



Catalogue price list 2026

Heating and plumbing | 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 - Comfort delivered

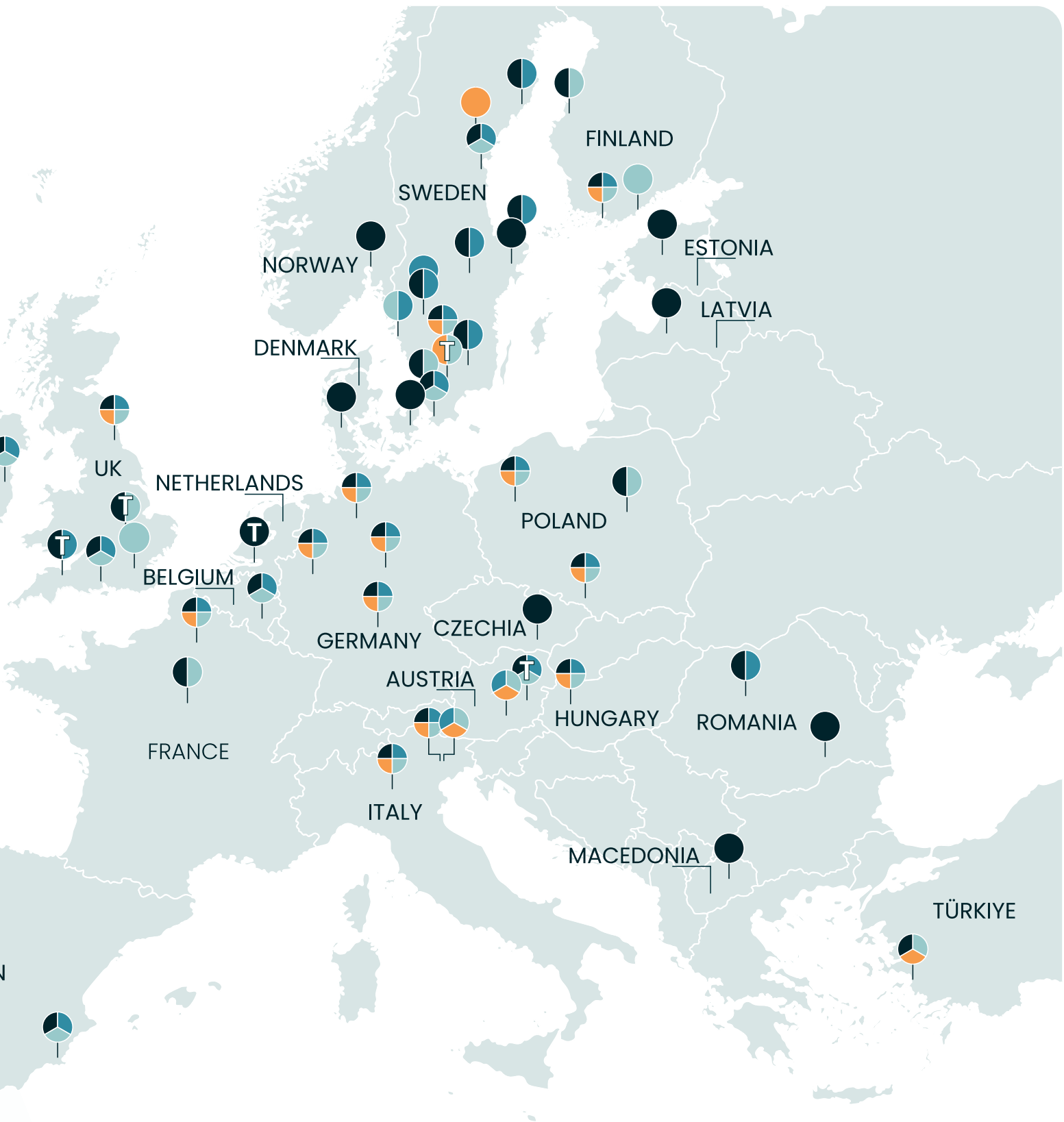
-  Sales offices
-  Warehouse
-  Offices
-  Manufacturing
-  Training Centres

IRELAND



SPAIN





Comfort delivered

The indoors. The place where we spend so much time, where we learn, sleep, relax, share.

This is where we live.

That is why a healthy and comfortable indoor climate is so important.

In a world facing unprecedented climate challenges population growth and the need to make better use of resources, it is essential to guarantee sustainability.

Committed to innovation, our approach to system and solution allows us to provide optimal heating at the highest levels of comfort and energy efficiency.

With our complete range and the knowledge of our experts, we can help you find exactly the right solution.

Therefore we work together today to create innovative solutions that will meet the indoor climate challenges of tomorrow.

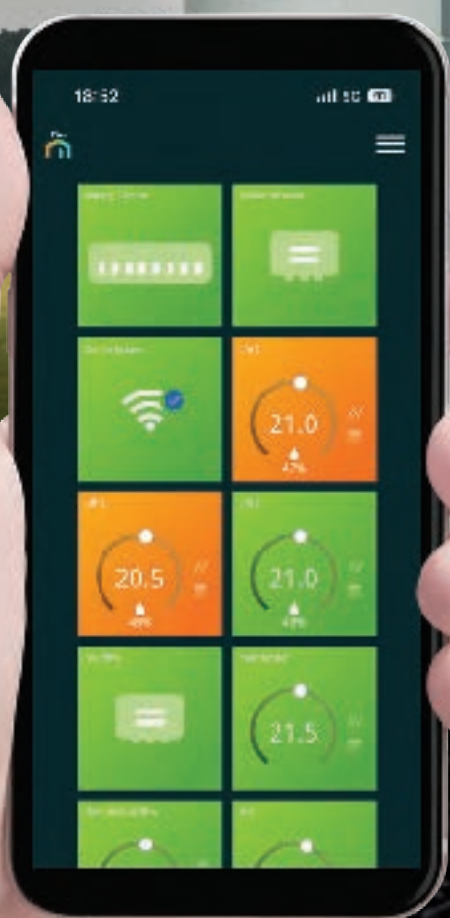
We improve the indoor climate as we know it.

Let's create the great indoors.



Improvement
of efficiency

**Optimisation
of energy efficiency**
thanks to the precision
of the system



Improvement
of integration

We integrate solutions
into innovative systems
for better performance



Smarter work

We work together
and we work
in a smarter manner

Reduction of the environmental impact

We concentrate on the entire
life cycle of the product
and reduce its impact
on our climate

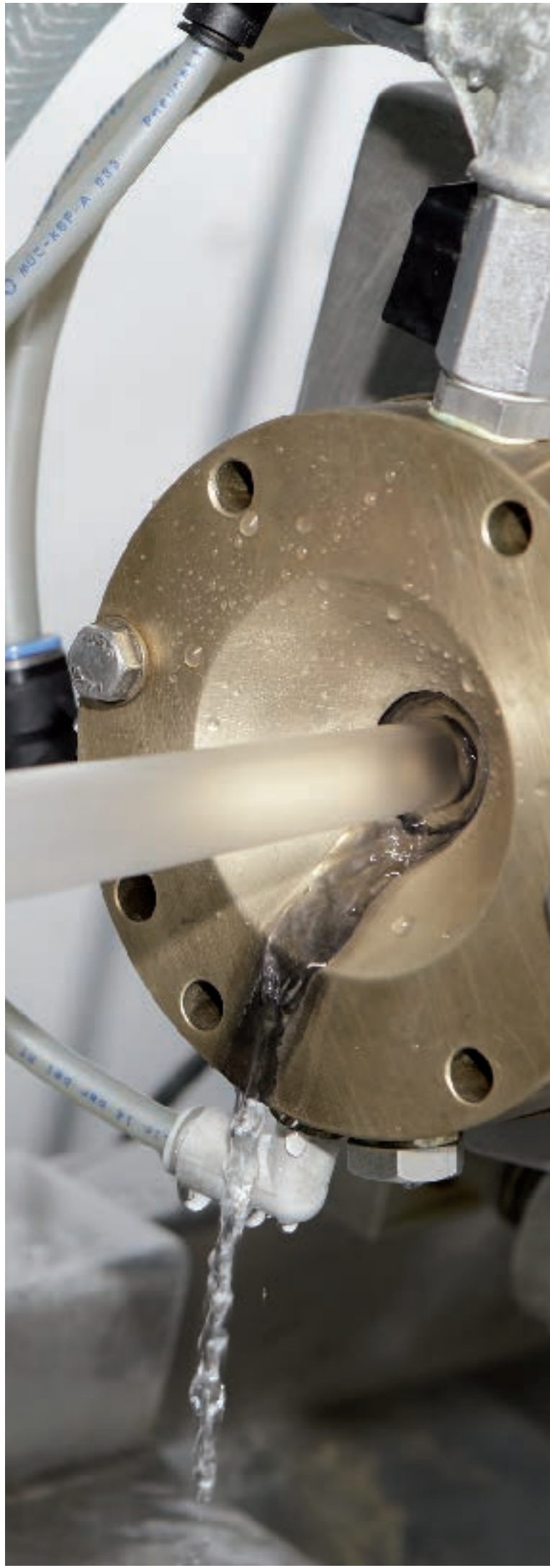
CO₂

Italian talent

The excellent quality and consistently high standard of our products stem from careful design and construction using the latest technology.

