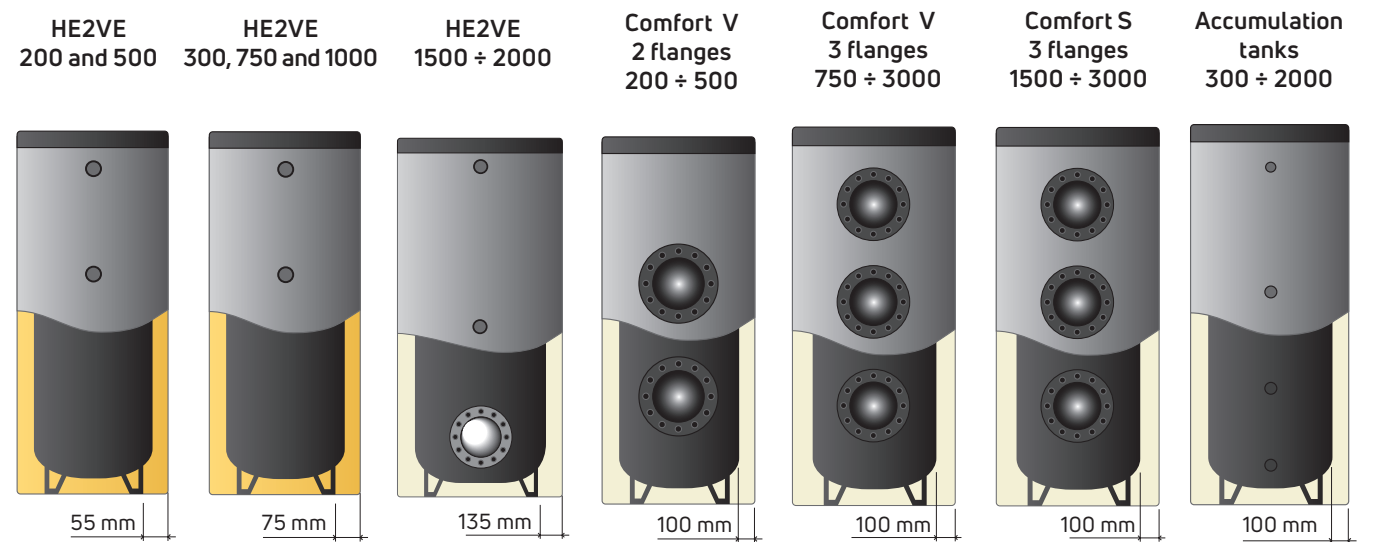
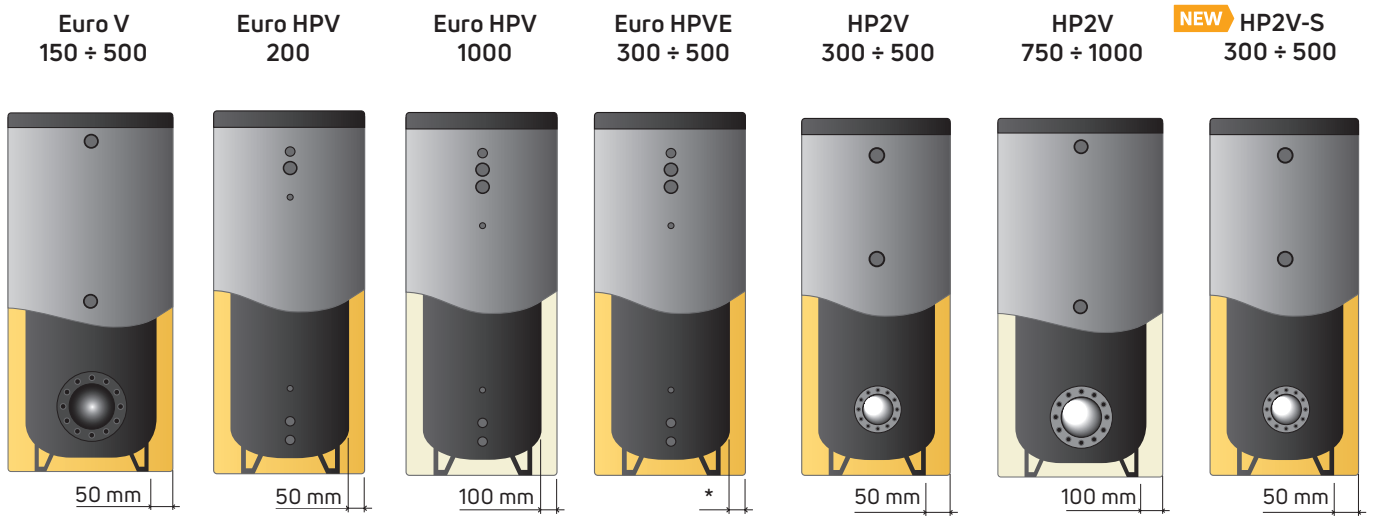


A [mm]
55

Gaslock - Built-in ball valve for gas



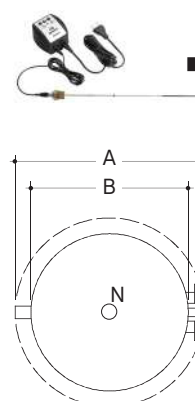
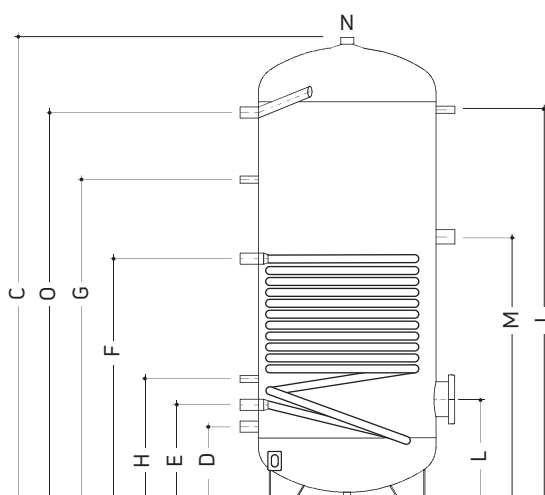
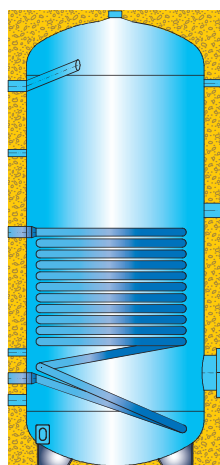
Tanks



* 75 mm for Euro HPVE 300 model, 55 mm for Euro HPVE 500 model

** 24 mm for ETW 26 model, 30 mm for ETW 51 model.

Euro V - Vitrified tanks for domestic water production



Construction

- Storage tank in carbon steel S235JR with dished bottoms with deep drawing; internal treatment of inorganic enamelling (vitrification).
- Insulation in rigid foamed polyurethane foam 50 mm thick.
- Insulation with SKY coating in PVC grey color.
- S235JR carbon steel coil.

Technical data

- Storage tank max continuous operating temperature: 95 °C.
- Storage tank maximum operating pressure: 10 bar.
- Coil maximum operating pressure: 6 bar.

Conformity

- Complies with EU Regulations 812/2013 and 814/2013.
- Compliant with art. 4.3 PED Directive 2014/68/EU.
- Complies with DIN 4753.3.

Supplying

Euro V storage tanks are supplied with the closing flange mounted and equipped with thermal insulation and nr. 1 Boguard electronic anode ■.

Note: A safety valve with maximum calibration = 6 bar and an expansion vessel suitable for the volume of the DHW system must be installed in the DHW circuit near the storage tank.

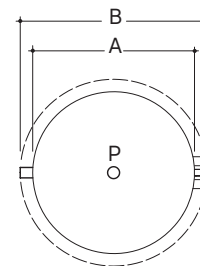
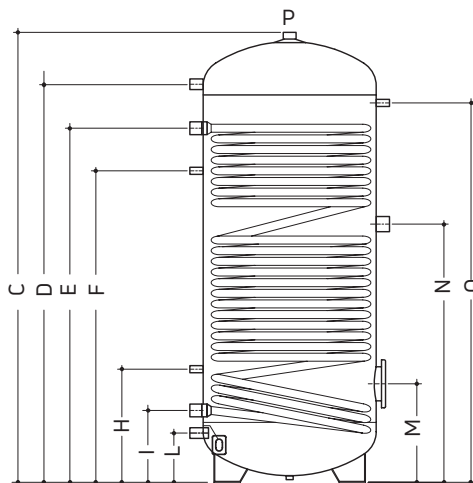
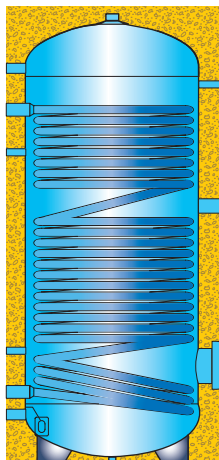
Models	Ref.	u.m.	150	200	300	500
Total capacity (storage volume)		ℓ	160	196	273	475
Non-solar volume Vbu		ℓ	0	0	0	0
Ø with insulation	A	mm	600	600	600	750
Ø without insulation	B	mm	500	500	500	650
Height	C	mm	990	1215	1615	1705
Height with insulation		mm	1000	1225	1625	1715
Cold water inlet	D	1" mm	220	220	220	265
Fixed heat coil outlet	E	1" mm	300	290	290	345
Fixed heat coil inlet	F	1" mm	620	750	890	880
Recirculation	G	1/2" mm	695	835	1165	1170
Thermostat / Thermometer	H	1/2" mm	385	375	375	440
Thermostat / Thermometer	I	1/2" mm	775	1000	1390	1425
Flange	L	DN 180 mm	330	320	320	365
Electric resistance	M	1"1/2 mm	655	810	955	960
Anode	N	1"1/4 mm	Above	Above	Above	Above
Hot water outlet	O	1" mm	765	975	1390	1415
Fixed coil exchange surface		m ²	0,5	0,7	1,2	1,8
Fixed coil content		ℓ	3,1	5,6	7,9	11,4
Empty weight		kg	70	90	115	155
Dispersion S (*)		W	55	67	85	112
Specific dispersion psbsol		W/K	1,22	1,49	1,89	2,49
Energetic class (min F/max A+)			B	C	C	C

Thread: G (ISO 228-1)

(*) In compliance with UNI EN 12897 with $T_{water} = 65 °C$ and $T_{environment} = 20 °C$

Tanks

Euro HPV 200 - Vitrified tank for domestic water production with heat pump



Construction

- Storage tank in carbon steel S235JR with dished bottoms with deep drawing; internal treatment of inorganic enameling (vitrification).
- Insulation in rigid foamed polyurethane foam 50 mm thick.
- Insulation with SKY coating in PVC grey color.
- S235JR carbon steel coil.

Technical data

- Storage tank max continuous operating temperature: 95 °C.
- Storage tank maximum operating pressure: 10 bar.
- Coil maximum operating pressure: 6 bar.

Conformity

- Complies with EU Regulations 812/2013 and 814/2013.
- Compliant with art. 4.3 PED Directive 2014/68/EU.
- Complies with DIN 4753.3.

Supplying

Euro HPV storage tanks are supplied with the closing flange mounted and equipped with thermal insulation and nr. 1 Boguard electronic anode ■.

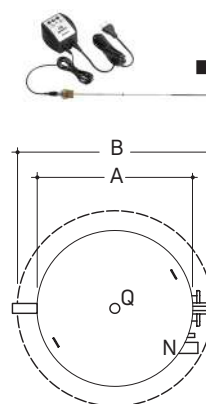
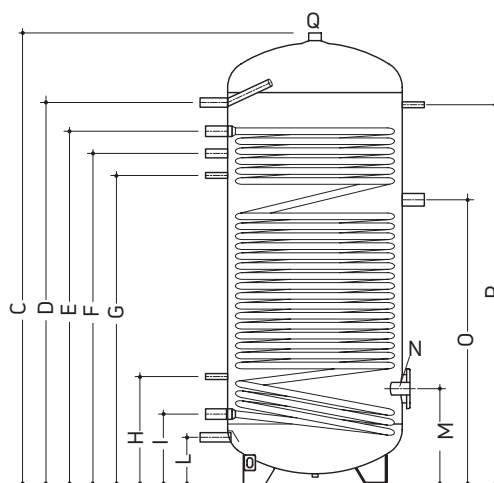
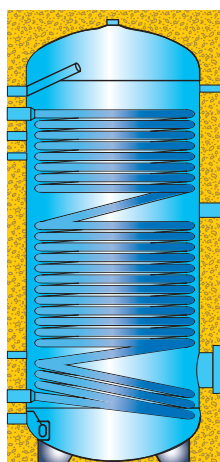
Note: A safety valve with maximum calibration = 6 bar and an expansion vessel suitable for the volume of the DHW system must be installed in the DHW circuit near the storage tank.

Models	Ref.	u.m.	Euro HPV200
Total capacity (storage volume)		ℓ	190
Non-solar volume Vbu		ℓ	0
Ø without insulation	A	mm	500
Ø with insulation	B	mm	600
Height	C	mm	1215
Height with insulation		mm	1225
Hot water outlet	D	1"	1070
Fixed heat coil inlet	E	1"	990
Recirculation	F	1/2"	835
Thermostat / Thermometer	G	-	-
Thermostat / Thermometer	H	1/2"	370
Fixed heat coil outlet	I	1"	220
Cold water inlet	L	1"	140
Flange	M	DN 180	320
Electric resistance	N	1"1/2	730
Thermostat / Thermometer	O	1/2"	990
Anode	P	1"1/4	Above
Fixed coil exchange surface		m ²	3,0
Fixed coil content		ℓ	17,2
Empty weight		kg	120
Dispersion S (*)		W	67
Specific dispersion psbsol		W/K	1,49
Energetic class (min F/max A+)			C

Thread: G (ISO 228-1)

(*) In compliance with UNI EN 12897 with T_{water} = 65 °C and T_{environment} = 20 °C

Euro HPV 1000 - Vitrified tank for domestic water production with heat pump



Construction

- Storage tank in carbon steel S235JR with dished bottoms with deep drawing; internal treatment of inorganic enameeling (vitrification).
- Insulation in 100 mm thick flexible polyester.
- Insulation with SKY coating in PVC grey color.
- S235JR carbon steel coil.

Technical data

- Storage tank max continuous operating temperature: 95 °C.
- Storage tank maximum operating pressure: 10 bar.
- Coil maximum operating pressure: 6 bar.

Conformity

- Complies with EU Regulations 812/2013 and 814/2013.
- Compliant with art. 4.3 PED Directive 2014/68/EU.
- Complies with DIN 4753.3.

Supplying

Euro HPV storage tanks are supplied with the closing flange mounted and equipped with thermal insulation and nr. 1 Boguard electronic anode. ■

Note: A safety valve with maximum calibration = 6 bar and an expansion vessel suitable for the volume of the DHW system must be installed in the DHW circuit near the storage tank.

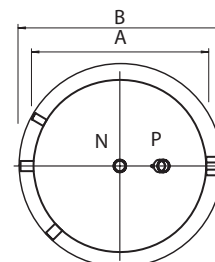
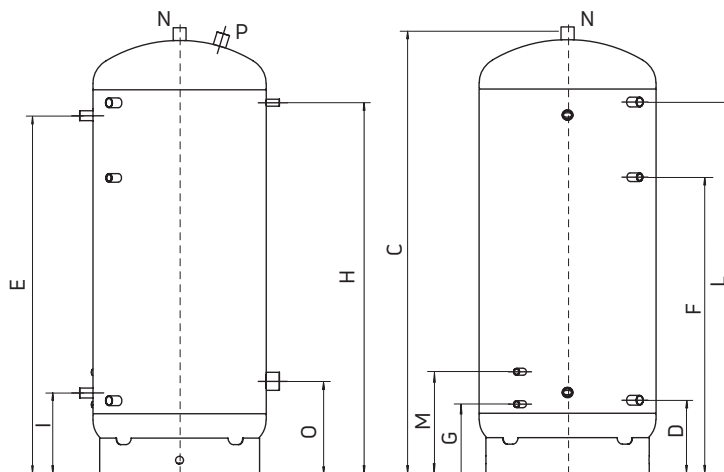
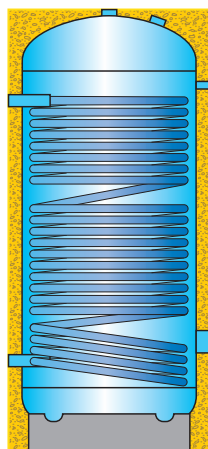
Models	Ref.	u.m.	Euro HPV 1000
Total capacity (storage volume)		ℓ	900
Non-solar volume V _{bu}		ℓ	0
Ø without insulation	A	mm	790
Ø with insulation	B	mm	990
Height	C	mm	2140
Height with insulation		mm	2230
Hot water outlet	D	1"1/4 mm	1940
Fixed heat coil inlet	E	1"1/4 mm	1830
Recirculation	F	1" mm	1615
Thermostat / Thermometer	G	1" mm	1485
Thermostat / Thermometer	H	1" mm	515
Fixed heat coil outlet	I	1"1/4 mm	345
Cold water inlet	L	1"1/4 mm	240
Flange	M	DN 180 mm	470
Anode	N	1"1/2 mm	470
Electric resistance	O	1"1/2 mm	1435
Thermostat / Thermometer	P	1/2" mm	1940
Anode	Q	1"1/2 mm	Above
Fixed coil exchange surface		m ²	8,0
Fixed coil content		ℓ	68,5
Empty weight		kg	320
Dispersion S (*)		W	142
Specific dispersion psbsol		W/K	3,16
Energetic class (min F/max A+)			-

Thread: G (ISO 228-1)

(*) In compliance with UNI EN 12897 with T_{water} = 65 °C and T_{environment} = 20 °C

Tanks

Euro HPVE 300-500 - Vitrified tank for domestic water production with heat pump



Construction

- DD11 steel accumulation; internal inorganic enamelling treatment (vitrification).
- Insulation in rigid expanded polyurethane foam, 50 mm thick.
- RAL9006 gray polystyrene insulation covering.
- Carbon steel coil with external vitrification treatment.

Technical data

- Maximum continuous storage operating temperature: 95 °C.
- Maximum storage operating pressure: 10 bar.
- Maximum coil operating pressure: 12 bar.

Conformity

- Complies with EU Regulations 812/2013 and 814/2013.
- Compliant with art. 4.3 PED Directive 2014/68/EU.
- Complies with DIN 4753.3.

Supplying

The Euro HPVE boilers are supplied with thermal insulation and nr. 1 Boguard electronic anode ■.

Note: A safety valve with maximum calibration = 6 bar and an expansion vessel suitable for the volume of the DHW system must be installed in the DHW circuit near the storage tank.

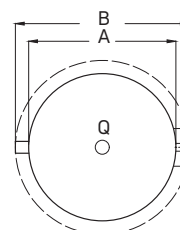
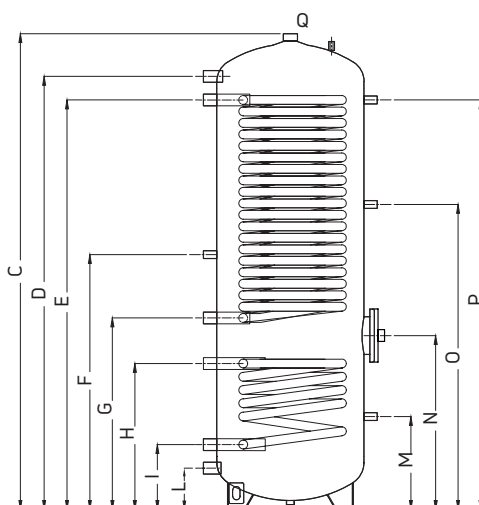
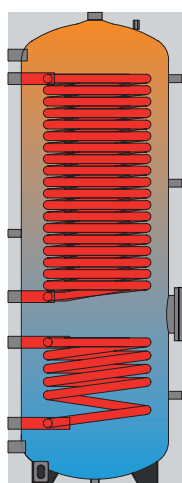
Models		u.m.	Euro HPVE300	Euro HPVE500
Total capacity (storage volume)		ℓ	265	454
Non-solar volume Vbu		ℓ	0	0
Ø without insulation	A	mm	550	650
Ø with insulation	B	mm	650	750
Height	C	mm	1410	1710
Height with insulation		mm	1420	1730
Cold water inlet	D	1"	243	279
Fixed heat coil inlet	E	1"	1113	1354
Recirculation	F	3/4"	978	1209
Thermostat /Thermometer	G	1/2"	378	399
Thermostat /Thermometer	H	1/2"	1158	1429
Fixed coil outlet	I	1"	288	309
Hot water outlet	L	1"	1143	1429
Drain	M	1/2"	243	264
Hot water outlet	N	1"1/4	Above	
Electric resistance	O	2"	348	369
Anode	P	1"1/4	Above	
Fixed coil exchange surface		m ²	3,4	5,5
Fixed coil contents		ℓ	21	35
Empty weight		kg	116	178
Dispersion S (*)		W	65	108
Specific dispersion psbsol		W/K	1,44	2,40
Energetic class (min F/max A+)			B	C

Thread: G (ISO 228-1)

(*) In compliance with UNI EN 12897 with T_{water} = 65 °C and T_{environment} = 20 °C

HP2V-S - Vitrified tanks for domestic hot water production with heat pump and solar collectors

NEW



Construction

- S235JR carbon steel storage tank with deep-drawn curved ends; internal inorganic enamelling treatment (vitrification).
- Insulation: 50 mm thick rigid polyurethane foam
- SKY insulation coating in grey PVC.
- S235JR carbon steel coils.

Technical data

- Maximum continuous operating temperature for storage: 95 °C.
- Maximum operating pressure for storage: 10 bar.
- Maximum operating pressure for coil: 10 bar.

Conformity

- Compliant with EU Regulations 812/2013 and 814/2013.
- Compliant with Art. 4.3 of the PED Directive 2014/68/EU.
- Compliant with DIN 4753.3.

Supplying

HP2V-S boilers are supplied with a mounting flange, thermal insulation and one Bogaard electronic anode.

Note: a safety valve with a maximum setting of 6 bar and an expansion tank suitable for the volume of the sanitary system must be installed in the sanitary circuit near the boiler.

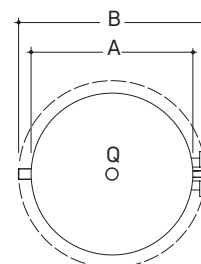
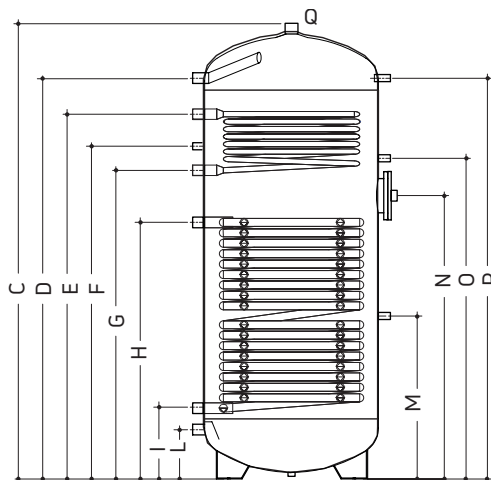
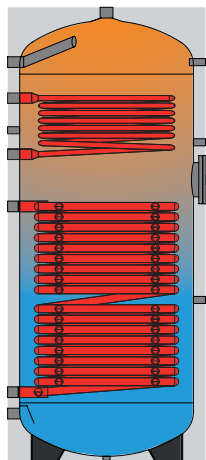
Models	Ref.	u.m.	300 / 500	HP2V-S 300	HP2V-S 500
Total capacity (storage volume)		ℓ		260	455
Energetic class				C	C
Dispersion S (*)		W		85	112
Specific dispersion psbsol		W/K		1,88	2,49
Empty weight		kg		131	182
Non-solar volume Vbu		ℓ		175	300
Lower coil exchange surface		m ²		1,2	1,8
Lower coil content		ℓ		8,0	10,0
Upper coil exchange surface		m ²		3,7	5,2
Upper coil content		ℓ		18,0	31,0
Ø without insulation	A	mm		500	650
Ø with insulation	B	mm		600	740
Height	C	mm		1615	1705
Height with insulation		mm		1615	1705
Hot water outlet	D	mm	1"	1470	1495
Upper coil inlet	E	mm	1"	1390	1395
Recirculation	F	mm	1/2"	865	950
Upper coil outlet	G	mm	1"	650	690
Lower coil inlet	H	mm	1"	495	525
Lower coil outlet	I	mm	1"	220	275
Cold water inlet	L	mm	1"	140	185
Thermostat / Thermometer	M	mm	1/2"	315	320
Flange/Electric resistance	N	mm	DN 180 / 1"1/2	590	625
Thermostat / Thermometer	O	mm	1/2"	1035	1045
Thermometer / Probe	P	mm	1/2"	1390	1420
Anode	Q		1"1/4		Above

Thread: G (ISO 228-1)

(*) In compliance with UNI EN 12897 with T_{water} = 65 °C and T_{environment} = 20 °C

Tanks

HP2V - Vitrified tanks for domestic water production with heat pump and boiler



Construction

- Storage tank in carbon steel S235JR with dished bottoms with deep drawing; internal treatment of inorganic enamel-lining (vitrification).
- Insulation: in 50 mm thick rigid expanded polyurethane (models 300-500); in 100 mm thick flexible polyester (models 750-1000).
- Insulation with SKY coating in PVC grey color.
- S235JR carbon steel coils.

Technical data

- Storage tank max continuous operating temperature: 95 °C.
- Storage tank maximum operating pressure: 10 bar.
- Coils maximum operating pressure: 10 bar.

Conformity

- Complies with EU Regulations 812/2013 and 814/2013.
- Compliant with art. 4.3 PED Directive 2014/68/EU.
- Complies with DIN 4753.3.

Supplying

HP2V storage tanks are supplied with the closing flange mounted and equipped with thermal insulation and nr. 1 Boguard electronic anode ■.

Note: A safety valve with maximum calibration = 6 bar and an expansion vessel suitable for the volume of the DHW system must be installed in the DHW circuit near the storage tank.

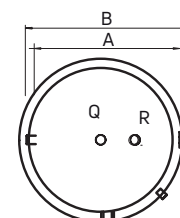
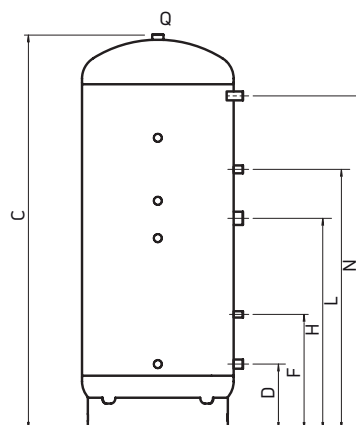
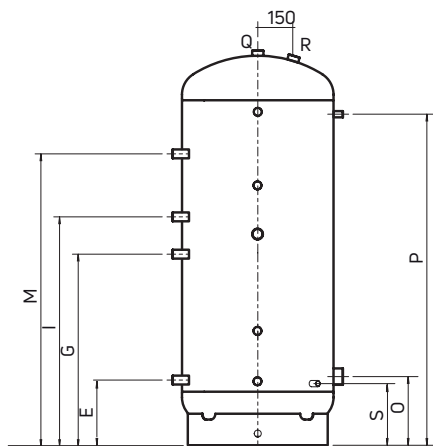
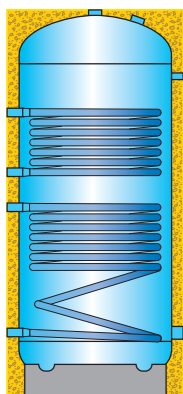
Models	Ref.	u.m.	300 / 500	750 / 1000	HP2V 300	HP2V 500	HP2V 750	HP2V 1000
Total capacity (storage volume)		ℓ			260	455	702	900
Energetic class (min F/max A+)		C			C		-	-
Dispersion S (*)		W			85	112	130	142
Specific dispersion psbsol		W/K			1,88	2,49	2,89	3,16
Empty weight		kg			125	170	288	318
Non-solar volume Vbu		ℓ			175	300	385	430
Lower coil exchange surface		m ²			3,7	5,2	5,1	6,0
Lower coil content		ℓ			18,0	31,0	39,9	36,6
Upper coil exchange surface		m ²			0,7	1,0	1,0	1,4
Upper coil content		ℓ			3,5	5,9	6,4	8,3
Ø without insulation	A	mm			500	650	790	790
Ø with insulation	B	mm			600	750	990	990
Height	C	mm			1615	1705	1810	2140
Height with insulation		mm			1615	1705	1875	2205
Hot water outlet	D	mm	1"	1"1/4	1470	1500	1610	1830
Upper coil inlet	E	mm	1"	1"1/4	1320	1365	1440	1660
Recirculation	F	mm	1/2"	1"	1090	1245	1270	1485
Upper coil outlet	G	mm	1"	1"1/4	1180	1155	1125	1345
Lower coil inlet	H	mm	1"	1"1/4	960	970	915	1085
Lower coil outlet	I	mm	1"	1"1/4	220	265	350	350
Cold water inlet	L	mm	1"	1"1/4	140	185	240	240
Thermostat / Thermometer	M	mm	1/2"	1/2"	605	610	565	520
Flange/Electric resistance	N	mm	DN 180 / 1"1/2	DN 180 / 1"1/2	1045	1070	1015	1200
Thermostat / Thermometer	O	mm	1/2"	1/2"	1230	1210	1270	1485
Thermometer / Probe	P	mm	1/2"	1/2"	1390	1365	1610	1830
Anode	Q		1" (mod. 300) 1"1/4 (mod. 500)	1"1/2			Above	

Thread: G (ISO 228-1)

(*) In compliance with UNI EN 12897 with T_{water} = 65 °C and T_{environment} = 20 °C

HE2VE 200 - 300 - 500 - 750 - 1000

Vitrified tanks for sanitary water



Construction

- DD11 steel accumulation; internal inorganic enamelling treatment (vitrification).
- Insulation in rigid expanded polyurethane thickness 55 mm (mod. 200 and 500), 75 mm (mod. 300), 75 mm with cupels (mod. 750 and 1000).
- Insulation covering in RAL 9006 gray polystyrene (mod. 200, 300 and 500), in RAL 9006 gray PVC SKY (mod. 750 and 1000).
- Carbon steel coil with external vitrification treatment.

Technical data

- Maximum continuous storage operating temperature: 95 °C.
- Maximum storage operating pressure: 10 bar.

- Maximum coil operating pressure: 12 bar.

Conformity

- Complies with EU Regulations 812/2013 and 814/2013.
- Compliant with art. 4.3 PED Directive 2014/68/EU.
- Complies with DIN 4753.3.

Supplying

The HE2VE boilers are supplied with thermal insulation and nr. 1 Bogaard electronic anode ■.

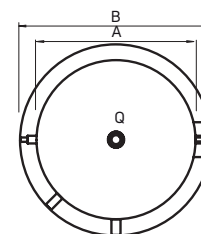
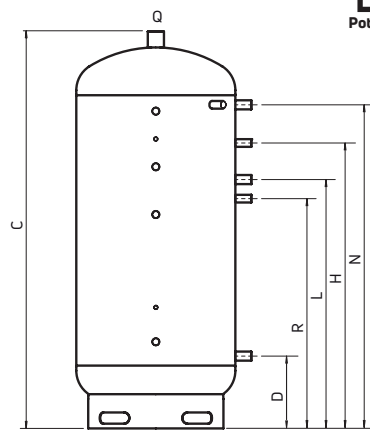
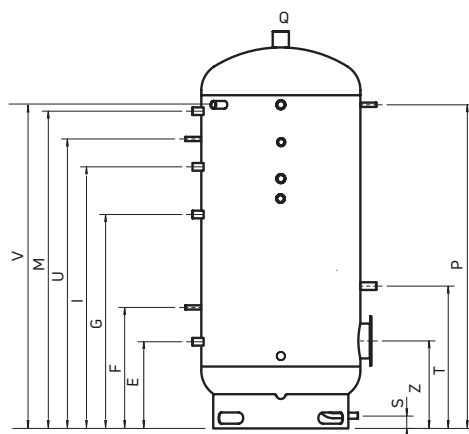
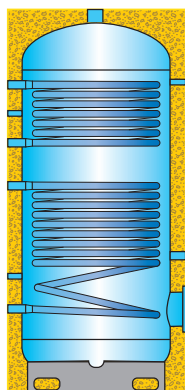
Note: A safety valve with maximum calibration = 6 bar and an expansion vessel suitable for the volume of the DHW system must be installed in the DHW circuit near the storage tank.

Model	200÷500	750÷1000	u.m.	200	300	500	750	1000
Total capacity (storage volume)			ℓ	184	267	472	726	841
Non-solar volume Vbu			ℓ	60	100	180	270	320
Ø without insulation	A		mm	500	500	650	790	790
Ø with insulation	B		mm	610	650	760	940	940
Height	C		mm	1190	1655	1720	1800	2050
Height with insulation			mm	1200	1670	1735	1815	2065
Cold water inlet	D	1"	1"1/4"	mm	235	235	280	320
Lower coil outlet	E	1"	1"1/4"	mm	235	235	280	430
Thermometer - probe	F	1/2"	1/2"	mm	350	380	495	635
Lower coil inlet	G	1"	1"1/4"	mm	585	835	820	950
Electric resistance	H	1"1/2"	1"1/2"	mm	635	875	905	965
Upper coil outlet	I	1"	1"1/4"	mm	680	930	980	1100
Recirculation	L	3/4"	1"	mm	767	1095	1115	1175
Upper coil inlet	M	1"	1"1/4"	mm	930	1351	1250	1400
Hot water outlet	N	1"	1"1/4"	mm	935	1385	1430	1450
Electric resistance	O	2"	2"	mm	250	250	295	345
Thermometer - probe	P	1/2"	1/2"	mm	935	1385	1430	1450
Hot water outlet	Q	1"1/4"	1"1/4"				Above	
Anode	R	1"1/4"	1"1/4"				Above	
Drain	S	1/2"	3/4"	mm	220	220	265	300
Lower coil surface			m²	0,7	1,2	1,8	2,0	2,4
Upper coil surface			m²	0,5	0,75	0,9	1,2	1,2
Lower coil content			ℓ	6,0	9,0	14,0	19,0	25,0
Upper coil content			ℓ	5,0	6,0	8,0	12,0	12,0
Empty weight			kg	69	99,5	146	205	224
Dispersion S (*)			W	56	65	90	129	134
Specific dispersion psbsol			W/K	1,24	1,44	2,00	2,87	2,98
Energetic class (min F/max A+)				B	B	C	-	-

Thread: G (ISO 228-1)

(*) In compliance with UNI EN 12897 with $T_{water} = 65\text{ °C}$ and $T_{environment} = 20\text{ °C}$

HE2VE 1500-2000 - Vitrified tanks for sanitary water



Construction

- DD11 carbon steel accumulation; internal inorganic enamelling treatment (vitrification).
- Insulation in 135 mm thick flexible polyester.
- SKY insulation covering in RAL 9006 gray PVC.
- Carbon steel coil with external vitrification treatment.

Technical data

- Maximum continuous storage operating temperature: 95 °C.
- Maximum storage operating pressure: 6 bar.
- Maximum coil operating pressure: 12 bar.

Conformity

- Complies with EU Regulations 812/2013 and 814/2013.
- Compliant with art. 4.3 PED Directive 2014/68/EU.
- Complies with DIN 4753.3.

Supplying

The HE2VE boilers are supplied with thermal insulation and nr. 1 double Boguard electronic anode ■■.

Note: A safety valve with maximum calibration = 6 bar and an expansion vessel suitable for the volume of the DHW system must be installed in the DHW circuit near the storage tank.