Our products are marketed with a “Quality Control” guarantee, which certifies that every piece produced by F.I.V. has undergone and passed a whole series of checks designed to establish whether they meet specifications relating to quality.





Certifications

The certifications of the innovative company management system according to ISO 9001 and 14001 provide a further guarantee for our customers. With the new 45001 certification, starting from 2018, FIV can officially certify their commitment to accident prevention and protection of health and safety at work.



MANAGEMENT SYSTEM CERTIFICATE

Certificate no.: 71884-0010-AE-ITA-SINCERT Initial certification date: 13 February 2010 Valid: 14 February 2025 – 13 February 2028

This is to certify that the management system of
F.I.V. - FABBRICA ITALIANA VALVOLE S.r.l.
Via Gavardina di sopra 86 - 25011 Ponte S. Marco di Calcinato (BS) - Italy
and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to the Environmental Management System standard:
ISO 14001:2015

This certificate is valid for the following scope:
Design and manufacture (through turning, assembly and packing) of ball valves and ballcocks, press fittings, tightening fittings, check valves, hydro-thermal-sanitary and gas distribution systems. Sale of lock shields-valves and accessories, safety valves, foot valves, automatic air valves, pressure reducers, gate valves and flexible pipes (IAF 18, 29)
Evaluated according to the requirements of Technical Regulations RT-09

Place and date:
Vimercate (MB), 12 February 2025

For the issuing office:
DNV - Business Assurance
Via Energy Park, 14 - 20871 Vimercate (MB) - Italy

Claudia Barondini
Management Representative

Lack of fulfillment of conditions as set out in the Certification Agreement may render this Certificate invalid.
ACCREDITED UNIT: DNV Business Assurance Italy S.r.l., Via Energy Park, 14 - 20871 Vimercate (MB) - Italy - TEL: +39 039 58 99 905, www.dnv.it



MANAGEMENT SYSTEM CERTIFICATE

Certificate no.: CERT-01295-96-AQ-AML-SINCERT Initial certification date: 19 November 1996 Valid: 22 October 2024 – 21 October 2027

This is to certify that the management system of
F.I.V. - FABBRICA ITALIANA VALVOLE S.r.l.
Via Gavardina di sopra 86 - 25011 Ponte S. Marco di Calcinato (BS) - Italy
and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to the Quality Management System standard:
ISO 9001:2015

This certificate is valid for the following scope:
Design and manufacturing of ball valves and ballcocks, fittings, check valves, hydro-thermal-sanitary and gas distribution systems. Sales of lockshields-valves and accessories, safety valves, foot valves, automatic air valves, pressure reducers, gate valves and flexible pipes (IAF 18)

Place and date:
Vimercate (MB), 20 October 2024

For the issuing office:
DNV - Business Assurance
Via Energy Park, 14 - 20871 Vimercate (MB) - Italy

Claudia Barondini
Management Representative

Lack of fulfillment of conditions as set out in the Certification Agreement may render this Certificate invalid.
ACCREDITED UNIT: DNV Business Assurance Italy S.r.l., Via Energy Park, 14 - 20871 Vimercate (MB) - Italy - TEL: +39 039 58 99 905, www.dnv.it



MANAGEMENT SYSTEM CERTIFICATE

Certificate no.: 1000457248-MSC-ACCREDIA-ITA Initial certification date: 24 February 2018 Valid: 28 February 2024 – 24 February 2027

This is to certify that the management system of
F.I.V. - FABBRICA ITALIANA VALVOLE S.r.l.
Via Gavardina di sopra 86 - 25011 Ponte S. Marco di Calcinato (BS) - Italy
and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to the Occupational Health and Safety Management System standard:
ISO 45001:2018

This certificate is valid for the following scope:
Design and manufacture (through turning, assembly and packing) of ball valves and ballcocks, fittings, check valves, hydro-thermal-sanitary and gas distribution systems. Sale of lockshields-valves and accessories, safety valves, foot valves, automatic air valves, pressure reducers, gate valves and flexible pipes (IAF 18, 29)

Place and date:
Vimercate (MB), 15 February 2024

For the issuing office:
DNV - Business Assurance
Via Energy Park, 14 - 20871 Vimercate (MB) - Italy

Claudia Barondini
Management Representative

Lack of fulfillment of conditions as set out in the Certification Agreement may render this Certificate invalid.
ACCREDITED UNIT: DNV Business Assurance Italy S.r.l., Via Energy Park, 14 - 20871 Vimercate (MB) - Italy - TEL: +39 039 58 99 905, www.dnv.it

Products conformity certificates

Products are delivered after a Quality Control process which corresponds to the needs of a customer and the certification bodies of a product. The certificates issued by different institutes for certifying products guarantee compliance with the main technical standards in the plumbing sector.



Germany



Germany



Germany



Europe/Italy



Poland



Ukraine

Integrated plumbing and heating solutions

1



page 16

**Multi-layer distribution
systems for water**

3



page 84

**Manifolds, cabinets
and mixing groups**

2



page 56

**Floor and wall
heating and cooling
systems**

4



page 164

**Regulation
and control**

5



page 174

**Connection and control
of heating units**

8



page 252

**Ball valves, check valves,
bibcocks and under sinks
for water**

6



page 202

**Seals and
screw fittings**

9



page 296

**Ball valves
for gas**

7



page 220

**Heating unit components,
fittings and flexible pipes**

10 **5 bar**
20 °C
44 Nm

page 324

**Technical
attachments**

X PEXb/AL/PEXb 20x2 Tmax=95°C DWGWI DW8501B

20x2 PEXb/AL/PEXb 20x2 Tmax=95°C DWGWI DW8501B



04 - DW8501CS0372 **kiwa**

FIUPEX Ø16X2 (1182)
SPRESSORE 6mm L.10.