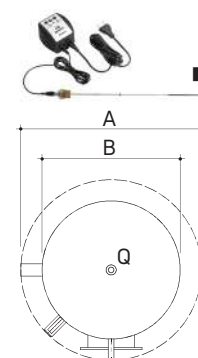
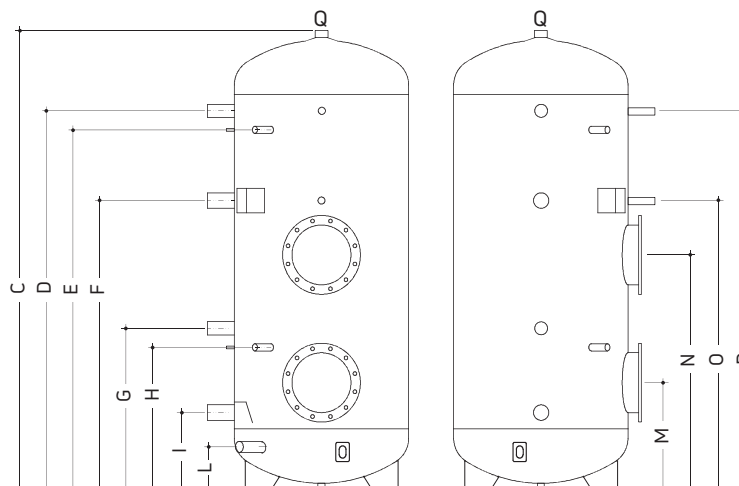
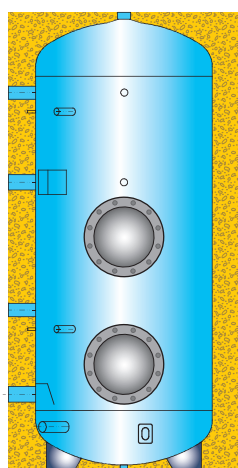
Model		u.m.	1500	2000
Total capacity (storage volume)		ℓ	1587	1886
Non-solar volume Vbu		ℓ	420	400
Ø without insulation	A	mm	1000	1100
Ø with insulation	B	mm	1270	1370
Height	C	mm	2495	2475
Height with insulation		mm	2530	2510
Cold water inlet	D	1"1/2 mm	455	445
Lower coil outlet	E	1"1/4 mm	545	535
Thermometer - probe	F	1/2" mm	760	760
Lower coil inlet	G	1"1/4 mm	1345	1425
Electric resistance	H	1"1/2 mm	1565	1565
Upper coil outlet	I	1"1/4 mm	1645	1605
Recirculation	L	1"1/4 mm	1795	1785
Upper coil inlet	M	1"1/4 mm	1995	2025
Hot water outlet	N	1"1/2 mm	2035	2025
Thermometer - probe	P	1/2" mm	2035	2025
Hot water outlet	Q	3"	Above	
Anode	R	1"1/4	1445	1455
Drain	S	1" mm	80	80
Sanitary expansion vessel	T	1"1/4 mm	895	885
Thermometer - probe	U	1/2" mm	1820	1780
Anode	V	1"1/4 mm	2035	2025
Inspection flange	Z	DN 220 mm	550	540
Lower coil surface		m ²	3,6	4,3
Upper coil surface		m ²	1,6	2,1
Lower coil content		ℓ	36,0	48,0
Upper coil content		ℓ	18,0	24,0
Empty weight		kg	404	501
Dispersion S (*)		W	163	174
Specific dispersion psbsol		W/K	3,62	3,87
Energetic class (min F/max A+)			-	-

Thread: G (ISO 228-1) (*) In compliance with UNI EN 12897 with T_{water} = 65 °C and T_{environment} = 20 °C

Tanks

Comfort V 200-300-500

Vitrified tanks for domestic water production



Construction

- Storage tank in carbon steel S235JR with dished bottoms with deep drawing; internal treatment of inorganic enamelling (vitrification).
- Insulation in 100 mm thick flexible polyester.
- Insulation with SKY coating in PVC grey color.

Supplying

The Comfort V storage tanks are supplied with the closing flange mounted and equipped with thermal insulation and nr. 1 Boguard electronic anode ■.

Their completion requires the insertion of the chosen coil; coils are not included.

Technical data

- Storage tank max continuous operating temperature: 95 °C.
- Storage tank maximum operating pressure: 10 bar.

Note: A safety valve with maximum calibration = 6 bar and an expansion vessel suitable for the volume of the DHW system must be installed in the DHW circuit near the storage tank.

Conformity

- Complies with EU Regulations 812/2013 and 814/2013.
- Compliant with art. 4.3 PED Directive 2014/68/EU.
- Complies with DIN 4753.3.

Models	Ref.	u.m.	200	300	500	
Total capacity (storage volume)		ℓ	208	285	490	
Non-solar volume Vbu		ℓ	95	160	275	
Ø with insulation	A	mm	700	700	850	
Ø without insulation	B	mm	500	500	650	
Height	C	mm	1215	1615	1690	
Height with insulation		mm	1305	1705	1780	
Anode	D	1"1/4	mm	965	1375	1395
Thermometer / Probe / Anode	E	1/2"	mm	895	1315	1325
Electric resistance/Recirculation	F	1"1/2	mm	725	1010	1065
Anode	G	1"1/4	mm	485	540	595
Thermometer / Probe / Anode	H	1/2"	mm	415	480	525
Cold water inlet	I	1"1/2	mm	245	235	285
Drain	L	1"1/4	mm	140	140	165
First flange	M	DN290	mm	345	345	395
Second flange	N	DN290	mm	765	810	865
Thermometer / Probe / Anode	O	1/2"	mm	–	1010	1065
Thermometer / Probe / Anode	P	1/2"	mm	965	1375	1395
Hot water outlet	Q	1"1/4	mm	Above		
Empty weight		kg	70	105	145	
Dispersion S (*)		W	77	95	115	
Specific dispersion psbsol		W/K	1,71	2,11	2,56	
Energetic class (min F/max A+)			C	C	C	

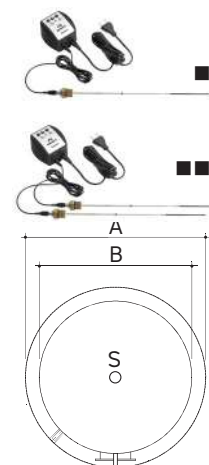
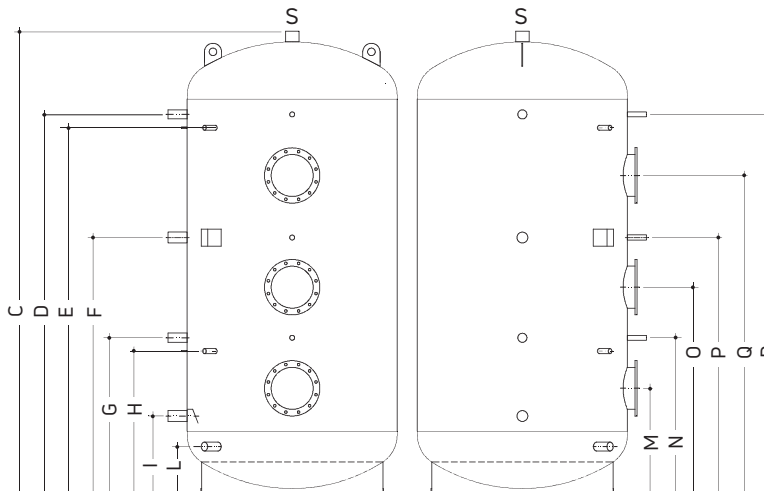
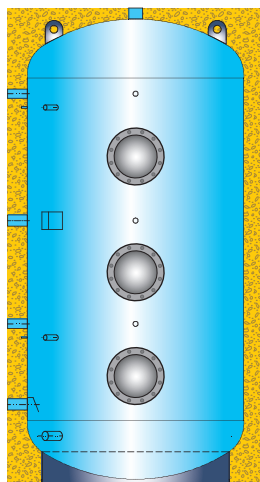
Thread: G (ISO 228-1)

(*) In compliance with UNI EN 12897 with $T_{water} = 65\text{ °C}$ and $T_{environment} = 20\text{ °C}$

Tanks

Comfort V 750-1000-1500-2000-3000

Vitrified tanks for domestic water production



Construction

- Storage tank in carbon steel S235JR with dished bottoms with deep drawing; internal treatment of inorganic enamelling (vitrification).
- Insulation in 100 mm thick flexible polyester.
- Insulation with SKY coating in PVC grey color.

Technical data

- Storage tank max continuous operating temperature: 95 °C.
- Storage tank maximum operating pressure: 10 bar (models 750-1000), 8 bar (models 1500-2000-3000).

Supplying

The Comfort V storage tanks are supplied with the closing flange mounted and equipped with thermal insulation and nr. 1 Boguard electronic anode (single for 750-1000 models ■, double for 1500-2000-3000 models ■■).

Their completion requires the insertion of the chosen coil; coils are not included.

Note: A safety valve with maximum calibration = 6 bar and an expansion vessel suitable for the volume of the DHW system must be installed in the DHW circuit near the storage tank.

Conformity

- Complies with EU Regulations 812/2013 and 814/2013.
- Compliant with art. 4.3 PED Directive 2014/68/EU.
- Complies with DIN 4753.3.

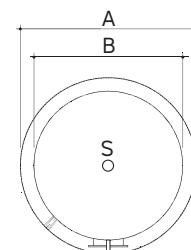
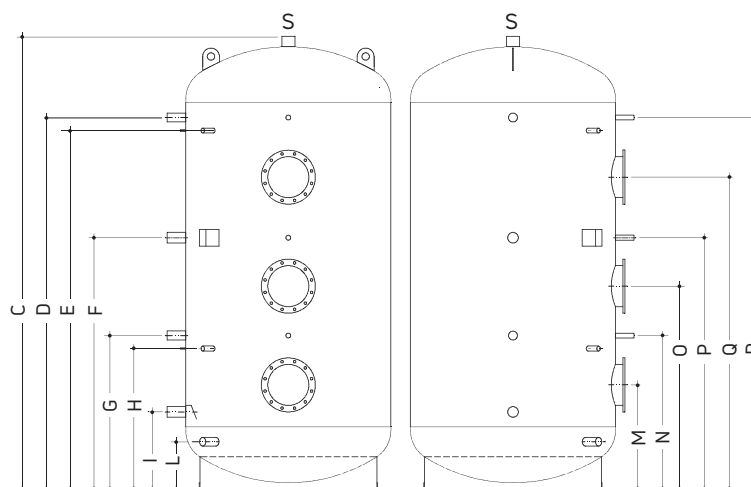
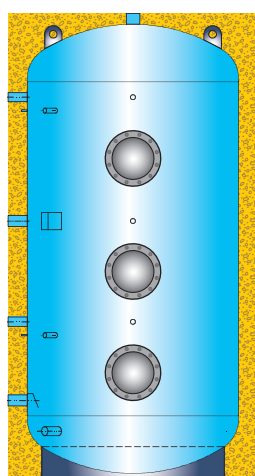
Models	Ref.	u.m.	750	1000	1500	2000	3000	
Total capacity (storage volume)		ℓ	749	955	1430	1990	2848	
Non-solar volume Vbu		ℓ	420	490	790	840	1745	
Ø with insulation	A	mm	990	990	1200	1300	1450	
Ø without insulation	B	mm	790	790	1000	1100	1250	
Height	C	mm	1810	2140	2120	2425	2650	
Height with insulation		mm	1900	2230	2180	2495	2705	
Anode	D	1"1/4	mm	1500	1830	1720	1990	2180
Thermometer / Probe / Anode	E	1/2"	mm	1430	1760	1650	1920	2110
Electric resistance or recirculation	F	1"1/2	mm	1130	1295	1300	1345	1425
Anode	G	1"1/4	mm	670	760	800	820	835
Thermometer / Probe / Anode	H	1/2"	mm	600	690	730	750	765
Cold water inlet	I	1"1/2 or 2" (*)	mm	350	350	435	410	440
Drain	L	1"1/4	mm	240	240	280	250	235
First flange	M	DN290	mm	470	470	545	555	550
Thermometer / Probe / Anode	N	1/2"	mm	-	-	760	820	835
Second flange	O	DN290	mm	940	1075	1075	1085	1130
Thermometer / Probe / Anode	P	1/2"	mm	1130	1295	1290	1345	1425
Third flange	Q	DN290	mm	1320	1610	1505	1670	1800
Thermometer / Probe / Anode	R	1/2"	mm	1510	1830	1720	1990	2180
Hot water outlet	S	1"1/2 or 2" (*)	mm			Above		
Empty weight		kg	195	205	285	350	620	
Dispersion S (**)		W	130	142	162	186	344	
Specific dispersion psbsol		W/K	2,89	3,16	3,6	4,13	7,64	

Thread: G (ISO 228-1)

(*) 1"1/2 for models up to 1500, 2" for models from 2000 to 3000

(**) In compliance with UNI EN 12897 with $T_{water} = 65\text{ °C}$ and $T_{environment} = 20\text{ °C}$

Comfort S - Enamelled tanks for domestic water production



Construction

- Storage tank in carbon steel S235JR with dished bottoms with deep drawing; internal organic enamel treatment (treatment with thermosetting resins).
- Insulation in 100 mm thick flexible polyester.
- Insulation with SKY coating in PVC grey color.

Supplying

Comfort S storage tanks are supplied with closing flange mounted and equipped with thermal insulation and nr. 1 double Boguard electronic anode ■■. Their completion requires the insertion of the chosen coil; coils are not included.

Technical data

- Storage tank max continuous operating temperature: 70 °C.
- Storage tank maximum operating pressure: 6 bar

Note: A safety valve with maximum calibration = 6 bar and an expansion vessel suitable for the volume of the DHW system must be installed in the DHW circuit near the storage tank.

Conformity

- Complies with EU Regulations 812/2013 and 814/2013.
- Compliant with art. 4.3 PED Directive 2014/68/EU.

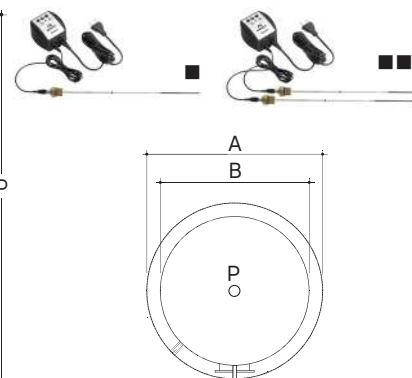
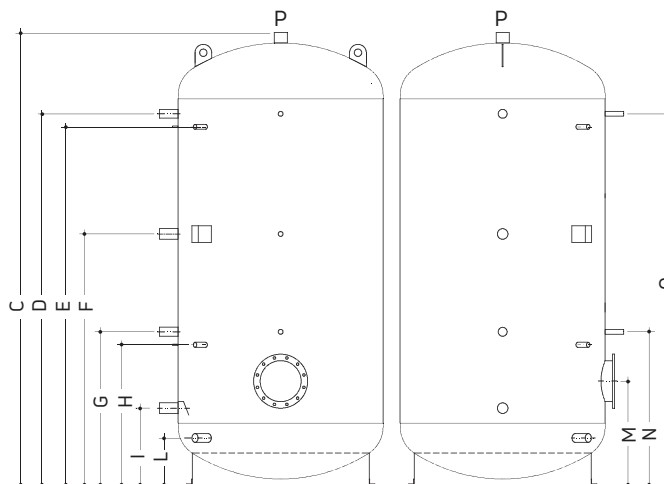
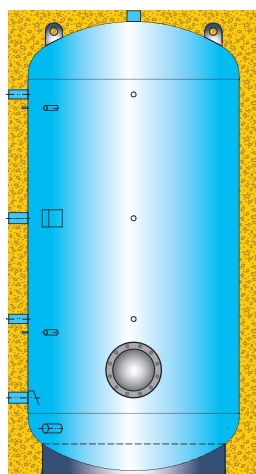
Models	Ref.	u.m.	1500	2000	3000
Total capacity (storage volume)		ℓ	1430	1990	2959
Non-solar volume Vbu		ℓ	790	840	1745
Ø with insulation	A	mm	1200	1300	1450
Ø without insulation	B	mm	1000	1100	1250
Height	C	mm	2105	2425	2700
Height with insulation		mm	2210	2495	2755
Anode	D	1"1/4 mm	1750	1990	2265
Thermometer / Probe / Anode	E	1/2" mm	1680	1920	2196
Electric resistance or recirculation	F	1"1/2 mm	1295	1345	1455
Anode	G	1"1/4 mm	780	820	865
Thermometer / Probe / Anode	H	1/2" mm	710	750	795
Cold water inlet	I	1"1/2 or 2" (*) mm	395	410	475
Drain	L	1"1/4 mm	180	180	190
First flange	M	DN290 mm	530	555	580
Thermometer / Probe / Anode	N	1/2" mm	780	820	865
Second flange	O	DN290 mm	1000	1085	1165
Thermometer / Probe / Anode	P	1/2" mm	1295	1345	1455
Third flange	Q	DN290 mm	1525	1670	1860
Thermometer / Probe / Anode	R	1/2" mm	1750	1990	2265
Hot water outlet	S	1"1/2 or 2" (*) mm		Above	
Empty weight		kg	285	350	535
Dispersion S (**)		W	162	186	344
Specific dispersion psbsol		W/K	3,60	4,13	7,64

Thread: G (ISO 228-1)

(*) 1"1/2 for models up to 1500, 2" for models from 2000 to 3000

(**) In compliance with UNI EN 12897 with $T_{water} = 65\text{ °C}$ and $T_{environment} = 20\text{ °C}$

Vitrified tanks for domestic water production



Construction

- Storage tank in carbon steel S235JR with dished bottoms with deep drawing; internal treatment of inorganic enamelling (vitrification).
- Insulation in 100 mm thick flexible polyester.
- Insulation with SKY coating in PVC grey color.

Technical data

- Storage tank max continuous operating temperature: 95 °C.
- Storage tank maximum operating pressure: 10 bar (models 300-500-750-1000), 8 bar models 1500-2000.

Conformity

- Complies with EU Regulations 812/2013 and 814/2013.
- Compliant with art. 4.3 PED Directive 2014/68/EU.
- Complies with DIN 4753.3.