FIIV FIUPEX PEXb/AL

25/ES/2020 13:22 30
Made in Italy



Xb 20x2 Tmax=95°C DWI

STURRA ALL'INTERNO
31 DPR 212/93 ALR1x

Multi-layer distribution

SYSTEMS FOR WATER

1



page 20

FIVPex
multilayer pipe
PE-Xb/AL/PE-Xb



page 40

FIVPress LBP
Leak Before Pressed
under-plaster
valve



page 24

FIVPert
multilayer pipe
PE-RT/AL/PE-RT



page 42

FIVPress
press fittings



page 27

FIVPress LBP
Leak Before Pressed
press fittings

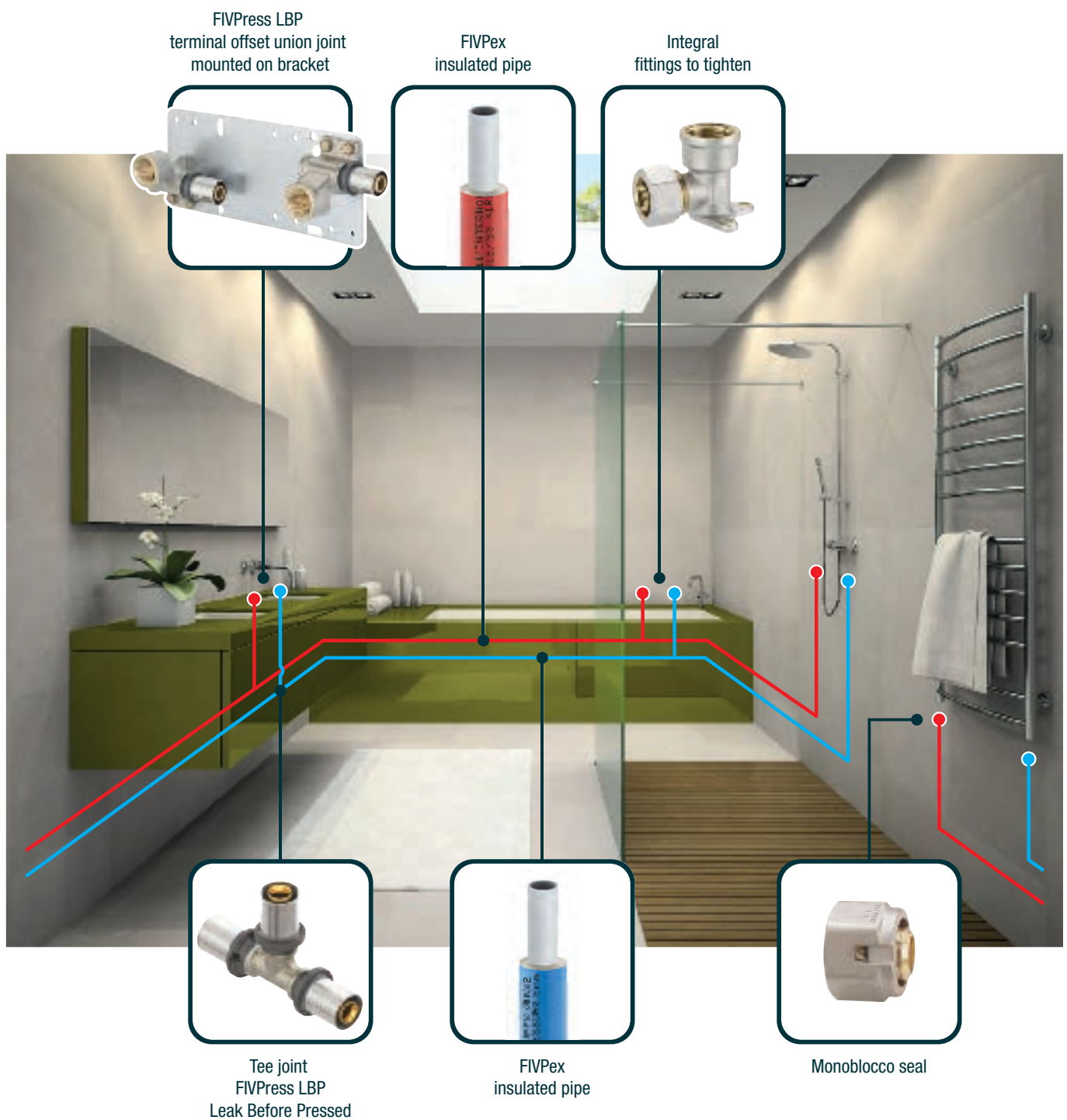


page 50

Equipment
for FIVPress
system

FIVPRESS

Multilayer pipe and fittings for plumbing systems



A complete system

APPLICATION SCOPE

FIVPress is a simple and innovative system, in multilayer pipes and special fittings, for:

- Heating systems
- Hydraulic-Plumbing systems
- Chilled water air conditioning systems
- Compressed air systems

FIVPex PIPE

Crosslinked polyethylene and aluminium multilayer pipe (PE-Xb/AL/PE-Xb)

FIVPert PIPE

Polyethylene with high resistance to high temperatures and aluminium multilayer pipe (PE-RT/AL/PE-RT)

FITTINGS

Available in two versions (press-fit and tightening), their wide range make system creation extremely practical.

System properties

RESISTANT TO TEMPERATURES UP TO 95 °C AND WORKING PRESSURES UP TO 10 BAR

LIMITED LINEAR THERMAL EXPANSION AND LOW PRESSURE DROPS

DIELECTRIC INSULATION IN THE PIPE-FITTING JOINTS THANKS TO THE PLASTIC BUSH HOLDER RING NUT

OXYGEN BARRIER AND CHEMICAL RESISTANCE

The aluminum layer makes the pipes impermeable to oxygen. The FIVPex and FIVPert pipes resist to “acid” and “basic” environments in chased installations, but must be protected against any contact with bitumen, grease, solvents and oils. The fittings must be protected with appropriate coatings when used in environments exposed to the danger of corrosion, such as in spaces with permanent humidity or in the presence of aggressive gases, in underground laying in direct contact with cement, mortar or lime-based binders.

INSULATION WITH CLOSED-CELL EXPANDED POLYETHYLENE SHEATH

For the distribution of hot and chilled water (prior verification in compliance with UNI EN ISO 12241, for condensate risks).

FITNESS FOR USE WITH DRINKING WATER

Compliance with Italian Decree of the Ministry of Health No. 174 (06/04/2004) and the UNI EN ISO 21003 standard.

FIRE REACTION CLASS (EN 13501-1)

E_L (multilayer pipes); B_L - s2, d0 (insulating sheath).

UV PROTECTION

The FIVPex and FIVPert pipes must be protected from direct exposure to sunlight.

System certifications

SYSTEMS CONSISTING OF FIVPex PIPE AND PRESS FITTINGS



System certification (in compliance with UNI EN ISO 21003 standard) in combination with FIVPress LBP fittings in sizes DN 16, 20, 26, 32.

SYSTEMS CONSISTING OF FIVPert PIPE AND PRESS FITTINGS

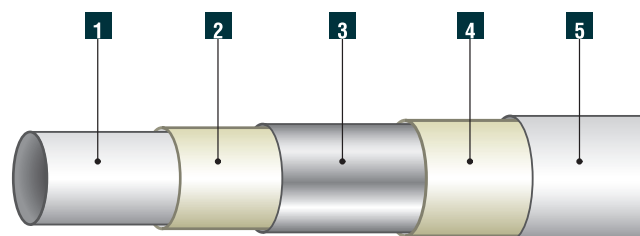


System certification (in compliance with UNI EN ISO 21003 standard) in combination with FIVPress LBP fittings in sizes DN 16, 20, 26, 32.



System certification in combination with FIVPress LBP fittings in sizes DN 16, 20, 26, 32.

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



[UNI EN ISO 21003]



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



See FIVPress System introductory page (page 19) for details

Components

- | | |
|---|---|
| 1 | Inner pipe in PE-Xb crosslinked polyethylene |
| 2 | Bonding layer connecting the inner pipe to the aluminium pipe |
| 3 | Aluminium pipe (minimum thickness 0.2 mm) |
| 4 | Bonding layer connecting the outer pipe to the aluminium pipe |
| 5 | Outer pipe in PE-Xb crosslinked polyethylene |

CONSTRUCTION CHARACTERISTICS AND PERFORMANCE

The FIVPex pipe is produced by constructing a layer of aluminum inside two layers of polyethylene and proceeding with the cross-linking process. This combines the advantages of metal (dimensional stability, high resistance to temperature and pressure) with those of plastic (easy working, good chemical inertia). The quality of materials used allow the FIVPex pipe to achieve the highest performance levels among products in its sector.

COMPLIANCE WITH STANDARDS

The FIVPex pipe complies with UNI EN ISO 21003 standard (class 2/10 bar, class 5/10 bar) and with Italian Ministerial Decree 174/2004.

CONDITIONS OF USE ACCORDING TO THE APPLICATION CLASSES IN COMPLIANCE WITH UNI EN ISO 21003-1 STANDARD (SEE TECHNICAL ATTACHMENTS).

EN TECHNICAL CHARACTERISTICS OF FIVPex PIPE

Minimum aluminium thickness 0.2 mm
Coefficient of linear expansion: 0.026 mm/m °C
Thermal conductivity: 0.45 W/m °C
Minimum radius of bending: 5 x Ø pipe
Surface roughness of internal pipe: 7 µm
Fire reaction class: E_L (EN 13501-1)

OPERATING CONDITIONS OF FIVPex PIPE

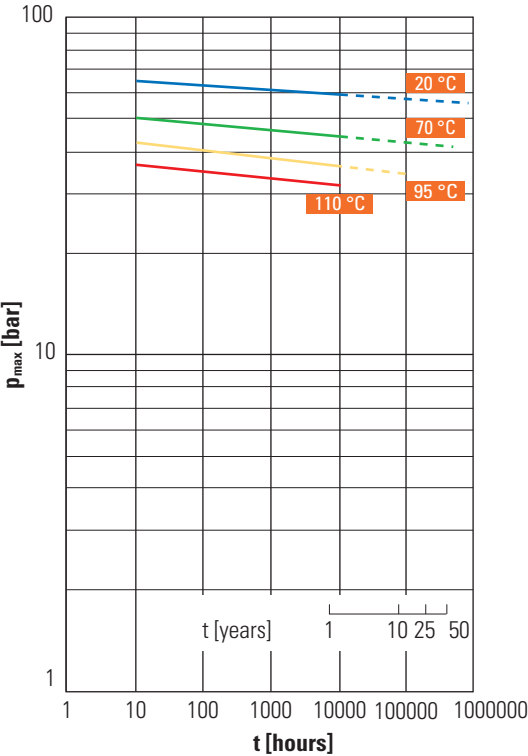
Classes of application (UNI EN ISO 21003-1 - see table Classifications of conditions of use in the Technical Attachments section): 2/10 bar, 5/10 bar
Maximum operating conditions for 50 years:
- Maximum temperature for shorts time: 95 °C
- Design pressure p_D = 10 bar

TECHNICAL CHARACTERISTICS OF INSULATING SHEATH

Insulating sheath material: Closed-cell expanded polyethylene, coated with a film in extruded LD-PE.
Thermal conductivity (at 40 °C): ≤ 0,040 W/mK (UNI EN ISO 8497)
Water vapour diffusion resistance µ: 5000 (UNI EN 13469)
Fire reaction class for the coating: B_L - s2, d0 (EN 13501-1)

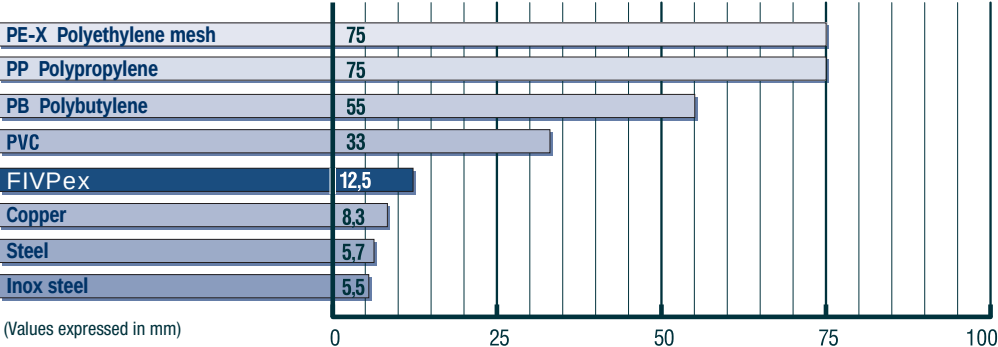
Pressure drops: see Technical Attachments section.

FIVPex pipe regression curves (16x2)



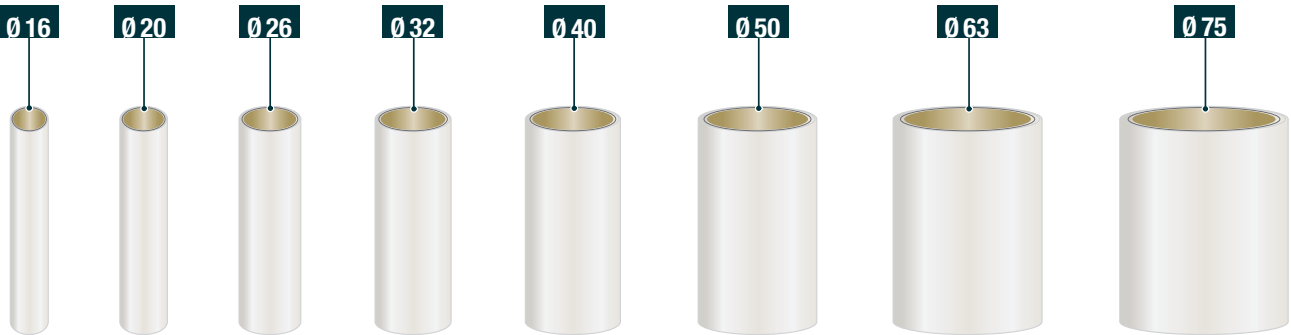
Example of reading
The maximum pressure (Pmax) for a duration of 50 years at a given temperature is identified by intersecting the vertical line for 50 years with the coloured line for said temperature. Once the expected operating pressure is known (Pes), the safety coefficient will be equal to ks=Pmax/Pes.

Linear thermal expansion for 10 m pipes in different materials ΔT 50 °C



FIVPex PIPE RANGE

Available in rolls with diameters DN 16 - 20 - 26 - 32 and in bars DN 16 - 20 - 26 - 32 - 40 - 50 - 63 - 75.
The pipe in coils is also available pre-insulated with a closed-cell expanded polyethylene sheath, coated.



FIVPex pipe dimensional characteristics

FIVPex pipe external Ø	mm	16	20	26	32	40	50	63	75
FIVPex pipe internal Ø	mm	12	16	20	26	33,2	41,8	53,6	64,5
Total thickness	mm	2	2	3	3	3,5	4	4,5	5
Weight (1)	kg/m	0,13	0,15	0,28 (0,30)	0,38 (0,41)	0,58	0,88	1,32	1,6
Water content	l/m	0,11	0,20	0,31	0,53	0,855	1,385	2,29	3,32
Insulation thickness	mm	6	6/9	6/9	9	-	-	-	-

(1) Bare pipe: in brackets the values for the pipe in bars

GP 2026
FIVPex PIPE



FIVPex BARE pipe in rolls.

CODE	Size	m Pallet	N° Rolls	Pack m	Price €/m
9416P917	16 x 2	2200	22	100	2,07
9416P969	16 x 2	2600	13	200	2,07
9416P971	16 x 2	2000	4	500	2,07
9416P931	20 x 2	1600	16	100	2,82
9416P987	26 x 3	600	12	50	6,28
9416P944	32 x 3	800	16	50	7,79

GP 2026
FIVPex PIPE



FIVPex BARE pipe in bars of 4 m.

CODE	Size	Pack m	Price €/m
9412P917	16 x 2	96	2,64
9412P931	20 x 2	96	3,74
9412P987	26 x 3	40	6,84
9412P944	32 x 3	28	10,11
9419P001	40 x 3,5	20	21,21
9419P002	50 x 4	20	29,00
9419P003	63 x 4,5	12	50,69
9419P953	75 x 5	12	78,20

GP 2026
FIVPex PIPE



FIVPex INSULATED pipe in rolls, insulating sheath in closed cell expanded polyethylene, coated.
Thermal conductivity of insulation at 40 °C: 0.040 W/m °C.

CODE	Size	Insulation thickness mm	m Pallet	N° Rolls	Pack m	Price €/m
9417P916	16 x 2	6 (I)	700	14	50	3,03
9417P917	16 x 2	6 (I)	900	9	100	3,03
9417P931	20 x 2	6	600	12	50	4,22
9417P934	20 x 2	9 (I)	450	9	50	4,59
9411P986	26 x 3	6	700	14	50	9,67
9411P987	26 x 3	9 (I)	600	12	50	9,16
9411P944	32 x 3	9 (I)	350	14	25	12,06

GP 2026
FIVPex PIPE



FIVPex INSULATED pipe in rolls, insulating sheath in closed cell expanded polyethylene, coated.
Thermal conductivity of insulation at 40 °C: 0.040 W/m °C.

CODE	Size	Insulation thickness mm	m Pallet	N° Rolls	Pack m	Price €/m
9414P922	16 x 2	10 (I)	500	10	50	3,40
9414P937	20 x 2	13 (I)	350	7	50	5,00
9414P988	26 x 3	13 (I)	250	10	25	9,48
9414P945	32 x 3	13 (I)	350	14	25	13,16

20x2 (13 mm) - 26x3 (13 mm) - 32x3 (13 mm): Type C installation
16x2 (10 mm): Type B installation

GP 2026
FIVPex PIPE



FIVPex INSULATED pipe in rolls, insulating sheath in closed cell expanded polyethylene, coated.
Thermal conductivity of insulation at 40 °C: 0.040 W/m °C.

CODE	Size	Insulation thickness mm	m Pallet	N° Rolls	Pack m	Price €/m
9417P920	16 x 2 SKY BLUE	6 (*)	700	14	50	3,13
9417P932	20 x 2 SKY BLUE	6	600	12	50	4,38
9417P988	26 x 3 SKY BLUE	9 (*)	600	12	50	9,16
9417P945	32 x 3 SKY BLUE	9 (*)	350	14	25	12,30

GP 2026
FIVPex PIPE



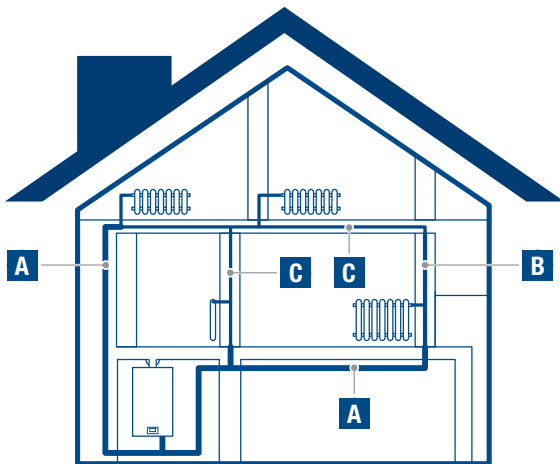
FIVPex INSULATED pipe in rolls, insulating sheath in closed cell expanded polyethylene, coated.
Thermal conductivity of insulation at 40 °C: 0.040 W/m °C.