Supplying

The vitrified storage tanks are supplied with the closing flange mounted and equipped with thermal insulation and nr. 1 Boguard electronic anode (single for models 300-500-750-1000 ■, double for models 1500-2000 ■■). In the 2000 model only there is a closing flange mounted.

Note: A safety valve with maximum calibration = 6 bar and an expansion vessel suitable for the volume of the DHW system must be installed in the DHW circuit near the storage tank.

Models	Ref.		u.m.	300	500	750	1000	1500	2000
Total capacity (storage volume)			ℓ	285	490	749	955	1430	1990
Ø with insulation	A		mm	700	850	990	990	1200	1300
Ø without insulation	B		mm	500	650	790	790	1000	1100
Height	C		mm	1615	1690	1810	2140	2120	2425
Height with insulation			mm	1705	1780	1900	2230	2180	2495
Anode	D	1"1/4	mm	1375	1395	1500	1830	1720	1990
Thermometer / Probe / Anode	E	1/2"	mm	1315	1325	1430	1760	1650	1920
Electric resistance/Recirculation	F	1"1/2	mm	1010	1065	1130	1295	1300	1345
Anode	G	1"1/4	mm	540	595	670	760	800	820
Thermometer / Probe / Anode	H	1"1/2	mm	480	525	600	690	730	750
Cold water inlet	I	1"1/2 or 2"(*)	mm	235	285	350	350	435	410
Drain	L	1"1/4	mm	140	165	240	240	250	250
Flange	M	DN290	mm	-	-	-	-	-	555
Thermometer / Probe / Anode	N	1/2"	mm	-	-	-	-	760	820
Thermometer / Probe / Anode	O	1/2"	mm	1375	1395	1510	1830	1720	1990
Hot water outlet	P	1"1/4 or 1"1/2" or 2" (**)	mm	Above					
Empty weight			kg	105	145	195	205	285	350
Dispersion S (***)			W	95	115	130	142	162	186
Specific dispersion psbsol			W/K	2,11	2,56	2,89	3,16	3,6	4,13
Energetic class (min F/max A+)				C	C	-	-	-	-

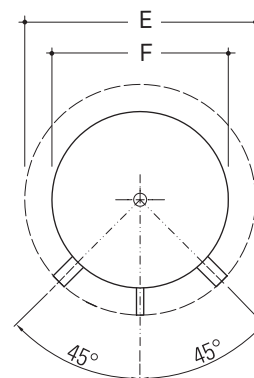
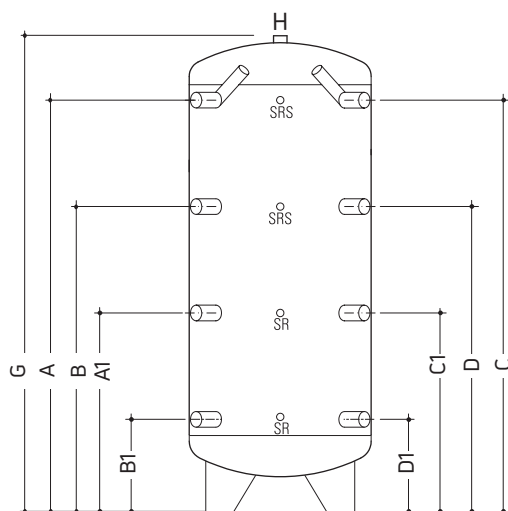
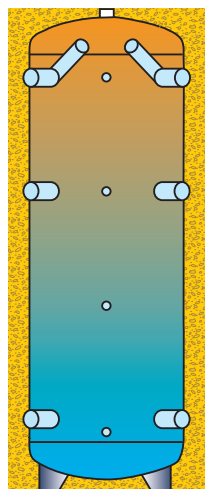
Thread: G (ISO 228-1)

(*) 1"1/2 for models up to 1500, 2" for model 2000

(**) 1"1/4 for models from 300 to 500, 1"1/2 for models from 750 to 1500, 2" for model 2000

(***) In compliance with UNI EN 12897 with $T_{water} = 65\text{ °C}$ and $T_{environment} = 20\text{ °C}$

Puffer for heating water, without coil



Puffer are used for the storage of heating water in support of systems with boiler, wood-burning boiler, thermal stove, fire-places and other sources of energy.

Construction

- Storage tank untreated inside, painted outside surface.
- Insulation in 100 mm thick flexible polyester.
- Insulation with SKY coating in PVC grey color.

Technical data

- Storage tank max continuous operating temperature: 95 °C.
- Storage tank maximum operating pressure: 3 bar.

Conformity

- Complies with EU Regulations 812/2013 and 814/2013.
- Compliant with art. 4.3 PED Directive 2014/68/EU.

Supplying

Puffers are supplied equipped with thermal insulation.

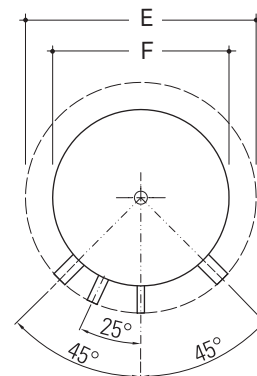
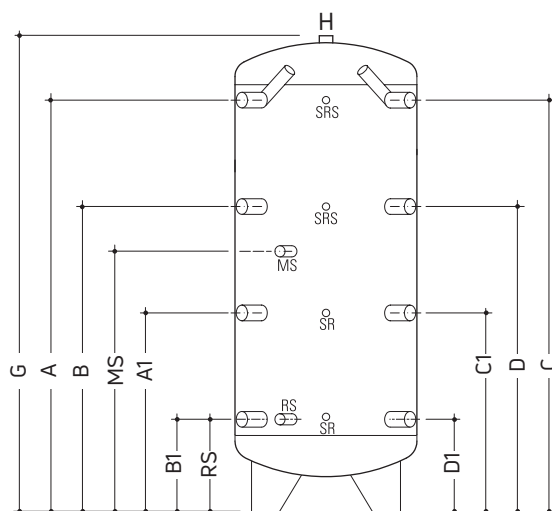
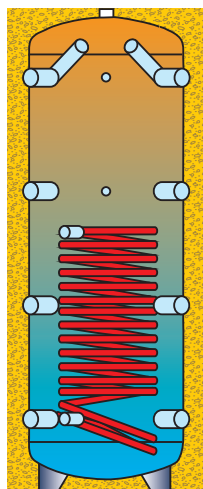
Note: Fit the Puffers with a safety valve and expansion tank suitable for the volume of the system.

Models	Ref.	u.m.	300	500	1000	1500	2000
Total capacity (storage volume)		ℓ	270	476	920	1410	2010
Fireplace stove flow	A	1"½	mm	1340	1470	1860	2070
Fireplace stove return	A1	1"½	mm	230	710	805	850
Heating flow	B	1"½	mm	970	1090	1335	1310
Heating return	B1	1"½	mm	600	330	280	390
Boiler flow	C	1"½	mm	1340	1470	1860	2070
Boiler return	C1	1"½	mm	600	710	805	850
Third heating source flow or electric resistance	D	1"½	mm	970	1090	1335	1310
Third heating source return	D1	1"½	mm	230	330	280	390
Heating probe	SR	1/2"	-	-	-	-	-
Solar heating probe	SRS	1/2"	-	-	-	-	-
Ø with insulation	E	mm	700	850	990	1200	1300
Ø without insulation	F	mm	500	650	790	1000	1100
Vent	H	1"¼	Above				
Height	G	mm	1560	1700	2115	2090	2405
Height with insulation		mm	1665	1800	2215	2190	2505
Empty weight		kg	77,5	105	150	196	215
Dispersion S (*)		W	93	110	143	167	190
Specific dispersion psbsol		W/K	2,07	2,44	3,18	3,71	4,22
Energetic class (min F/max A+)			C	C	-	-	-

Thread: G (ISO 228-1)

(*) In compliance with UNI EN 12897 with $T_{water} = 65\text{ °C}$ and $T_{environment} = 20\text{ °C}$

Puffer for heating water, with coil



Puffer are used for the storage of heating water in support of systems with boiler, wood-burning boiler, thermal stove, fireplaces and other sources of energy.

Construction

- Storage tank untreated inside, painted outside surface.
- With or without coil for solar system or fireplace stove.
- Insulation in 100 mm thick flexible polyester.
- Insulation with SKY coating in PVC grey color.

Technical data

- Storage tank max continuous operating temperature: 95 °C.
- Storage tank maximum operating pressure: 3 bar.
- Coil maximum operating pressure: 10 bar.

Conformity

- Complies with EU Regulations 812/2013 and 814/2013.
- Compliant with art. 4.3 PED Directive 2014/68/EU.

Supplying

Puffers are supplied equipped with thermal insulation.

Note: Fit the Puffers with a safety valve and expansion tank suitable for the volume of the system.

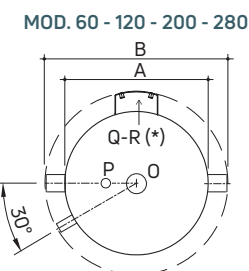
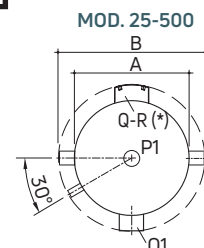
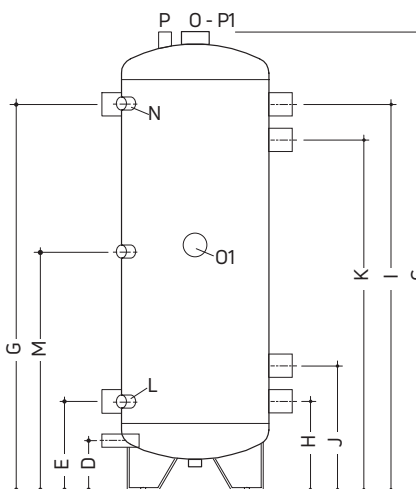
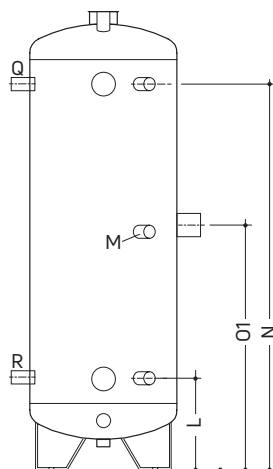
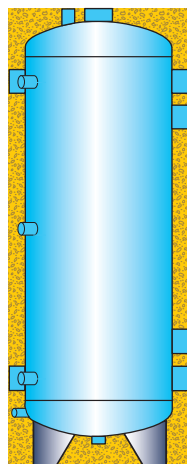
Models	Ref.	u.m.	300	500	1000	1500	2000	
Total capacity (storage volume)		ℓ	270	476	920	1410	2010	
Fireplace stove flow	A	1"½	mm	1340	1470	1860	1770	2070
Fireplace stove return	A1	1"½	mm	230	710	805	850	950
Heating flow	B	1"½	mm	970	1090	1335	1310	1510
Heating return	B1	1"½	mm	600	330	280	390	390
Boiler flow	C	1"½	mm	1340	1470	1860	1770	2070
Boiler return	C1	1"½	mm	600	710	805	850	950
Third heating source flow or electric resistance	D	1"½	mm	970	1090	1335	1310	1510
Third heating source return	D1	1"½	mm	230	330	280	390	390
Solar flow	MS	1"	mm	830	930	990	1290	1290
Solar return	RS	1"	mm	230	330	280	390	390
Heating probe	SR	1/2"		–	–	–	–	–
Solar heating probe	SRS	1/2"		–	–	–	–	–
Ø with insulation	E		mm	700	850	990	1200	1300
Ø without insulation	F		mm	500	650	790	1000	1100
Vent	H	1"¼				Above		
Height	G		mm	1560	1700	2115	2090	2405
Height with insulation			mm	1665	1800	2215	2190	2505
Coil exchange surface			m²	1,8	1,8	2,6	3,8	3,8
Fixed coil content			ℓ	10,4	10,4	14,6	21,6	21,6
Empty weight			kg	95	124	180	240	260
Dispersion S (*)			W	93	110	143	167	190
Specific dispersion psbsol			W/K	2,07	2,44	3,18	3,71	4,22
Energetic class (min F/max A+)				C	C	–	–	–

Thread: G (ISO 228-1)

(*) In compliance with UNI EN 12897 with $T_{water} = 65\text{ °C}$ and $T_{environment} = 20\text{ °C}$

ETW 25-60-120-280- 500

Hot and cold technical water storage tanks



(*) ONLY mod. 25, 60 and 120

ETW series storage tanks are particularly suitable for storing hot and cold technical water to create thermal flywheels for heat pump systems.

They are not suitable for the storage of water for sanitary use.

Construction

- Untreated storage tank inside.
- Rigid polyurethane foam insulation foamed directly on the storage tank: thickness 40 mm (ETW models 25-60), thickness 50 mm (ETW models 120-200-280-500).
- SKY insulation coating in PVC gray color.

Technical data

- Maximum continuous storage operating temperature: 95 °C.
- Maximum accumulation working pressure: 6 bar.

Conformity

- Complies with EU Regulations 812/2013 and 814/2013.
- Compliant with art. 4.3 PED Directive 2014/68/EU.

Supplying

ETW are supplied equipped with thermal insulation..

Note: ETW 25-60-120 models can be hung on the wall using the brackets provided.

Models	Ref.	ETW 25	ETW 60	ETW 120	ETW 200	ETW 280	ETW 500	u.m.	ETW 25	ETW 60	ETW 120	ETW 200	ETW 280	ETW 500
Total capacity (storage volume)								ℓ	24	57	123	203	277	473
Ø without insulation	A							mm	300	300	400	450	500	600
Ø with insulation	B							mm	380	380	510	550	600	700
Height	C							mm	451	935	1100	1395	1560	1855
Height with insulation								mm	461	945	1120	1405	1570	1855
Vent	D	1/2"	1/2"	1/2"	3/4"	3/4"		mm	80	100	100	105	120	135
System return	E	1 1/4"	1 1/4"	1 1/2"	2"	2 1/2"		mm	165	180	185	215	235	240
System delivery	G	1 1/4"	1 1/4"	1 1/2"	2"	2 1/2"		mm	300	785	935	1200	1340	1610
Heat pump return	H	1 1/4"	1 1/4"	1 1/2"	2"	2 1/2"		mm	165	180	185	215	235	240
Boiler flow	I	1 1/4"	1 1/4"	1 1/2"	2"	2 1/2"		mm	300	785	935	1200	1340	1610
Boiler return	J	-	1 1/4"	1 1/2"	2"	2 1/2"		mm	-	275	280	315	350	420
Heat pump flow	K	-	1 1/4"	1 1/2"	2"	2 1/2"		mm	-	690	840	1100	1225	1430
Thermometer - probe	L	1/2"	1/2"	1/2"	1/2"	1/2"		mm	80	180	185	215	235	240
Thermometer - probe	M	1/2"	1/2"	1/2"	1/2"	1/2"		mm	165	485	560	705	785	925
Thermometer - probe	N	1/2"	1/2"	1/2"	1/2"	1/2"		mm	300	785	935	1200	1340	1610
Electrical resistance (*)	O	-	1 1/2"	1 1/2"	1 1/2"	-			-	-	-	-	-	-
	O1	1 1/2"	-	-	-	1 1/2"		mm	210	-	-	-	-	970
Connection for air vent	P	1/2"	1/2"	1/2"	1/2"	-			-	-	-	-	-	-
	P1	1"	-	-	-	1 1/4"			Above	-	-	-	-	Above
Upper bracket	Q							mm	300	785	935	-	-	-
Lower bracket	R							mm	165	180	185	-	-	-
Empty weight								kg	18	25	35	45	55	100
Dispersion S (**)								W	19	34	50	68	82	114
Specific dispersion psbsol								W/K	0,42	0,75	1,10	1,51	1,82	2,53
Energetic class (min F/max A+)									A	B	B	C	C	C

Thread : G (ISO 228-1)

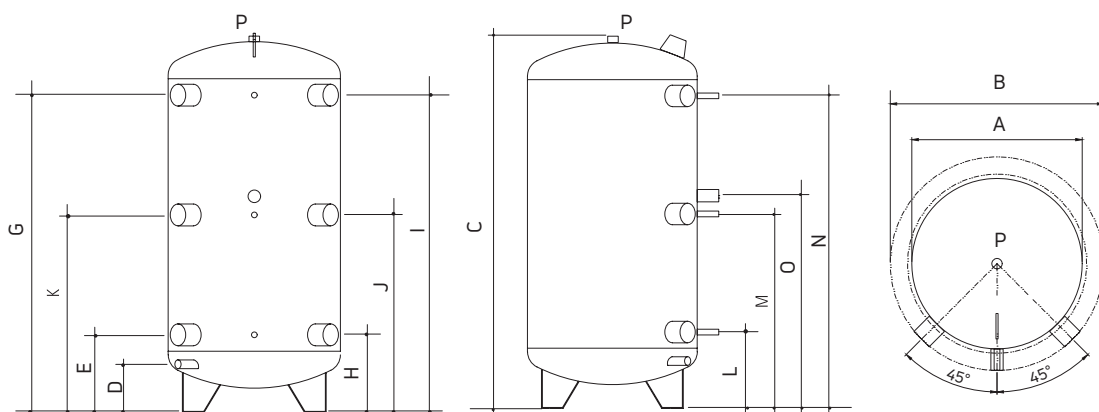
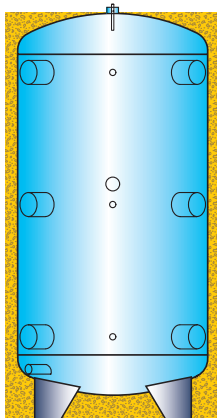
(*) The electrical resistance, in the case of models 60, 120, 200, 280 (O connection), must be suitable for operation in the vertical position.

(**) In compliance with UNI EN 12897 with $T_{water} = 65 °C$ and $T_{environment} = 20 °C$

Tanks

ETW 750-1000

Hot and cold technical water storage tanks



ETW series storage tanks are particularly suitable for storing hot and cold technical water to create thermal flywheels for heat pump systems.