CODE	Size	Insulation thickness mm	m Pallet	N° Rolls	Pack m	Price €/m
9417P921	16 x 2 RED	6 (*)	700	14	50	3,13
9417P933	20 x 2 RED	6	600	12	50	4,38
9417P989	26 x 3 RED	9 (*)	600	12	50	9,16
9417P946	32 x 3 RED	9 (*)	350	14	25	12,30

(1) Compliant with Italian Law: L. 10/91 and Presidential Decree no. 412/93 Attachment B - TAB 1
(Current pipes within structures that do not face either the outside or unheated rooms).

(2) Compliant with Italian Law: L. 10/91 and Presidential Decree no. 412/93 Attachment B - TAB 1
(Vertical mounting of the piping placed on the other side of the building's heat insulation, towards the inside of the building).

INSULATION OF HEAT DISTRIBUTION NETWORKS IN HEATING SYSTEMS



Installation type A (symbol A)

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 (symbol B)

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 (symbol C)

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.

External Ø of piping (mm)

(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

Thermic 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 = 0.040 W/m °C

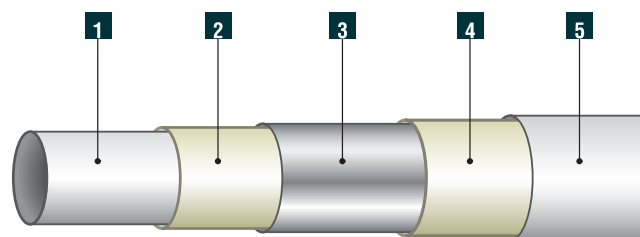
External diameter of pipe / 22 mm

Position (see drawing) C

Calculation $30 \times 0,3 = 9$ mm

where 30 = thickness from table; 0,3 coefficient for category.

FIV insulating pipes, in accordance with Law 549 of 28/12/1993, do not contain CFCs and are composed of non-toxic materials. Insulation of heat distribution networks within thermic plants (Presidential Decree 412/93).



[UNI EN ISO 21003]

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



See FIVPress System introductory page (page 19) for details

Components

1	Inner pipe in PE-RT
2	Bonding layer connecting the inner pipe to the aluminium pipe
3	Horizontal-roller-position welding (see table on next page for thickness)
4	Bonding layer connecting the outer pipe to the aluminium pipe
5	Outer pipe in PE-RT

CONSTRUCTION CHARACTERISTICS AND PERFORMANCE

The PE-RT/AL/PE-RT multilayer pipe for underfloor heating, heating and sanitary systems, belongs to the new generation of multilayer pipes for plumbing-sanitary systems. It consists of composite material, made even and more solid by a technologically advanced process, with which a PE-RT (crosslinked polyethylene with high resistance to high temperatures) pipe is implemented, reinforced by an aluminium core welded and covered externally by another layer of PE-RT.

COMPLIANCE WITH STANDARDS

The FIVPert pipe complies with UNI EN ISO 21003 standard (class 2/10 bar, class 5/10 bar) and with Italian Ministerial Decree 174/2004. In addition, the FIVPert 16x2 pipe has achieved the DVGW (Technical Rules W542 and W534) and KIWA (Technical Document Ki-0410) quality certificates.

CONDITIONS OF USE ACCORDING TO THE APPLICATION CLASSES IN COMPLIANCE WITH UNI EN ISO 21003-1 STANDARD (SEE TECHNICAL ATTACHMENTS).

EN TECHNICAL CHARACTERISTICS

Coefficient of linear expansion: 0,026 mm/m °C
Thermal conductivity: 0,45 W/m K
Minimum radius of bending: 5 x Ø pipe
Surface roughness of internal pipe: 7 µm
Fire reaction class: E_L (EN 13501-1)

OPERATING CONDITIONS OF FIVPert PIPE

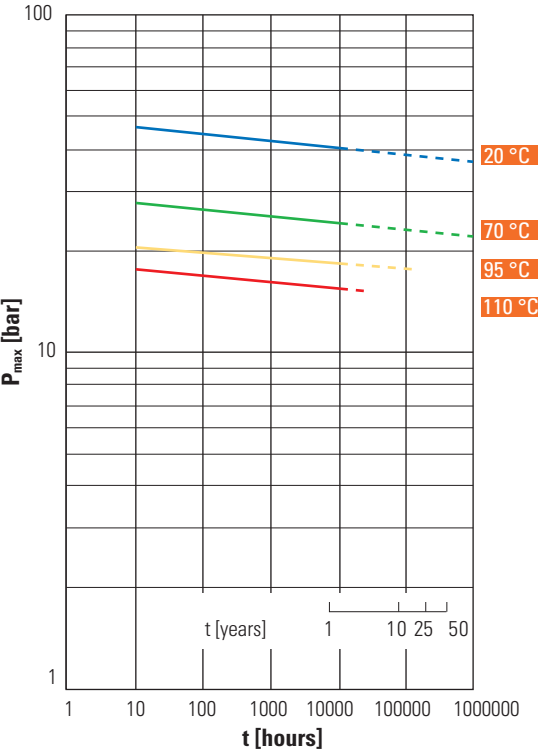
Classes of application (UNI EN ISO 21003-1 - see table "Classifications of conditions of use" in the Technical Attachments section): 2/10 bar, 5/10 bar
Maximum operating conditions for 50 years:
- Design temperature T_D = 70 °C
- Design pressure p_D = 10 bar

TECHNICAL CHARACTERISTICS OF INSULATING SHEATH

Material: Closed-cell expanded polyethylene, coated with a film in extruded LD-PE.
Thermal conductivity (at 40 °C): ≤ 0,040 W/mK (UNI EN ISO 8497).
Water vapour diffusion resistance µ: 5000 (UNI EN 13469)
Fire reaction class: B_L - s2, d0 (EN 13501-1)

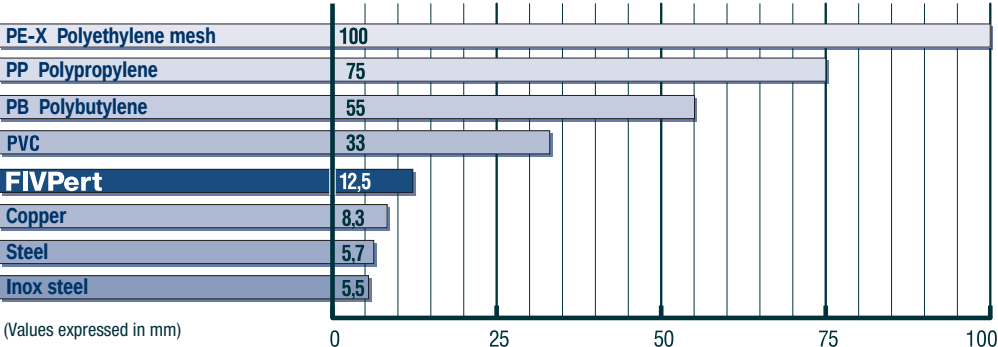
Pressure drops: see Technical Attachments section.

FIVPert pipe regression curve (16x2)



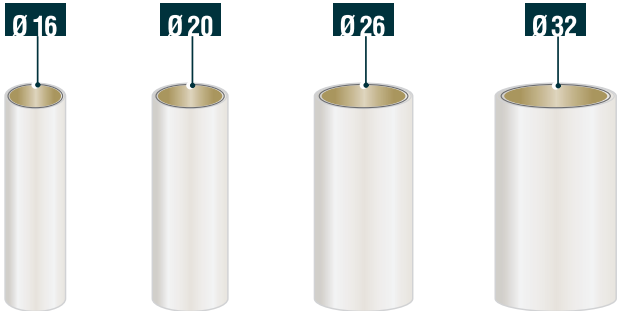
Example of reading
The maximum pressure (P_{max}) for a duration of 50 years at a given temperature is identified by intersecting the vertical line for 50 years with the coloured line for said temperature. Once the expected operating pressure is known (P_{es}), the safety coefficient will be equal to k_s=P_{max}/P_{es}.