They are not suitable for the storage of water for sanitary use.

Construction

- Untreated accumulation inside.
- Insulation: flexible polyester 80 mm thick + PEXL 20 mm thick.
- SKY insulation coating in PVC gray color.

Technical data

- Maximum continuous storage operating temperature: 95 °C.
- Maximum accumulator operating pressure: 6 bar.

Conformity

- Complies with EU Regulations 812/2013 and 814/2013.
- Compliant with art. 4.3 PED Directive 2014/68/EU.

Supplying

ETW are supplied equipped with thermal insulation.

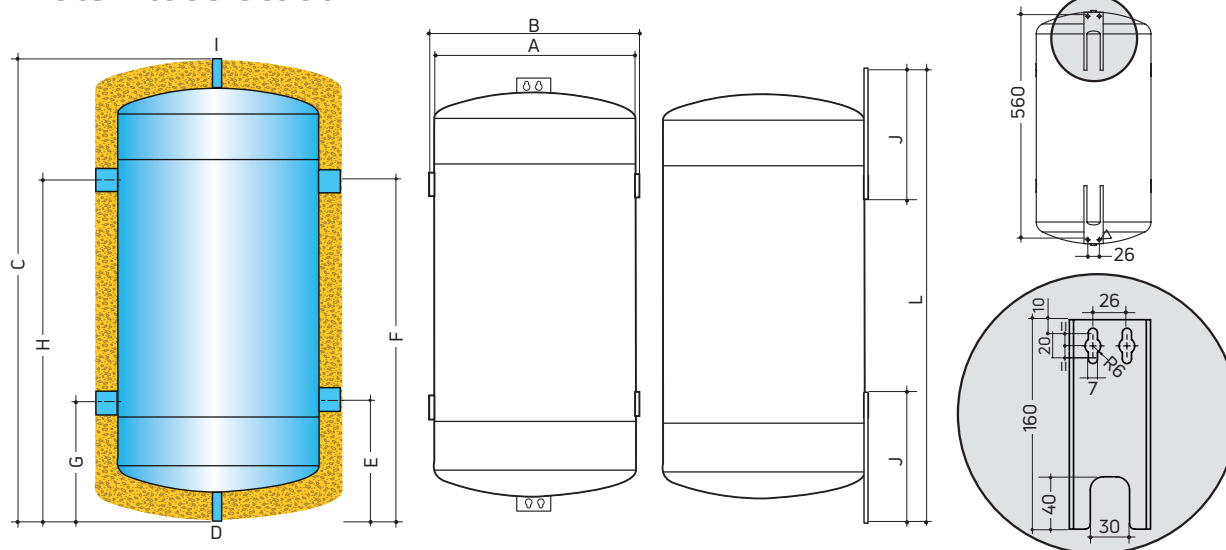
Models	Ref.	ETW 750	ETW 1000	u.m.	ETW 750	ETW 1000
Total capacity (storage volume)				ℓ	732	855
Ø without insulation	A			mm	790	790
Ø with insulation	B			mm	990	990
Height	C			mm	1725	1855
Height with insulation				mm	1800	2050
Vent	D	1"	1"	mm	220	220
System return	E	3"	3"	mm	355	355
System delivery	G	3"	3"	mm	1455	1705
Heat pump return	H	3"	3"	mm	355	355
Boiler flow	I	3"	3"	mm	1455	1705
Boiler return	J	3"	3"	mm	905	1030
Heat pump flow	K	3"	3"	mm	905	1030
Thermometer - probe	L	1/2"	1/2"	mm	355	355
Thermometer - probe	M	1/2"	1/2"	mm	905	1030
Thermometer - probe	N	1/2"	1/2"	mm	1455	1705
Electrical resistance	O	1" 1/2	2"	mm	990	1130
Connection for air vent	P	1"1/4	1"1/4		Above	Above
Empty weight				kg	170	190
Dispersion S (*)				W	131	139
Specific dispersion psbsol				W/K	2,91	3,09
Energetic class					-	-

Thread : G (ISO 228-1)

(*) In compliance with UNI EN 12897 with $T_{water} = 65\text{ °C}$ and $T_{environment} = 20\text{ °C}$

ETW Inox

Storage tanks for hot and cold technical water in stainless steel



ETW Inox series storage tanks are particularly suitable for storing hot and cold technical water, to create thermal buffers for heat pump systems. They are not suitable for storing water for hygienic-sanitary use.

Construction

- Storage tank in stainless steel.
- Insulation in cross-linked expanded polyethylene thickness 24 mm (model ETW 26) or 30 mm (model ETW 51).

Technical data

- Storage tank maximum operating temperature: 95 °C.
- Storage tank maximum operating pressure: 5 bar.

Conformity

- Complies with EU Regulations 812/2013 and 814/2013.
- Compliant with art. 4.3 PED Directive 2014/68/EU.

Supplying

ETW Inox storage tanks are supplied with thermal insulation.

Note: ETW Inox storage tanks can be hung on the wall using the supplied brackets.

Models	Ref.	u.m.	ETW 26	ETW 51
Total capacity (storage volume)		ℓ	23	50
Ø with insulation	A	mm	302	379
Maximum width	B	mm	320	385
Height with insulation	C	mm	554	755
Drain	D	3/8" F	0	0
System return	E	1"1/4 F	124,5	155,5
System flow	F	1"1/4 F	429,5	599,5
Heat pump return	G	1"1/4 F	124,5	155,5
Heat pump flow	H	1"1/4 F	429,5	599,5
Air vent connection	I	3/8" F	554	755
Bracket length	J	mm	160	190
Length including brackets	L	mm	599	775
Empty weight		kg	6	9
Dispersion S (*)		W	43	54
Specific dispersion psbsol		W/K	0,96	1,20
Energetic class (min F/max A+)			C	C

(*) In accordance with standard EN 12897:2020 with water temperature in the storage tank $T_w=65\text{ °C}$ and ambient temperature $T_a=20\text{ °C}$

Tanks

EBN 300-500

Storage tanks for heating water for integrated systems

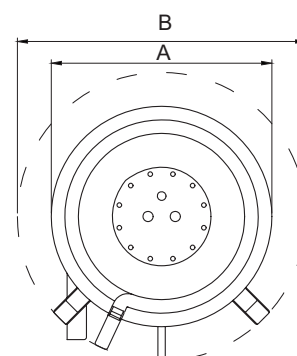
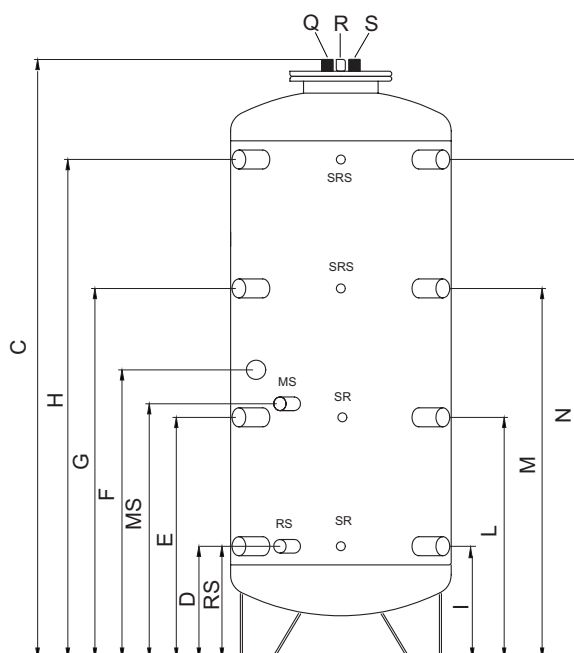
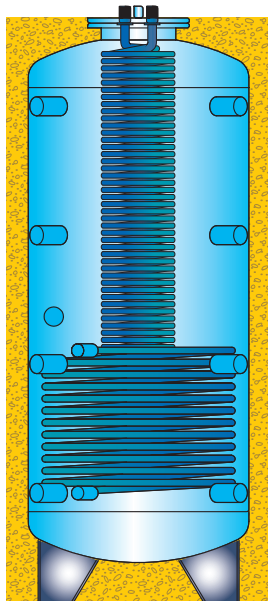


Potable suitability*



Warranty

* valid only for the internal coil for domestic hot water



EBN300-500 storage tanks are designed to be able to integrate multiple energy sources present in the heating system, such as, for example: heat pumps, thermal solar collectors, gas boilers, thermo fireplaces, etc.

Characteristics

- Solar integration to heating
- Integration of condensing boiler
- Possible integration of heat pump
- Possible integration of wood boiler

Construction

- Crude storage tank inside.
- Insulation: in 100 mm thick flexible polyester.
- Insulation with SKY coating in PVC grey color.
- S235JR carbon steel solar coil.
- Coil for domestic hot water production in copper.

Technical data

- Storage tank max continuous operating temperature: 95 °C.
- Storage tank maximum operating pressure: 3 bar.
- Solar coil maximum operating pressure: 10 bar.
- Sanitary coil maximum operating pressure: 10 bar.

Conformity

- Complies with EU Regulations 812/2013 and 814/2013.
- Compliant with art. 4.3 PED Directive 2014/68/EU.

Supplying

EBN 300-500 storage tanks are supplied with thermal insulation.

Models	Ref.	u.m.	EBN 300	EBN 500
Total capacity (storage volume)		ℓ	270	450
Non-solar volume Vbu		ℓ	0	0
Ø without insulation	A	mm	500	650
Ø with insulation	B	mm	700	850
Height	C	mm	1625	1765
Height with insulation		mm	1625	1765
Heating system return	D 1"1/2	mm	230	330
Solar return	RS 1"	mm	230	330
Fireplace stove return	E 1"1/2	mm	600	710
Solar flow	MS 1"	mm	830	750
Electric resistance	F 1"1/2	mm	930	850
Heating system flow	G 1"1/2	mm	1040	1090
Fireplace stove flow	H 1"1/2	mm	1340	1470
Floor system return	I 1"1/2	mm	230	330
Boiler return	L 1"1/2	mm	600	710
Floor system flow	M 1"1/2	mm	1040	1090
Boiler flow	N 1"1/2	mm	1340	1470
Sanitary cold water inlet	Q 1" (*)	mm	Above	Above
Air vent	R 1/2"	mm	Above	Above
Sanitary hot water outlet	S 1" (*)	mm	Above	Above
Heating probe	SR 1/2"	mm	-	-
Solar heating probe	SRS 1/2"	mm	-	-
Lower coil heat exchange surface		m ²	1,9	2,5
Lower coil water content		ℓ	11,4	14,9
Sanitary coil heat exchange surface		m ²	5,0	5,0
Sanitary coil water content		ℓ	3,5	3,5
Empty weight		kg	130	150
Dispersion S (**)		W	93	112
Specific dispersion psbsol		W/K	2,07	2,49
Energetic class (min F/max A+)			C	C

Thread: G (ISO 228-1)

(*) With dielectric joint

(**) In compliance with UNI EN 12897 with T_{water} = 65 °C and T_{environment} = 20 °C

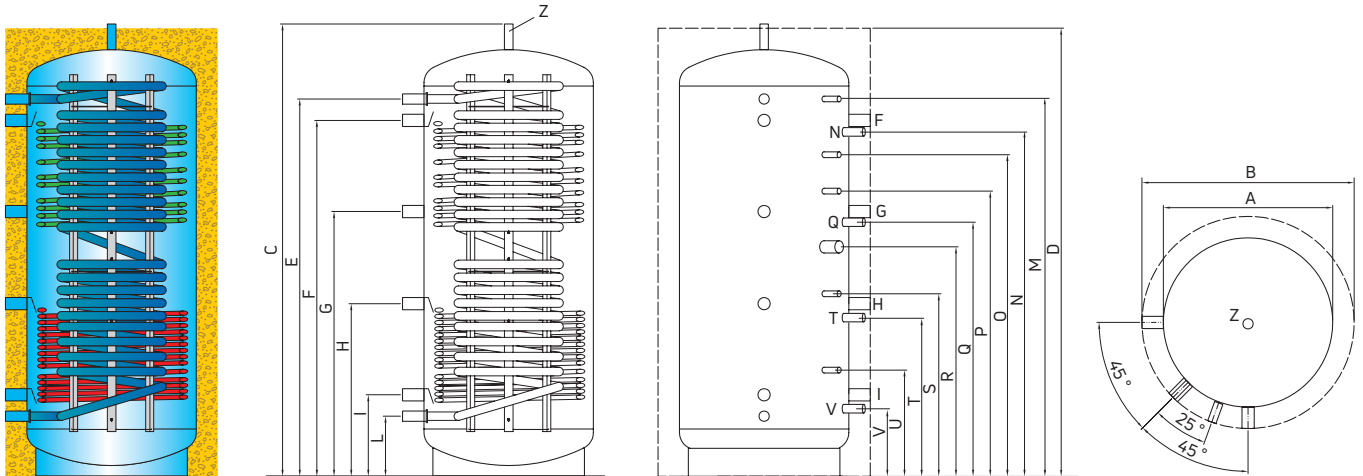
Tanks

EB 1000-1500

Storage tanks for heating water
for integrated systems



* valid only for the internal coil
for domestic hot water



EB1000-1500 storage tanks are designed to be able to integrate multiple energy sources present in the heating system, such as, for example: heat pumps, thermal solar collectors, gas boilers, thermo fireplaces, etc.

Characteristics

- Solar integration to heating
- Integration of condensing boiler
- Possible integration of heat pump
- Possible integration of wood boiler
- Stratification with hydraulic chimney

Construction

- Crude storage tank inside.
- Insulation: in 100 mm thick flexible polyester.
- Insulation with SKY coating in PVC grey color.
- Solar coil and alternative energy coil in S235JR carbon steel.
- Coil for domestic hot water production in AISI 316L stainless steel.

Technical data

- Storage tank max continuous operating temperature: 95 °C.
- Storage tank maximum operating pressure: 3 bar.
- Sanitary coil maximum operating pressure: 6 bar.
- Max operating pressure of the alternative energy coil: 10 bar.
- Solar coil maximum operating pressure: 10 bar.

Conformity

- Complies with EU Regulations 812/2013 and 814/2013.
- Compliant with art. 4.3 PED Directive 2014/68/EU.

Supplying

EB1000-1500 storage tanks are supplied with thermal insulation.

Tanks

Models	Ref.	u.m.	EB 1000 S30 AS76 AUX20	EB 1500 S35 AS89 AUX30
Total capacity (storage volume)		ℓ	870	1470
Non-solar volume Vbu		ℓ	356	672
Ø without insulation	A	mm	790	1000
Ø with insulation	B	mm	990	1200
Height	C	mm	2110	2240
Insulation height	D	mm	2135	2265
Sanitary hot water outlet	E	1"1/4 mm	1760	1825
Boiler flow	F	1"1/2 mm	1660	1725
Heating system flow	G	1"1/2 mm	1235	1300
Boiler return	H	1"1/2 mm	805	870
Heating system return	I	1"1/2 mm	380	445
Sanitary cold water inlet	L	1"1/4 mm	280	345
Thermometer - probe	M	1/2" mm	1760	1825
Alternative energy flow	N	1" mm	1655	1715
Thermometer - probe	O	1/2" mm	1500	1525
Thermometer - probe	P	1/2" mm	1330	1415
Alternative energy return	Q	1" mm	1185	1165
Electric resistance	R	1"1/2 mm	1070	1055
Thermometer - probe	S	1/2" mm	840	870
Solar flow	T	1" mm	785	835
Thermometer - probe	U	1/2" mm	495	520
Solar return	V	1" mm	365	445
Air vent	Z	1"	Above	Above
Sanitary coil exchange surface ■		m ²	7,6	8,9
Sanitary coil water content ■		ℓ	48	56
Sanitary coil nominal flow rate ■		m ³ /h	1,89	2,36
Sanitary coil pressure drop referred to the nominal flow rate ■		mbar	100	150
Alternative energy coil exchange surface ■		m ²	2,0	3,0
Alternative energy coil water content ■		ℓ	11,8	19,0
Solar coil exchange surface ■		m ²	3,0	3,5
Solar coil water content ■		ℓ	16,6	20,5
Empty weight		kg	315	390
Dispersion S (*)		W	141	170
Specific dispersion psbsol		W/K	3,13	3,78

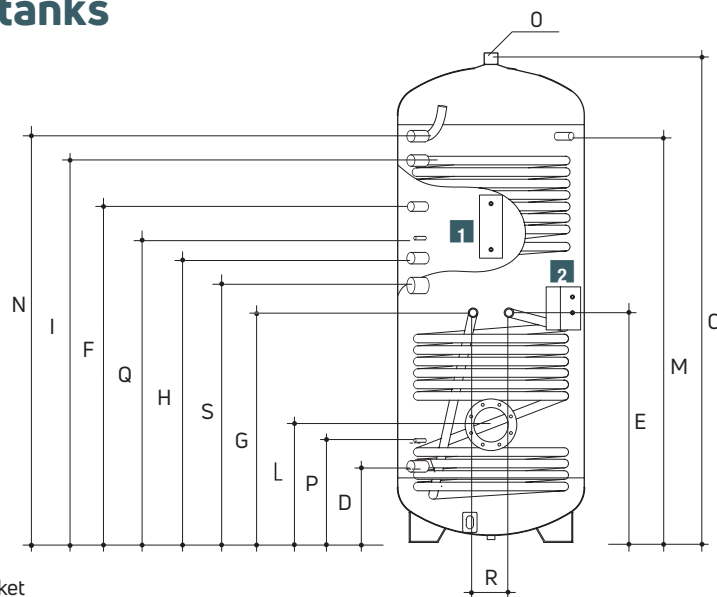
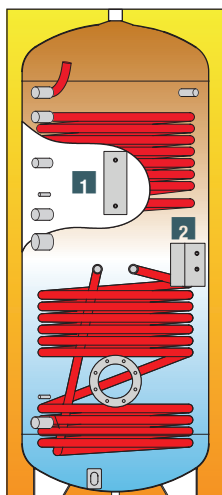
Thread: G (ISO 228-1)

(*) In compliance with UNI EN 12897 with T_{water} = 65 °C and T_{environment} = 20 °C

- Sanitary coil
- Alternative energy coil
- Solar coil

Tanks

HEVSN solar tanks



- 1 Solar station support bracket
- 2 Expansion vessel support bracket

Construction

- Inorganic glazing (vitrification)
- Insulation in 70 mm thick rigid expanded polyurethane

Conformity

- Compliant with art. 4.3 PED directive 2014/68/EU
- Complies with DIN 4753.3 and UNI 10025

Technical data

- Maximum working pressure: 6 bar (coil), 10 bar (sanitary)
- Storage tank max continuous operating temperature: 95 °C
- Test pressure: 15 bar
- Insulation coating in gray PVC SKY

Model			u.m.	300	500
Total capacity (storage volume)			ℓ	273	475
Non-solar volume Vbu			ℓ	110	205
Ø without insulation		A	mm	500	650
Ø with insulation		B	mm	640	790
Height		C	mm	1615	1705
Height with insulation			mm	1625	1715
Cold water inlet	1"	D	mm	220	265
Lower coil outlet	1"	E	mm	800	800
Recirculation	3/4"	F	mm	1145	1170
Lower coil entry	1"	G	mm	800	800
Upper coil outlet	1"	H	mm	965	990
Upper coil entry	1"	I	mm	1305	1330
Flange	DN 180	L	mm	330	410
Thermometer / Probe	1/2"	M	mm	1390	1415
Hot water outlet	1"	N	mm	1390	1415
Anode	1"1/4	O		Above	Above
Probe	Ø 10	P	mm	310	355
Probe	Ø 10	Q	mm	1035	1060
Connection center distance		R	mm	125	125
Electric resistance / Recirculation	1"1/2	S	mm	860	895
Lower serpentine surface			m ²	1,3	1,7
Upper serpentine surface			m ²	0,9	1,2
Lower coil content			ℓ	7,8	10,1
Upper coil content			ℓ	5,3	7,5
Weight (empty)			kg	125	165
Dispersion S (*)			W	63	80
Specific dispersion psbsol			W/K	1,40	1,78
Energetic class (min F/max A+)				B	B

Thread : G (ISO 228-1)

(*) In compliance with UNI EN 12897 with T_{water} = 65 °C and T_{environment} = 20 °C

Compatibility SH electric heaters / Emmeti tanks

Tank	Resistance								
	SH-1,5	SH-2,0	SH-2,5	SH-3,0	SH-3,8	SH-4,5	SH-6,0	SH-7,5	SH-9,0
Euro V 150	•	•	•	•	•	•	--	--	--
Euro V 200	•	•	•	•	•	•	--	--	--
Euro V 300	•	•	•	•	•	•	--	--	--
Euro V 500	•	•	•	•	•	•	•	--	--
Euro HPV 200	•	•	•	•	•	•	--	--	--
Euro HPV 1000	•	•	•	•	•	•	•	•	•
Euro HPVE 300	•	•	•	•	•	--	--	--	--
Euro HPVE 500	•	•	•	•	•	•	--	--	--
HP2V 300	•	•	•	•	•	•	--	--	--
HP2V 500	•	•	•	•	•	•	•	--	--
HP2V 750	•	•	•	•	•	•	•	•	•
HP2V 1000	•	•	•	•	•	•	•	•	•
HP2V-S 300	•	•	•	•	•	•	--	--	--
HP2V-S 500	•	•	•	•	•	•	•	--	--
HE2VE 200	•	•	•	•	•	•	--	--	--
HE2VE 300	•	•	•	•	•	•	--	--	--
HE2VE 500	•	•	•	•	•	•	•	--	--
HE2VE 750	•	•	•	•	•	•	•	•	--
HE2VE 1000	•	•	•	•	•	•	•	•	•
HE2VE 1500	•	•	•	•	•	•	•	•	•
HE2VE 2000	•	•	•	•	•	•	•	•	•
Comfort V 2F 200	•	•	•	•	•	•	--	--	--
Comfort V 2F 300	•	•	•	•	•	•	--	--	--
Comfort V 2F 500	•	•	•	•	•	•	•	•	--
Comfort V 3F 750	•	•	•	•	•	•	•	•	•
Comfort V 3F 1000	•	•	•	•	•	•	•	•	•
Comfort V 3F 1500	•	•	•	•	•	•	•	•	•
Comfort V 3F 2000	•	•	•	•	•	•	•	•	•
Comfort V 3F 3000	•	•	•	•	•	•	•	•	•
Comfort S 3F 1500	•	•	•	•	•	•	•	•	•
Comfort S 3F 2000	•	•	•	•	•	•	•	•	•
Comfort S 3F 3000	•	•	•	•	•	•	•	•	•
Accumulation tanks V 300	•	•	•	•	•	•	--	--	--
Accumulation tanks V 500	•	•	•	•	•	•	•	•	--
Accumulation tanks V 750	•	•	•	•	•	•	•	•	•
Accumulation tanks V 1000	•	•	•	•	•	•	•	•	•
Accumulation tanks V 1500	•	•	•	•	•	•	•	•	•
Accumulation tanks V 2000	•	•	•	•	•	•	•	•	•
Puffer 300 N	•	•	•	•	•	•	--	--	--
Puffer 500 N	•	•	•	•	•	•	•	•	--
Puffer 1000 N	•	•	•	•	•	•	•	•	•
Puffer 1500 N	•	•	•	•	•	•	•	•	•
Puffer 2000 N	•	•	•	•	•	•	•	•	•
Puffer 300 N 1S	•	•	•	•	•	•	--	--	--
Puffer 500 N 1S	•	•	•	•	•	•	•	•	--
Puffer 1000 N 1S	•	•	•	•	•	•	•	•	•
Puffer 1500 N 1S	•	•	•	•	•	•	•	•	•
Puffer 2000 N 1S	•	•	•	•	•	•	•	•	•
ETW 25	•	•	--	--	--	--	--	--	--
ETW 26 - ETW 51	--	--	--	--	--	--	--	--	--
ETW 60 - ETW 120 - ETW 200 - ETW 280 - ETW 500	--	--	--	--	--	--	--	--	--
ETW 750 - ETW 1000	--	--	--	--	--	--	--	--	--
EBN300	•	•	--	--	--	--	--	--	--
EBN500	•	•	•	•	•	--	--	--	--
EB 1000-S30-AS76 AUX20	•	•	•	•	•	•	•	•	•
EB 1500-S35-AS89 AUX30	•	•	•	•	•	•	•	•	•
HEVSN 300	•	•	•	•	•	•	--	--	--
HEVSN 500	•	•	•	•	•	•	•	--	--

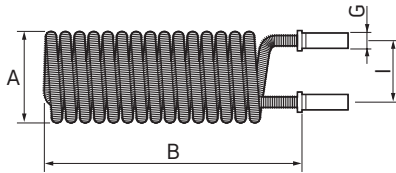
• Usable -- Not usable

Tanks

LS08 - LS12

Tinned finned copper heating coils for HEVSN, Euro V, Euro HPV, HP2V-S, HP2V boilers.

Including DN180 flange and gasket, flange cover, washers and dielectric joints.



Model		u.m.	LS 08	LS 12
external Ø	A	mm	100	100
Length	B	mm	450	550
Surface		m ²	0,80	1,21
Flange		DN	180	180
Connections (*)	G	gas	3/4"	3/4"
Connection takeoffs	I	mm	60	60
Content		ℓ	0,5	0,5
Empty weight		kg	5,0	9,6

(*) with dielectric joints

LS 08

Can be used on:
Euro V 150 - 200 - 300 - 500, Euro HPV 200 - 1000,
HP2V 300 - 500 - 750 - 1000, HP2V-S 300 - 500,
HEVSN 300 - 500.

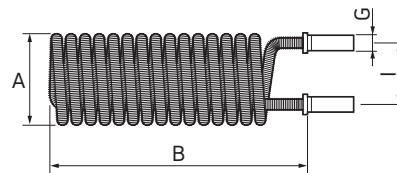
LS 12

Can be used on:
Euro V 500, Euro HPV 1000, HP2V 500 - 750 - 1000,
HP2V-S 500, HEVSN 500.

LN 12 ÷ LN 63

Finned copper coil kit for Comfort V, Comfort S, HE2V models 1500 and 2000, Glazed storage tank 2000.

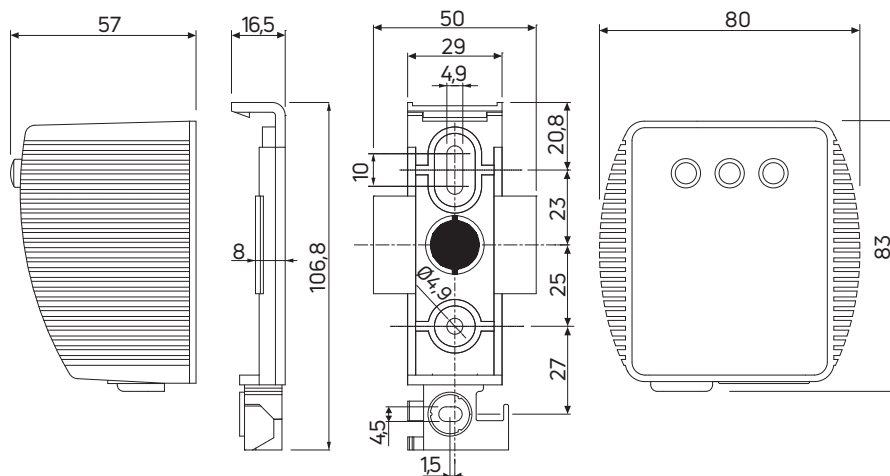
Including DN290 flange and gasket, flange cover, washers and dielectric joint.



Model		u.m.	LN 12	LN 18	LN 26	LN 32	LN 45	LN 63
external Ø	A	mm	200	200	200	200	200	200
Length	B	mm	420	470	580	660	750	980
Surface		m ²	1,21	1,80	2,63	3,20	4,54	6,34
Flange		DN	290	290	290	290	290	290
Connections (*)	G	gas	1"	1"	1"	1"	1"1/4	1"1/4
Connection takeoffs	I	mm	80	80	80	80	80	80
Content		ℓ	0,7	1,4	2,0	2,5	3,5	5,0
Weight without fittings		kg	9,6	11,7	14,9	17,0	21,1	29,0
For tanks (from÷to)		ℓ	200 ÷ 3000	200 ÷ 3000	500 ÷ 3000	750 ÷ 3000	750 ÷ 3000	1500 ÷ 3000

(*) with dielectric joints

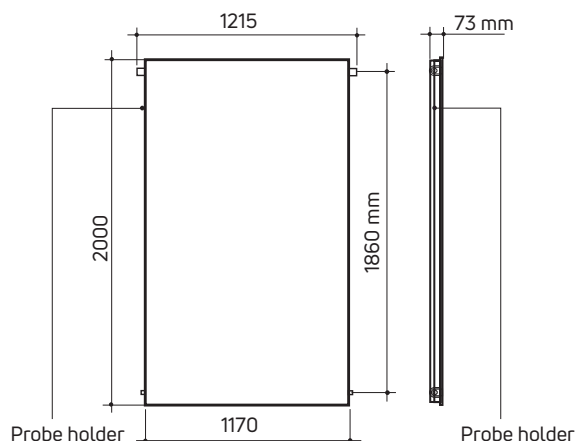
Boguard - electronic anode



Arcobaleno - Solar collectors

Arcobaleno

"SXM" type with selective surface



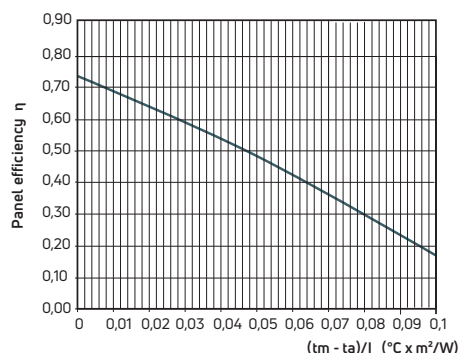
Technical data	u.m.	
Gross surface	m ²	2,34
Opening (net) surface	m ²	2,24
Absorber surface	m ²	2,14
Connections: copper pipe	mm	Ø 22
Empty weight	kg	32
Fluid content	ℓ	1,6
Stagnation temperature (*)	°C	227
Max operating pressure heating	bar	10
Pressione di collaudo (**)	bar	15
Q _{COL} (***)	kWh	901

(*) Referred at I=1000 W/m² and 30 °C

(**) 100% of production

(***) Heat energy produced annually, related to the Würzburg locality and to an average operating temperature of T_m equal to 50 °C

Diagram of efficiency



$\eta_0 = 0,733$

$a_1 = 4,269$

$a_2 = 0,0143$

t_m = Fluid average temperature (°C)

t_a = Ambient temperature (°C)

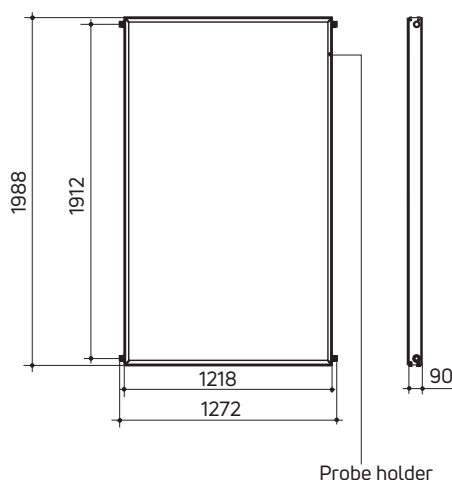
I = Global radiation (W/m²)

$K_\theta (50^\circ) = 0,93$

Arcobaleno

"NS12" type with selective surface

NEW



Technical data	u.m.	
Gross surface	m ²	2,42
Opening (net) surface	m ²	2,24
Absorber surface	m ²	2,23
Connections	mm	3/4" M
Empty weight	kg	44
Fluid content	ℓ	1,27
Stagnation temperature (*)	°C	203
Max operating pressure	bar	10
Test pressure (**)	bar	15
Q _{COL} (***)	kWh	1124

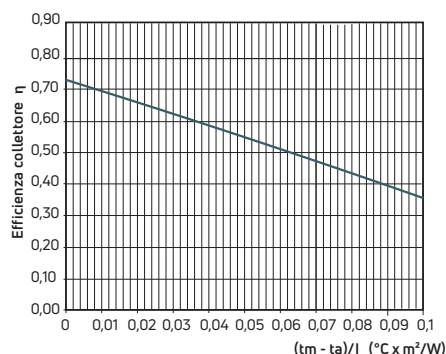
Thread: G (ISO 228-1)

(*) Referred at I=1000 W/m² and 30 °C

(**) 100% of production

(***) Heat energy produced annually, related to the Würzburg locality and to an average operating temperature of T_m equal to 50 °C

Diagram of efficiency



$\eta_0 = 0,730$

$a_1 = 3,740$

$a_2 = 0,006$

t_m = Fluid average temperature (°C)

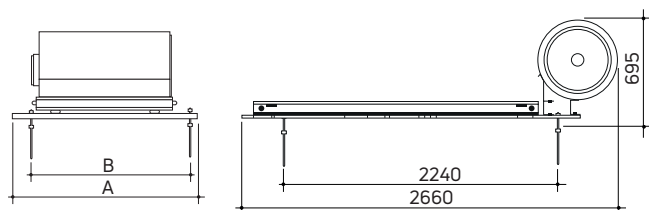
t_a = Ambient temperature (°C)

I = Global radiation (W/m²)