Linear thermal expansion for 10 m pipes in different materials ΔT 50 °C



FIVPert PIPE RANGE

Available in rolls with diameters DN 16 - 20 - 26 - 32 and in bars DN 26 and 32.
The pipe in rolls is also available pre-insulated with a coated expanded polyethylene sheath.



FIVPert pipe dimensional and characteristics

FIVPert pipe external Ø	mm	16	20	26	32
FIVPert pipe internal Ø	mm	12	16	20	26
Total thickness	mm	2	2	3	3
Thickness of aluminum sheet	mm	0,20	0,25	0,30	0,35
Weight (1)	Kg/m	0,10	0,13	0,26	0,33
Water content	l/m	0,11	0,20	0,31	0,53
Insulation thickness	mm	6	6/9	9	9

(1) Bare pipe

GP 2035
FIVPert pipe



FIVPert BARE pipe in rolls.

(*) Article available while stocks last.

CODE	Size	m Pallet	N° Rolls	Pack m	Price €/m
9517P917	16 x 2	2200	22	100	1,89
9517P969	16 x 2	2600	13	200	2,07
9517P971	16 x 2	2000	4	500	2,07
9517P931	20 x 2	1600	16	100	2,81
9517P240	20 x 2 (*)	1920	8	240	2,81
9517P981	26 x 3	600	12	50	5,52
9517P982	32 x 3	800	16	50	6,84

GP 2035
FIVPert pipe



FIVPert INSULATED pipe in rolls, insulated sheath in closed-cell expanded polyethylene, coated.
Thermal conductivity of insulation at 40 °C: ≤0.040 W/m °C

CODE	Size	Insulation thickness mm	m Pallet	N° Rolls	Pack m	Price €/m
9512P916	16 x 2	6 (I)	700	14	50	3,03
9512P917	16 x 2	6 (I)	900	9	100	3,03
9512P931	20 x 2	6	600	12	50	4,18
9512P934	20 x 2	9 (I)	450	9	50	4,55
9512P938	26 x 3	9 (I)	600	12	50	8,06
9512P939	32 x 3	9 (I)	350	14	25	10,60

GP 2035
FIVPert pipe



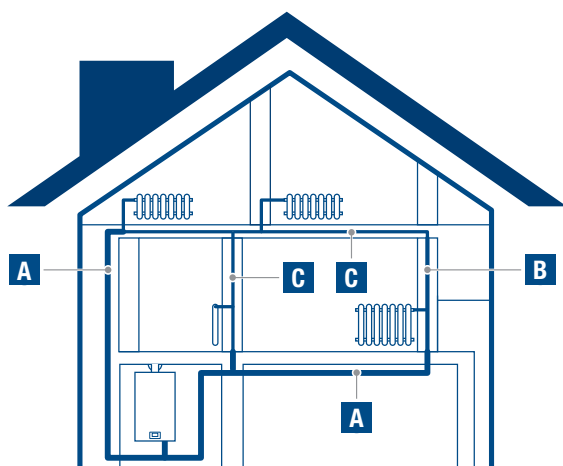
FIVPert BARE pipe in bars of 4 m.

Available only on request.

CODE	Size	Pack m	Price €
9517P985	26 x 3	40	6,62
9517P986	32 x 3	28	9,78

(1) Compliant with Italian Law: L. 10/91 and Presidential Decree no. 412/93 Attachment B - TAB 1
(Current pipes within structures that do not face either the outside or unheated rooms).

INSULATION OF HEAT DISTRIBUTION NETWORKS IN HEATING SYSTEMS



Installation type A (symbol A)

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 thermal conductivity of the insulating material shown in W/m °C at a temperature of 40 °C.

Installation type B (symbol B)

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 (symbol C)

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.

External Ø of piping (mm)

(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

Thermic 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 = 0.040 W/m °C

External diameter of pipe / 22 mm

Position (see drawing) C

Calculation $30 \times 0.3 = 9$ mm

where 30 = thickness from table; 0.3 coefficient for category.

FIV insulating pipes, in accordance with Law 549 of 28/12/1993, do not contain CFCs and are composed of non-toxic materials. Insulation of heat distribution networks within thermic plants (Presidential Decree 412/93).

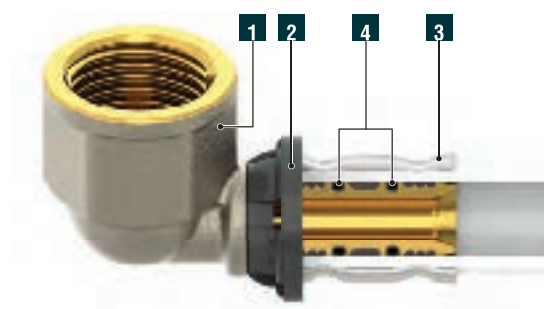


FIVPress LBP

Leak Before Pressed

PLURI-PROFILE PRESS FITTINGS

pluri  profile



[UNI EN ISO 21003]

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



EPD
VERIFIED



See FIVPress System introductory page (page 19) for details

Components

	Pcs	Material
1 Brass body (nickel plated only on surfaces not in contact with carried fluids)	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
Female - Male connection Thread UNI EN 10226 (UNI EN ISO 7/1) (DIN 2999)		
2 Bush holder ring nut	1	Polyamide
3 Bush	1	AISI 304 stainless steel
4 Double O-Ring	2	EPDM peroxidic 70 Sh
5 Matrices (pincers)	1	Steel

EN TECHNICAL AND CONSTRUCTIONAL CHARACTERISTICS

The FIVPress LBP fittings allow a quick and safe connection of the pipe - fitting, attainable by pressing the steel bushing, with the specific device.

The special shape of the fitting and the use of a double O-Ring guarantee a perfect and long-lasting hydraulic and mechanical seal.

The FIVPress LBP fittings have been developed to ensure a water leak in the absence of pressing and to be used indifferently with 5 different pressing profiles (TH, B, U, H, F). The LBP function (Leak Before Pressed) enables the installer to identify any fittings not pressed during testing of the system seal, and therefore avoiding possible damage.

SUITABILITY FOR DRINKING WATER

The press fittings of the FIVPress LBP system comply with the Decree of the Italian Ministry of Health n. 174 of 06/04/2004.

CONSTRUCTIONAL DETAILS

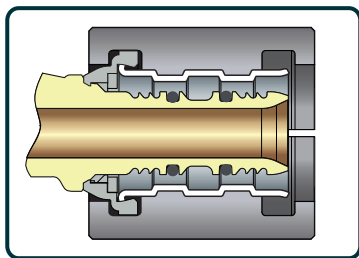
The stainless steel bush is mounted on the fitting by means of a polyamide ring nut with windows.

This performs the following tasks:

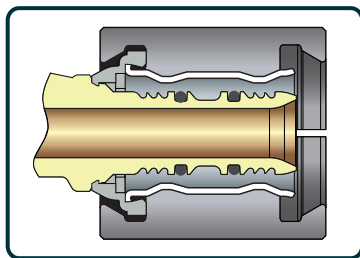
- it allows you to check that the pipe is correctly positioned with the pipe (thanks to the windows)
- it guides the pincers correctly around the bush
- it insulates the pipe from the brass of the fitting, preventing corrosion due to differences in electrical potential.

PRESSING PROFILE FIVPress LBP FITTINGS

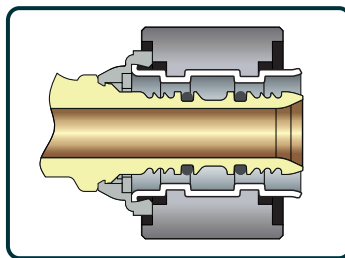
TH - KSP 11



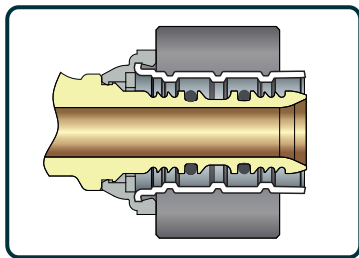
B - KSP 1



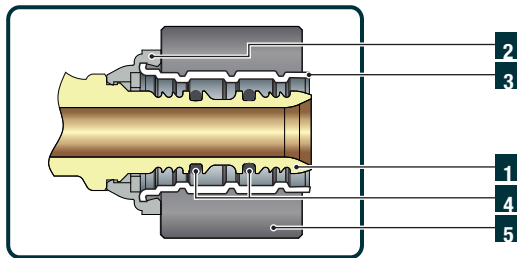
F - KSP 2



U - KSP 5



H - KSP 7



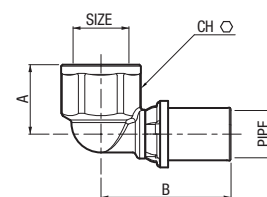
Profile and dimensions of the jaws that can be used with Pluri-Profile FIVPress LBP fittings

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

GP 2601
LBP FITTINGS



Female connecting elbow, nickel-plated.