$K_\theta (50^\circ) = 0,95$

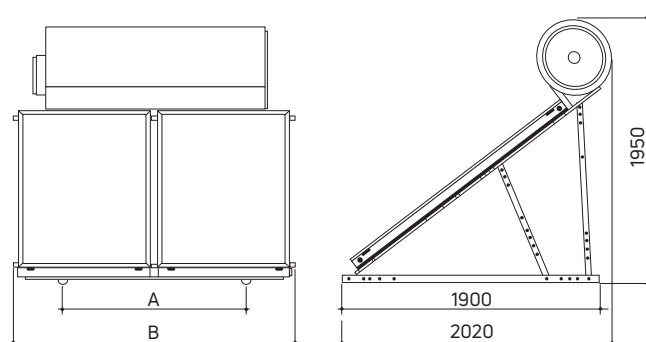
NVSN natural circulation solar kit

Parallel roof mounting



Model	NVSN1S 150	NVSN2S 280
A [mm]	1400	2000
B [mm]	1040-1300	1700-1900

Installation on flat roof

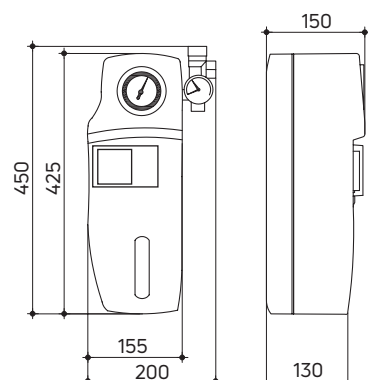


Model	NVSN1S 150	NVSN2S 280
A [mm]	745	1420
B [mm]	1090	2230

Accessories for solar systems - Solar stations

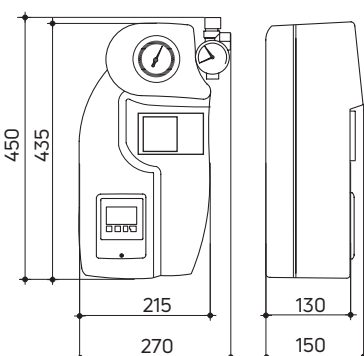
GSN1V 38 NP

Solar station



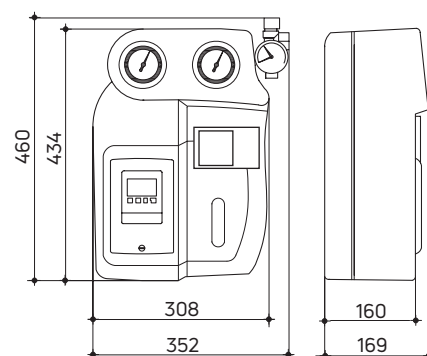
SS1V 12 NP

One-way solar station



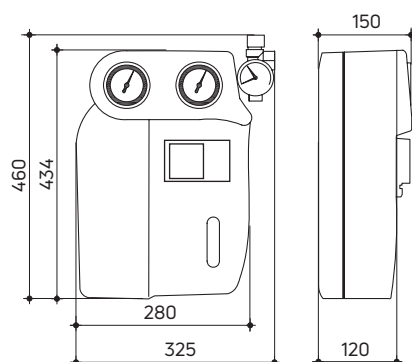
SSX 12-38 NP e SSC 40 NP

Solar station



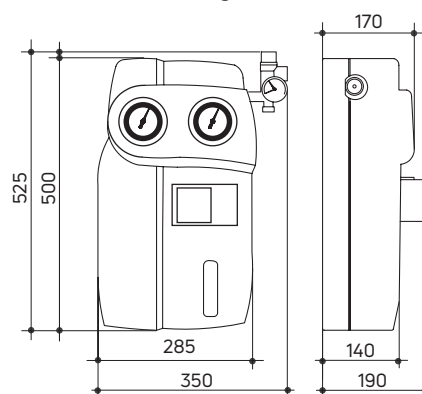
GSN 12-38 NP

Circulation solar unit



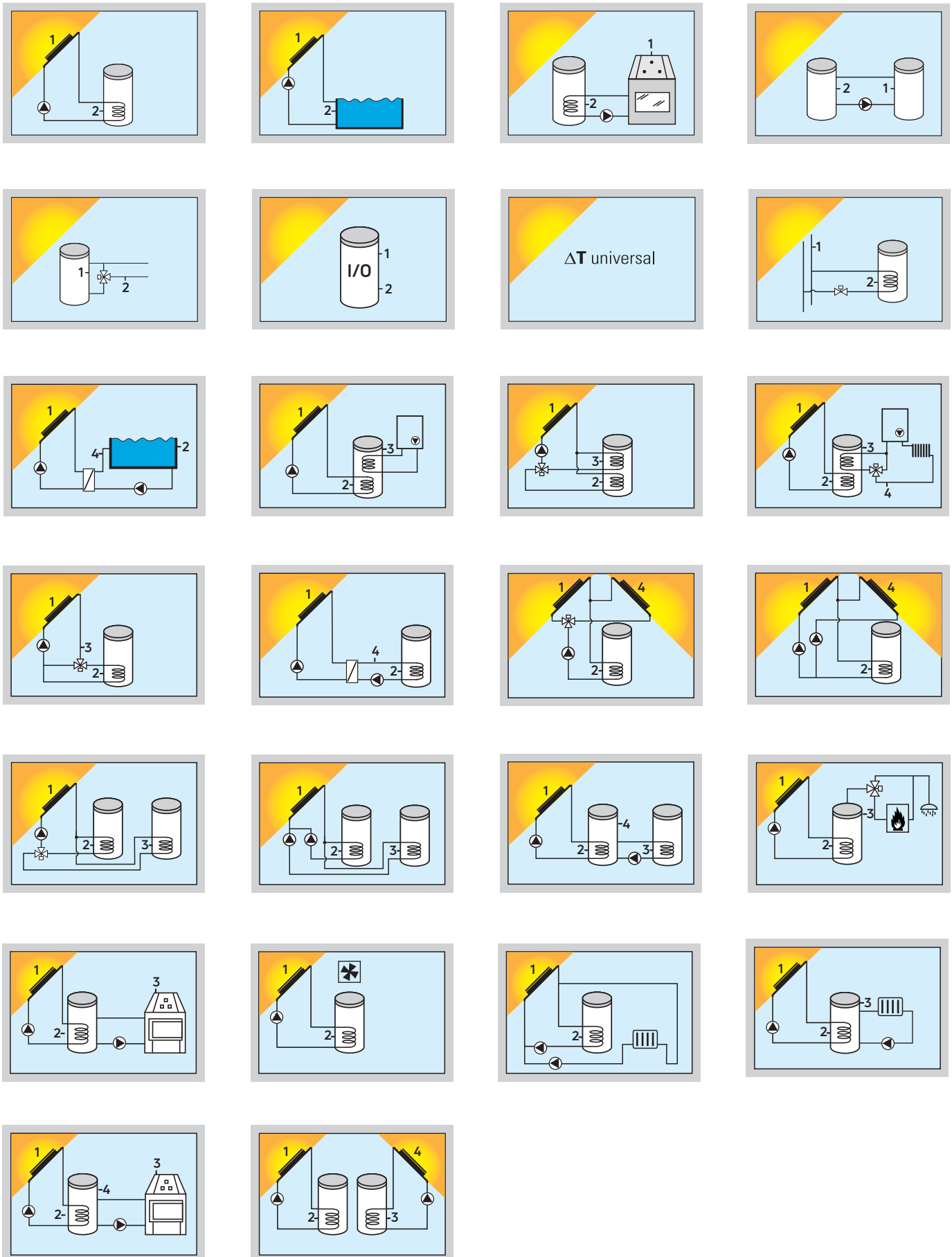
GSA 42-70 N

Solar unit for high flow rate circulation



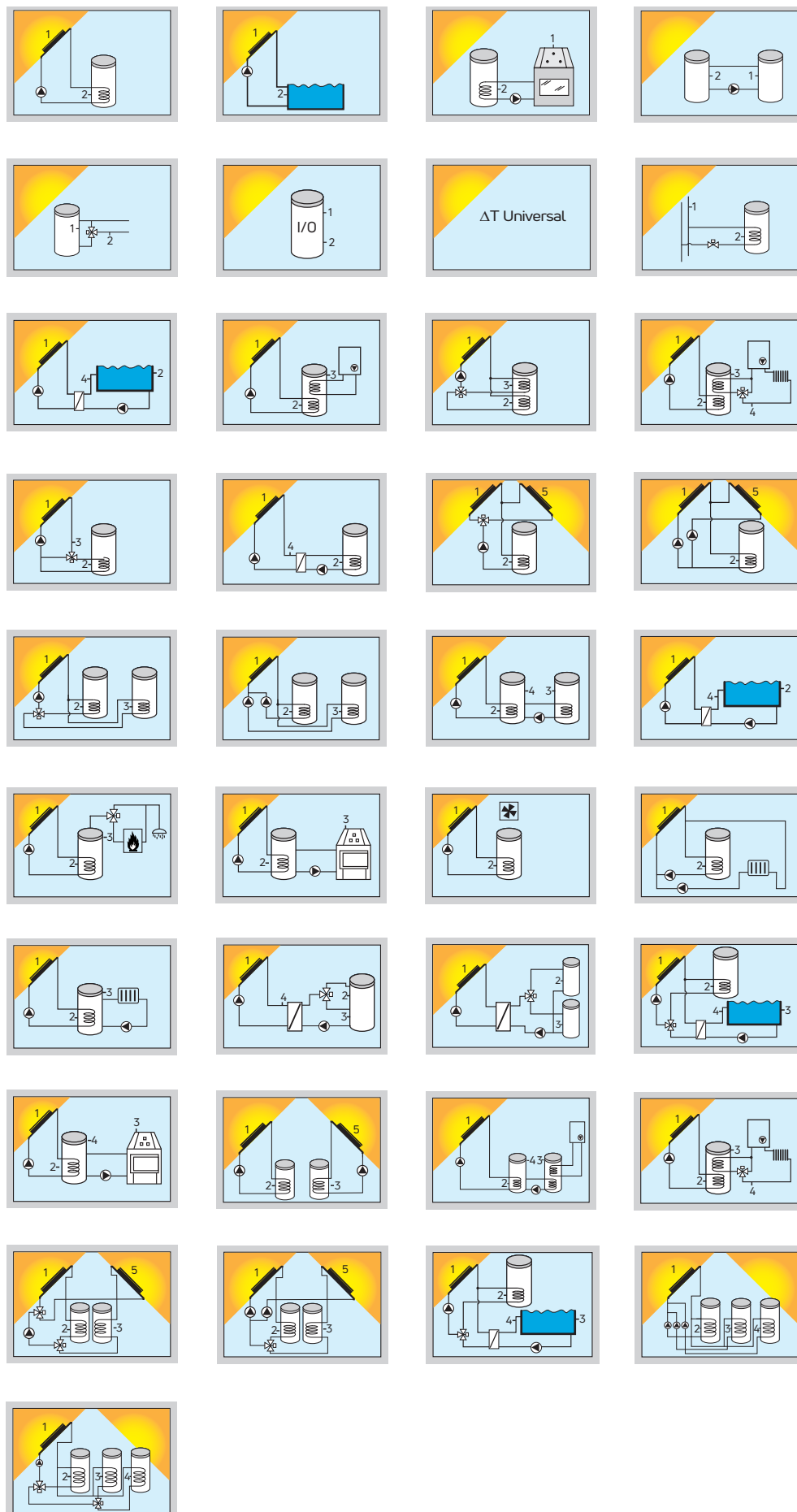
Solar accessories - Solar control unit

Hydraulic variants with EMCS 2015 differential temperature regulator and SSX12 NP and SSX38 NP solar station



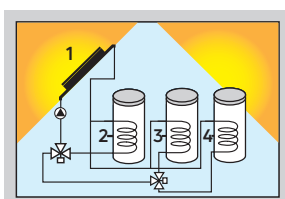
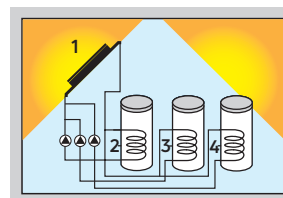
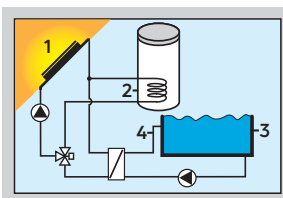
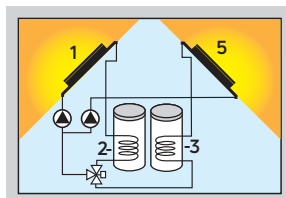
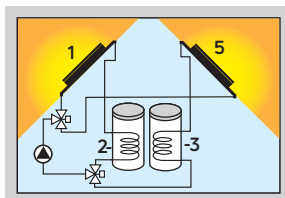
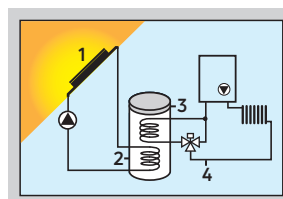
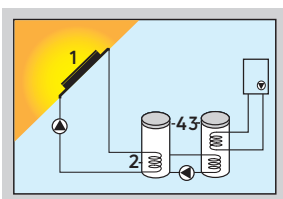
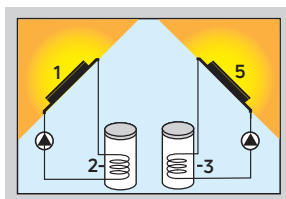
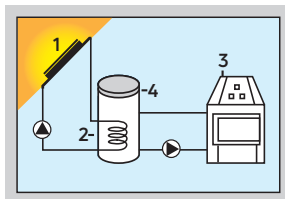
Solar accessories - Solar control unit

Basic hydraulic variants with ELCS 2016 differential temperature controller and SSC40 NP solar station

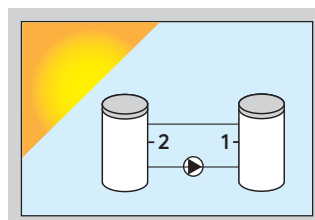
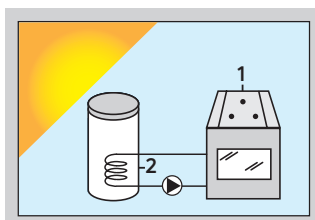
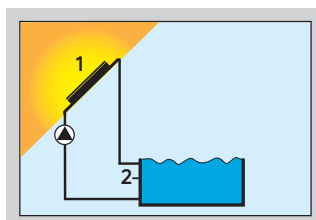
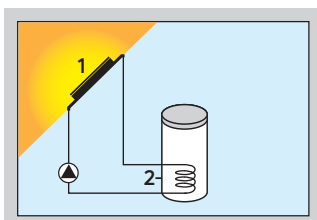


Solar accessories - Solar control unit

Basic hydraulic variants with ELCS 2016 differential temperature controller and SSC40 NP solar station



Hydraulic variants STDC 2015 solar controller and SS1V 12 NP one-way solar station

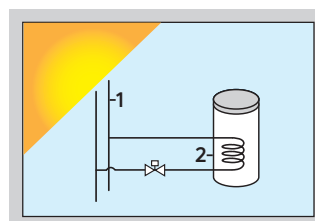
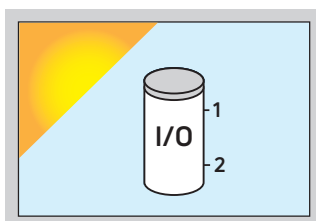
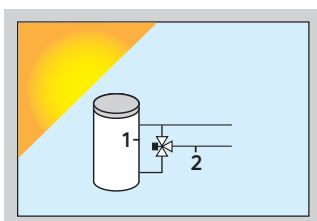


1 Solar with storage

2 Solar with swimming pool

3 Wood boiler with accumulation

4 Transfer



5 Return raising

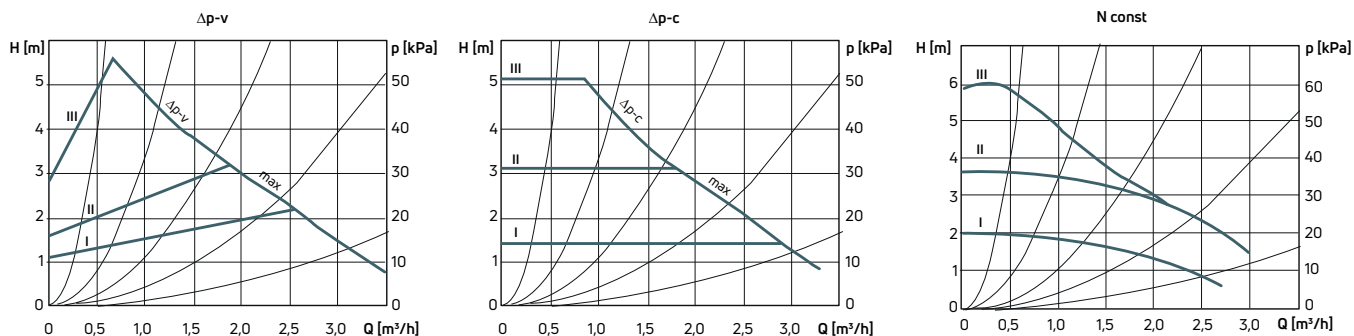
6 Thermostat

7 ΔT Universal

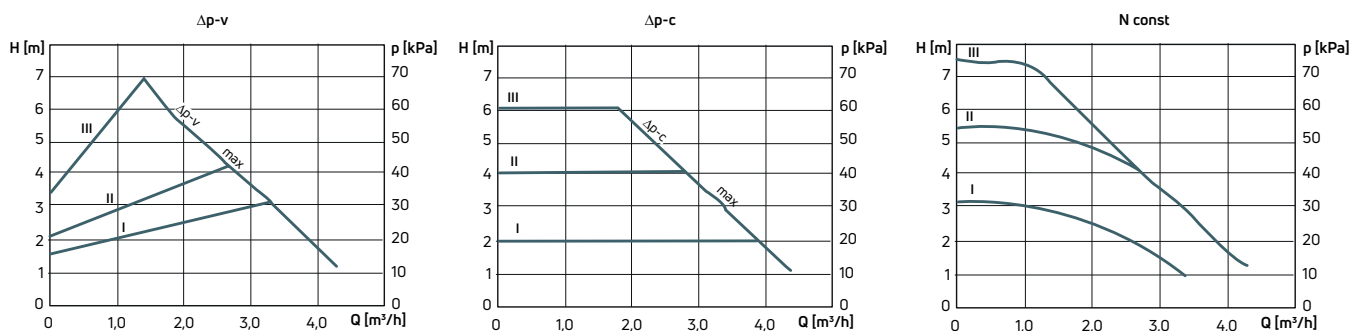
8 Valve

Shark CP - Heating and cooling circulator pump

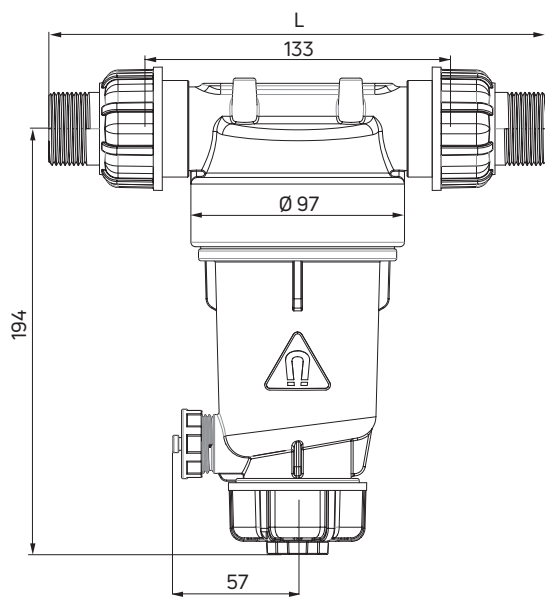
Hydraulic performance diagrams: model 25/6 - 130



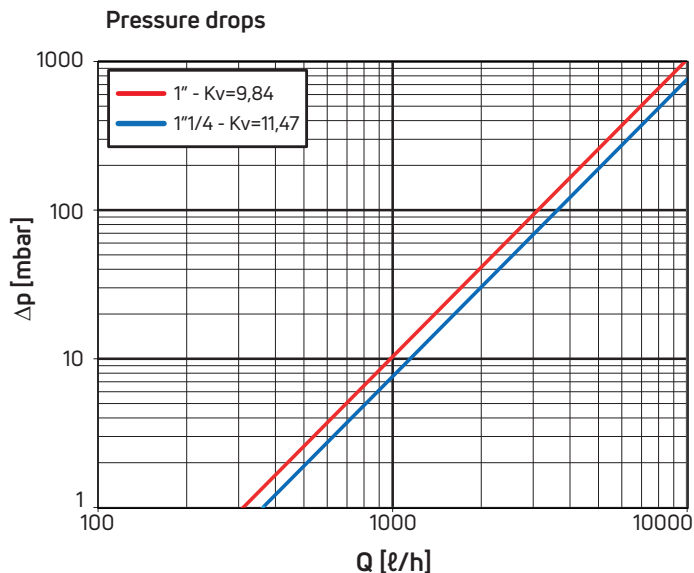
Hydraulic performance diagrams: model 25/7 - 130



Magnetic dirt separator filter for heating and cooling systems

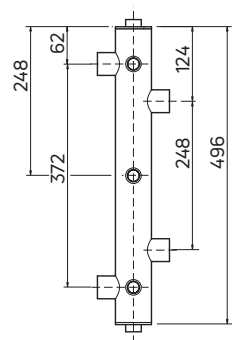


Model	L [mm]
1"	205
1 1/4"	230



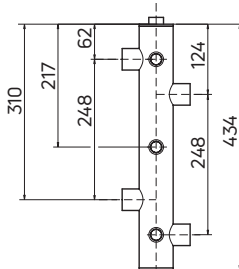
Open manifolds

Version 2" and 3" 2+2+5 ways



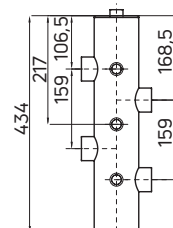
2" model volume: 1.22 litres
3" model volume: 2.70 litres

3" 2+2+5-way S version



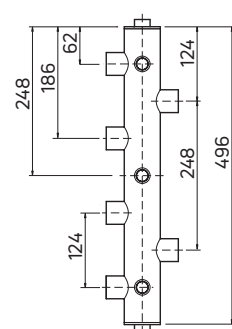
Volume: 2.37 litres

3" 2+2+5 S version center distance Firstbox



Volume: 2.37 litres

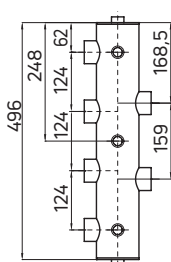
3" 4+2+5-way version



Volume: 2,70 litres

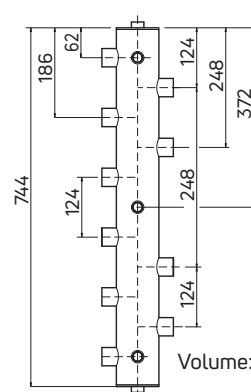
Side connections: G 1 1/4 Female in the "Interaxis for Firstbox" models, G 1 Female in all the other models
Service connections: G 1/2 Female in all models

3" 4+2+5 Firstbox center distance version



Volume: 2,75 litres

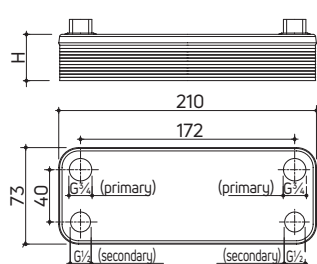
3" 6+4+5-way version



Volume: 4,10 litres

Plate heat exchangers

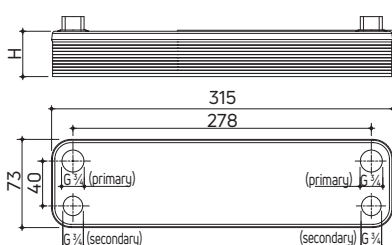
Model SPES 210



Technical data	u.m.	10	12	14	16	20	24	30	34	40
Nominal number of plates	N°	10	12	14	16	20	24	30	34	40
Exchange area	m ²	0,112	0,140	0,168	0,196	0,252	0,308	0,392	0,448	0,532
Exchange coefficient KA	W/K	800	1000	1200	1400	1800	2200	2800	3200	3800
Kv (primary=primary) (*)	m ³ /h / (bar) ^{0,5}	2,1	2,6	3,1	3,5	4,3	4,9	5,7	6,1	6,5
Kv (primary=secondary) (*)	m ³ /h / (bar) ^{0,5}	2,5	2,9	3,3	3,6	4,2	4,6	5,1	5,3	5,5
Height H	mm	27	31	36	41	50	60	72	82	95
Weight	g	760	850	940	1040	1220	1400	1680	1860	2140

(*) water temperature = 15 °C

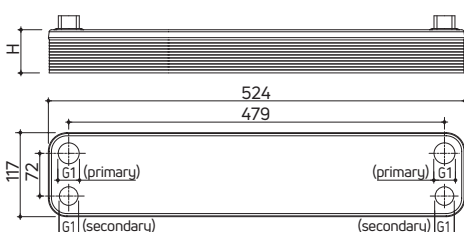
Model SPES 315



Technical data	u.m.	20	24	30	34	40
Nominal number of plates	N°	20	24	30	34	40
Exchange area	m ²	0,414	0,506	0,644	0,736	0,874
Exchange coefficient KA	W/K	2790	3410	4340	4960	5890
Kv (primary=primary) (*)	m ³ /h / (bar) ^{0,5}	3,1	3,7	4,4	4,8	5,4
Kv (primary=secondary) (*)	m ³ /h / (bar) ^{0,5}	3,4	3,9	4,6	5,0	5,5
Height H	mm	50	60	72	82	95
Weight	g	1890	2190	2640	2940	3390

(*) water temperature = 15 °C

Model SPES 524



Technical data	u.m.	20	30	40	50	60	80
Nominal number of plates	N°	20	30	40	50	60	80
Exchange area	m ²	1,13	1,76	2,39	3,02	3,65	4,91
Exchange coefficient KA	W/K	8550	13300	18050	22800	27550	37050
Kv (primary=primary) (*)	m ³ /h / (bar) ^{0,5}	3,0	4,5	5,8	6,8	7,7	8,9
Kv (primary=secondary) (*)	m ³ /h / (bar) ^{0,5}	3,4	4,8	6,0	7,0	7,8	9,0
Height H	mm	55	82	107	131	155	204
Weight	g	4640	6410	8190	9960	11740	15290

(*) water temperature = 15 °C

Chemical resistance table

LEGEND

E	Excellent
B	Good
M	Mediocre
S	Not recommended
-	Not experienced

	BRASS	PT.FE.	N.B.R.	INOX 316	NYLON
Ethyl chloride	B	E	E	E	B
Ferric chloride	S	E	E	S	-
Ferrous chloride	S	E	E	S	-
Magnesium chloride	S	E	E	B	E
Methyl chloride	B	E	M	B	M
Nickel chloride	M	E	E	B	-
Potassium chloride	M	E	E	B	E
Copper chloride	S	E	E	B	S
Sodium chloride	M	E	E	B	E
Zinc chloride	S	E	E	B	B
Dicloroethan	-	E	M	B	-
Phenol	-	E	B	B	B
Aluminium fluoride	-	E	E	M	-
Sodium fluoride	-	E	-	B	-
Formaldehyde	M	E	E	M	-
Methyl formate	-	E	M	B	-
Ammonium phosphate	-	E	E	B	-
Sodium phosphate	M	E	E	B	-
Freon 11-12-21-22-TE	E	E	B	E	E
Furfural	E	E	S	B	-
Methane	E	E	E	E	E
Gelatine	B	E	E	E	-
Glycerine	E	E	E	E	B
Clycol ethylene	B	E	B	E	E
Glucose	E	E	E	B	-
Sodium hydrate	B	E	E	E	-
Hydrocarbons	E	E	E	E	E
Hydrogen dry	E	E	-	-	S
Hydrogen wet	M	E	-	-	S
Ammonium hydroxide	S	E	E	E	-
Barium hydroxide	B	E	E	B	-
Calcium hydroxide	B	E	E	B	-
Magnesium hydroxide	B	E	E	E	-
Potassium hydroxide	M	E	E	E	-
Sodium hydroxide	M	E	E	E	-
Iodoform	-	E	-	E	-
Potassium iodide	-	E	E	B	-
Ipcloclato of sodio	M	E	M	M	-
Calcium hypochlorite	S	E	E	M	S
Hypoclorite sodium	S	E	E	M	B
Hyposulphite sodium	M	E	E	B	-
Iso-octane	-	E	E	E	-
Milk	B	E	E	E	E
Molasses	B	E	E	E	-
Mercury	S	E	E	M	E
Natural gas	E	E	E	B	E
Sodium metasilicate	-	E	E	E	-
Ammonium monophosphate	-	E	E	E	-
Naphta	B	E	E	B	E
Naphtalene	-	E	-	B	E
Ammonium nitrate	S	E	E	B	-
Silver nitrate	S	E	E	B	E
Nickel nitrate	-	E	E	B	-
Copper nitrate	M	E	E	E	-
Sodium nitrate	M	E	E	B	E

LEGEND

E	Excellent
B	Good
M	Mediocre
S	Not recommended
-	Not experienced

	BRASS	PT.FE.	N.B.R.	INOX 316	NYLON
Nitrobenzene	-	E	S	B	B
Oleum	-	E	S	B	S
Fuel oil	E	E	E	E	-
Coconut oil	-	E	E	B	E
Creosote oil	E	E	S	B	E
Flax oil	B	E	E	B	E
Fish oil	-	E	E	E	E
Pine oil	-	E	E	E	E
Castor oil	M	E	E	E	E
Cottonseed oil	E	E	E	B	E
Soybean oil	-	E	E	E	E
Mineral oil	E	E	E	E	E
Ethylene oxide	E	E	S	B	-
Magnesium oxide	-	E	E	B	-
Oxygen	E	E	E	E	E
Paraffin	E	E	E	E	-
Paraformaldehyde	-	E	B	B	-
Pentane	-	E	E	E	-
Sodium perborate	-	E	E	B	-
Propane	E	E	E	B	-
Brine	B	E	E	B	-
Mercury salts	S	E	E	S	-
Soap	B	E	E	B	E
Sodium silicate	B	E	E	B	-
Caustic soda	M	E	E	B	B
Aluminium sulphate	M	E	E	B	E
Ammonium sulphate	S	E	E	B	-
Barium sulphate	E	E	E	B	E
Calcium sulphate	E	E	E	B	-
Magnesium sulphate	M	E	E	B	-
Nickel sulphate	M	E	E	B	-
Potassium sulphate	B	E	E	B	-
Copper sulphate	S	E	E	B	E
Sodium sulphate	B	E	E	B	E
Zinc sulphate	S	E	E	B	-
Ferric sulphate	S	E	E	E	-
Ferrous sulphate	S	E	E	B	-
Sodium sulphate	B	E	E	B	-
Barium sulphide	B	E	E	-	B
Carbon sulphide	E	E	S	B	E
Sodium sulphide	B	E	E	B	-
Paint solvents	E	E	M	E	-
Styrene	-	E	B	E	-
Fruit Juices	S	E	E	E	-
Carbon tetrachloride	M	E	S	M	E
Sodium tiosulphate	M	E	E	E	-
Toluene-Toluol	E	E	M	E	E
Turpentine	B	E	S	E	-
Trichloro ethylene dry	E	E	M	B	B
Trichloro ethylene wet	M	E	M	-	B
Ammonium phosphate tribask	-	E	E	E	-
Steam	M	E	-	E	-
Paint	E	E	E	E	-
Xilene dry	-	E	S	E	-
Sulphur	S	E	S	B	E

Note: the information in the tables is indicative. To be sure of the functionality of the materials of the listed products, it is necessary to investigate the real conditions of use concentration, pressure, temperature and any dynamic shocks. The data was taken from the material manufacturers' tables.

General conditions of sales

- 1 From the moment this proposal is accepted it shall be considered a contract sale valid for all legal purposes.
The proposal is considered automatically accepted the instant the purchaser receives the first delivery of material.
- 2 Export Market: orders for a minimum amount of 2.500,00 euro can be accepted. Orders for less amounts might be fulfilled at the seller's discretion.
- 3 The prices agreed upon are the same as those in the seller's price lists and only include the packaging expenses based on company standard and expenses relative to the technical documentation enclosed with the products sold.
The seller reserves the right, within the period of time elapsing between the signature of the order and the first delivery, to alter the list prices should any unexpected events occur to make it necessary.
Such alterations in prices are considered automatically accepted by the purchaser unless he declares otherwise in writing.
- 4 Exclusively for supplies related to photovoltaic products, the purchaser must pay, upon order confirmation, an amount that is equal to 30% of the entire order value (VAT and transport included), as a **"commitment deposit pursuant to and for the effects of art. 1385 of the civil code"**, whereas the balance must be paid upon the shipment of the goods.
- 5 Failure to pay the agreed amounts within the terms established will lead to the charging of interest on arrears at a rate of 0,7% a month plus banking charges.
- 6 The purchaser may not make any exceptions to delay payment.
- 7 Shipments shall be debited completely to the purchaser and the goods are considered sold ex seller's works.
Also, by way of signing this deed and unless otherwise agreed upon, the purchaser entrusts the seller to negotiate on his behalf and completely independently, transportation and other accessory services and the procedures for their implementation, including the drawing up of an insurance contract for the goods shipped. In such a case, the expenses relative to shipping, to the other accessories services and to the insurance will be charged to the purchaser separately as a percentage of the value of the supply. The purchaser is hereby notified that if he is unable to check the goods at the time of delivery he must accept the goods with the reserve to check and report any defects to the carrier within 8 days from the date of delivery.
In addition, the purchaser may collect the goods with his own means from the seller's factory.
- 8 The material travels at the risk and peril of the purchaser and, if shipping is seen to by the seller, the purchaser must make any complaints directly to the carrier.
The documentation necessary to receive insurance payment must be sent promptly to the company.
- 9 The delivery terms of each single order must be compatible with the availability of the goods at the seller's factory and will be agreed at the time of the order.
However, such terms are not binding and may be, at the seller's discretion.
The purchaser has the right to ask, in writing, for the order to be cancelled in which case, however, he has no right to request damages of any kind.
Furthermore, the seller reserves the right to supply products which are different from those in the order but which have the same performance should warehouse or manufacturing requirements make this necessary.
Guarantees on faults and defects remain unchanged.
- 10 The products sold are guaranteed free from manufacturing defects for the term of 24 months from shipping (unless agreed otherwise in relation to the type of product).
The guarantee is limited to replacing a product found to be faulty. The seller declines all liability in the case of an incorrect installation or improper use of the products sold.
- 11 Any defects found in the material, both relevant to faults covered by the guarantee, as per point Nr. 10, or any other hypothesis, must be reported to the seller in the accordance with the law terms.
- 12 All products are intended sold with reserve of proprietorship and become property of the buyer only after the whole price has been paid.
Acceptance of payment by way of bills or other means does not change this agreement provided such bills are considered received "prosolvendo" (without recourse) and not "pro soluto" (with recourse).
- 13 Any particular and general exceptions to these conditions shall be agreed upon between the parties in writing.
- 14 The seller reserves the right to accept returned goods in the case of products acknowledged as faulty and covered by the guarantee. The conditions for such returns are free consignee.
- 15 In the case of continuous supplies, the seller may stop such supplies if the purchaser is in breach of only one of the particular or general conditions agreed upon. In such an event, any agreements reached for attributing premiums or for the attainment of objectives will no longer be valid.
- 16 The price indicated refers to the single article (piece) if not otherwise specified. When the article is a kit made of various components, even identical, the price refers to the complete kit. In the case of insulation, the price refers to the entire (complete) package. In the case of piping, whether in coil or in bar, naked or insulated, the price refers to one meter of pipe.
- 17 The images of the products shown in this catalog and price list are indicative.
- 18 All judicial disputes, with no exception, will be settled by the Pordenone Court of Law.

The purchaser declares to have read the aforesaid general conditions and to have fully accepted them.

He also declares to have received a copy of them and to have read the information regarding personal data, which is also available on the Emmeti S.p.a website.

THE PURCHASER

place and date _____

Pursuant to articles 1341 and 1342 of the civil code, the purchaser declares after careful reading to accept the contract clauses specified in point 1 Contract purpose, 2 Amount of foreign orders, 3 Prices, 4 Commitment deposit, 5 Interest on arrears, 6 Prohibition of exceptions, 7 Transport method-conditional acceptance, 8 Transport risks, 9 Delivery terms, 10 Warranty for faults and defects, 11 Defect reporting terms, 12 Lien, 13 Written changes, 14 Good returns, 15 Continuous supply, 16 Price specifications, 17 Images are indicative, 18 Court of jurisdiction.

Confirms to have received a copy of these conditions, authorising the use of personal data pursuant to Leg. Decree 196/03.

THE PURCHASER

place and date _____

DECLARATION ACCORDING TO THE REACH REGULATION N. 1907/2006

Emmeti Spa, aware of its obligations deriving from Regulation (EC) no. 1907/2006 REACH as a downstream user, warns that lead has been included in the SVHC substance list, on 27.06.2018, as follows:

Substance name	Number of CAS	Number of EC	Date of registration	Decision
Lead	7439-92-1	231-100-4	27.06.2018	ED/61/2018

The latest version of the Candidate List is available on the ECHA (European Chemicals Agency) website:

<https://echa.europa.eu/home>

Emmeti informs, as required by art. 33 of the REACH Regulation, which in the products of this catalog, containing brass, lead may be present in a concentration higher than 0.1% (w / w), depending on the type of brass alloy used.

The inclusion of lead in the SVHC list does not imply new ways of using Emmeti products for their safe use, if used in the manner provided by the related product documentation.

Emmeti undertakes, based on the information that its suppliers of components and finished products will communicate to the company, to keep customers updated on the possible use in their products of substances, which are currently not included in the SVHC list but which could be in future revisions. The information may be included directly in the product information sheets.

DECLARATION OF CONFORMITY RoHS

Emmeti SpA, aware of its obligations deriving from directive (EC) no. 2011/65 RoHS II (and subsequent amendments and additions), declares that the products in this catalog comply with the requirements of the aforementioned European directive on the restriction of the use of certain dangerous substances in electrical and electronic equipment.



Rev. 0_EMMETI_Catalogue price list_05.2026_EN01_CDT/SR/LP



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