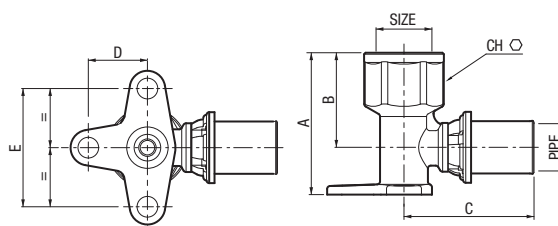
CODE	Size	Pipe	A mm	B mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
7422R802	16 x 1/2"	16x2	23,5	44	24	10/80	320	5,41
7422R805	16 x 3/4"	16x2	28	48	30	10/50	200	11,05
7422R804	20 x 1/2"	20x2	23,5	44	24	10/60	240	6,78
7422R807	20 x 3/4"	20x2	28	48	30	10/50	200	9,37
7422R809	26 x 3/4"	26x3	28	52,5	30	5/35	140	10,03
7422R811	26 x 1"	26x3	33	56,5	38	5/25	100	20,08
7422R814	32 x 1"	32x3	33	56,5	38	5/25	100	18,28

Threads: Rp (UNI EN 10226-1).

GP 2601
LBP FITTINGS



Female connecting elbow fitting, with flanged, nickel-plated.



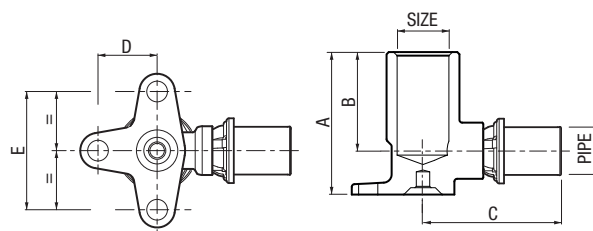
CODE	Size	Pipe	A mm	B mm	C mm	D mm	E mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
7424R802	16 x 1/2"	16x2	48	32	44	20	40	24	5/40	160	8,45
7424R804	20 x 1/2"	20x2	48	32	44	20	40	24	5/40	160	8,79
7424R807	20 x 3/4"	20x2	56	37	48	20	40	30	5/20	80	13,94
7424R809	26 x 3/4"	26x3	56	37	52,5	20	40	30	5/20	80	14,13

Threads: Rp (UNI EN 10226-1).

GP 2601
LBP FITTINGS



Female connecting H52 mm elbow fitting,
with flanged, nickel-plated.



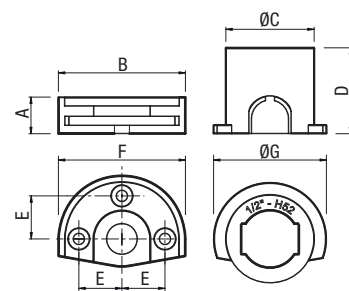
CODE	Size	Pipe	A mm	B mm	C mm	D mm	E mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
7424R806	16 x 1/2"	16x2	52	36	51	20	40	24	5/30	120	10,85
7424R808	20 x 1/2"	20x2	52	36	51	20	40	24	5/30	120	11,11

Threads: G (UNI EN ISO 228-1).

GP 2601
LBP FITTINGS



Soundproofing shell for elbow, H52 mm female connection
with flange, screw kit included.

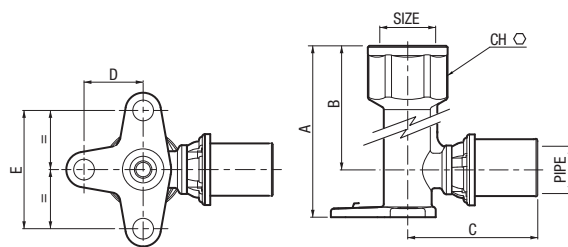


CODE	Size	Version	A mm	B mm	ØC mm	D mm	E mm	F mm	ØG mm	Pack pcs/box	Master pcs/box	Price €/pc
7446R052	-	SINGLE	17	59	41	42	20	59	52,4	1/4	32	16,16

GP 2601
LBP FITTINGS



Female coupling elbow fitting with long neck
and flange, nickel-plated.



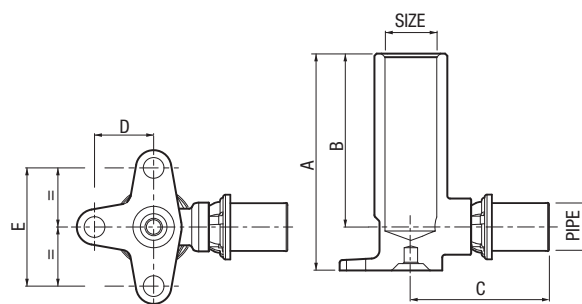
CODE	Size	Pipe	A mm	B mm	C mm	D mm	E mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
7443R802	16 x 1/2"	16x2	68	52	44	20	40	24	5/30	120	9,19
7443R804	20 x 1/2"	20x2	68	52	44	20	40	24	5/30	120	9,46

Threads: Rp (UNI EN 10226-1).

GP 2601
LBP FITTINGS



Female connecting H78 mm elbow fitting,
with flanged, nickel-plated.



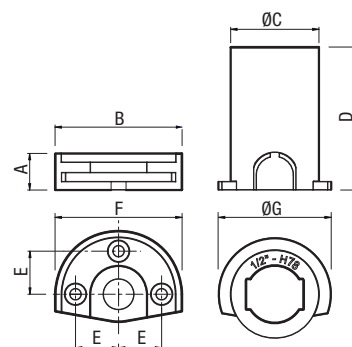
CODE	Size	Pipe	A mm	B mm	C mm	D mm	E mm	Pack pcs/box	Master pcs/box	Price €/pc
7424R906	16 x 1/2"	16x2	78	62	51	20	40	5/20	80	14,48
7424R908	20 x 1/2"	20x2	78	62	51	20	40	5/20	80	14,67

Threads: G (UNI EN ISO 228-1).

GP 2601
LBP FITTINGS



Soundproofing shell for elbow, H78 mm female connection with flange, screw kit included.

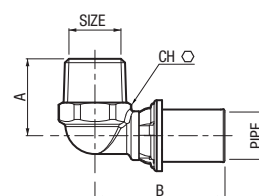


CODE	Size	Version	A mm	B mm	ØC mm	D mm	E mm	F mm	ØG mm	Pack pcs/box	Master pcs/box	Price €/pc
7446R078	-	SINGLE	17	59	41	68	20	59	52,4	1/4	32	16,85

GP 2601
LBP FITTINGS



Male connecting elbow, nickel-plated.



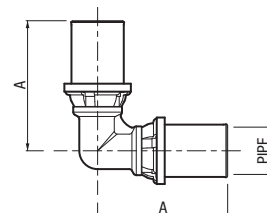
CODE	Size	Pipe	A mm	B mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
7423R801	16 x 3/8"	16x2	23,2	44	22	10/80	320	22,75
7423R802	16 x 1/2"	16x2	26	44	22	10/80	320	5,41
7423R804	20 x 1/2"	20x2	26	44	22	10/70	280	6,79
7423R807	20 x 3/4"	20x2	31,5	48	27	10/40	160	9,08
7423R809	26 x 3/4"	26x3	31,5	52,5	27	5/40	160	10,03
7423R811	26 x 1"	26x3	38	56,5	34	5/25	100	16,92
7423R814	32 x 1"	32x3	38	56,5	34	5/25	100	17,29

Threads: R (UNI EN 10226-1).

GP 2601
LBP FITTINGS



Intermediate elbow union joint, nickel-plated.

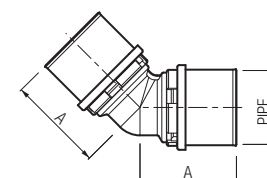


CODE	Size	Pipe	A mm	Pack pcs/box	Master pcs/box	Price €/pc
7428S829	16 x 16	16x2	41,7	10/70	280	6,08
7428S831	20 x 20	20x2	43,7	10/60	240	8,73
7428S833	26 x 26	26x3	51,2	5/30	120	12,54
7428S835	32 x 32	32x3	54,2	5/20	80	19,68

GP 2601
LBP FITTINGS



Intermediate 45° elbow union joint, nickel-plated.

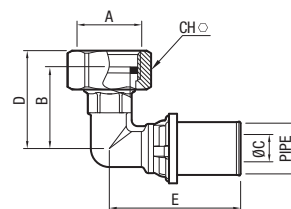


CODE	Size	Pipe	A mm	Pack pcs/box	Master pcs/box	Price €/pc
7444R833	26 x 26	26x3	45,5	5/30	120	22,72
7444R835	32 x 32	32x3	45,5	5/20	80	23,69

GP 2601
LBP FITTINGS



Elbow fitting with swivel nut and flat seal, nickel-plated.



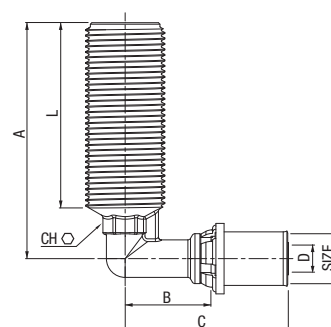
CODE	Size	Pipe	A	B	C	D	E	Ch	Pack	Master	Price
			mm	mm	mm	mm	mm	mm	pcs/box	pcs/box	€/pc
7438R917	16 x 1/2"	16x2	1/2"	28	7	32,8	44	25	1/50	200	7,31
7438R804	20 x 1/2"	20x2	1/2"	28	10,5	32,8	44	25	1/40	160	11,99
7438R805	16 x 3/4"	16x2	3/4"	32	7	36,7	47	30	1/40	160	11,97
7438R920	20 x 3/4"	20x2	3/4"	32	10,5	34,5	47	30	1/40	160	11,04
7438R809	26 x 3/4"	26x3	3/4"	32	14,2	36,7	51,5	30	1/30	120	13,01
7438R811	26 x 1"	26x3	1"	33	14,2	40,1	51,5	37	1/25	100	20,07

Threads: G (UNI EN ISO 228-1).

GP 2601
LBP FITTINGS



Male connecting 90° elbow, nickel-plated.
Thread length L = 60 mm.



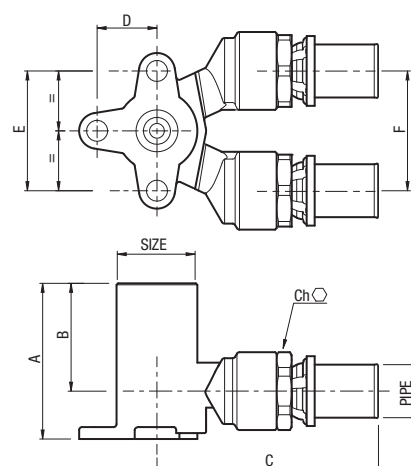
CODE	Size	Pipe	A	B	C	D	L	Ch	Pack	Master	Price
			mm	mm	mm	mm	mm	mm	pcs/box	pcs/box	€/pc
7423R905	16 x 3/4"	16x2	78	28,4	54	7	60,6	13	1/15	60	15,20

Threads: G (UNI EN ISO 228-1).

GP 2601
LBP FITTINGS



Double female thread elbow connector,
with flange, nickel-plated.



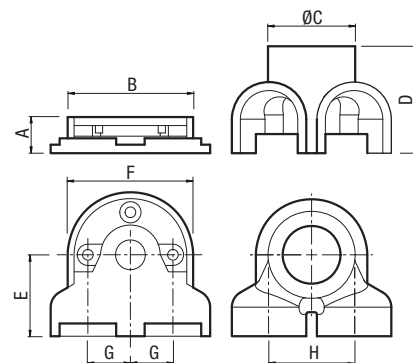
CODE	Size	Pipe	A	B	C	D	E	F	Ch	Pack	Master	Price
			mm	mm	mm	mm	mm	mm	mm	pcs/box	pcs/box	€/pc
7436R802	16 x 1/2"	16x2	52	36	74	20	40	40	24	1/10	40	45,76
7436R804	20 x 1/2"	20x2	52	36	74	20	40	40	28	1/10	40	46,84

Threads: G (UNI EN ISO 228-1).

GP 2601
LBP FITTINGS



Soundproofing shell for elbow, double, H52 mm female connection with flange, screw kit included.

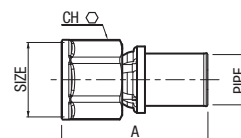


CODE	Size	Version	A mm	B mm	ØC mm	D mm	E mm	F mm	G mm	H mm	Pack pcs/box	Master pcs/box	Price €/pc
7446R252	-	DOUBLE	17	75	41	51	39	59	20	40	1/4	32	16,78

GP 2601
LBP FITTINGS



Straight female union joint, nickel-plated.



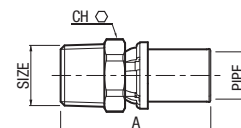
CODE	Size	Pipe	A mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
7420R802	16 x 1/2"	16x2	49,5	24	10/100	400	4,83
7420R805	16 x 3/4"	16x2	52	30	10/60	240	8,69
7420R804	20 x 1/2"	20x2	49,5	24	10/90	360	5,71
7420R807	20 x 3/4"	20x2	52	30	10/60	240	8,23
7420R809	26 x 3/4"	26x3	56,5	30	5/40	160	8,66
7420R811	26 x 1"	26x3	60,5	38	5/30	120	11,99
7420R814	32 x 1"	32x3	60,5	38	5/25	100	13,80

Threads: Rp (UNI EN 10226-1).

GP 2601
LBP FITTINGS



Straight male union joint, nickel-plated.



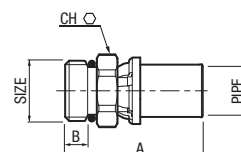
CODE	Size	Pipe	A mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
7421R801	16 x 3/8"	16x2	48	22	10/100	400	5,00
7421R802	16 x 1/2"	16x2	50,8	22	10/100	400	4,55
7421R805	16 x 3/4"	16x2	54,5	27	10/70	280	6,31
7421R804	20 x 1/2"	20x2	50,8	22	10/100	400	5,23
7421R807	20 x 3/4"	20x2	54,5	27	10/70	280	6,24
7421R830	26 x 1/2"	26x3	57,3	27	5/50	200	9,96
7421R809	26 x 3/4"	26x3	59	27	5/50	200	8,32
7421R811	26 x 1"	26x3	64	34	5/30	120	11,57
7421R814	32 x 1"	32x3	64	34	5/30	120	12,42
7421R810	32 x 1"1/4	32x3	70	46	1/16	64	33,49

Threads: R (UNI EN 10226-1).

GP 2601
LBP FITTINGS



Straight joint male with O-ring, nickel-plated.



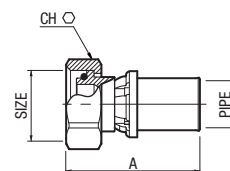
CODE	Size	Pipe	A mm	B mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
7421R916	16 x 1/2"	16x2	43,5	6,5	24	1/100	400	9,73
7421R920	20 x 1/2"	20x2	43,5	6,5	28	1/100	400	10,28

Threads: G (UNI EN ISO 228-1).

GP 2601
LBP FITTINGS



Straight joint with female swivel nut with O-Ring seal, nickel-plated.



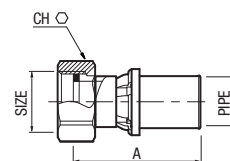
CODE	Connection	Takeoff	Pipe	A mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
7432R314	16 - 24x19	24 x 19	16x2	45,5	27	10/100	400	5,92
7432R316	20 - 24x19	24 x 19	20x2	45,5	27	10/80	320	8,05
7432R318	16 - 3/4"	EUROCONO	16x2	46	30	10/80	320	7,79
7432R320	20 - 3/4"	EUROCONO	20x2	46	30	10/80	320	8,66

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

GP 2601
LBP FITTINGS



Straight joint with female swivel nut with flat seal, nickel-plated.



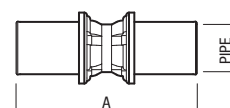
CODE	Size	Connection	Pipe	A mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
7439R915	16 x 3/8"	3/8"	16x2	44	19	1/50	200	5,96
7439R917	16 x 1/2"	1/2"	16x2	44	25	1/50	200	7,00
7439R918	16 x 3/4"	3/4"	16x2	44	30	1/40	160	8,32
7439R919	20 x 1/2"	1/2"	20x2	44	25	1/50	200	7,95
7439R920	20 x 3/4"	3/4"	20x2	44	30	1/40	160	8,33
7439R922	26 x 3/4"	3/4"	26x3	51,5	30	1/35	140	8,60
7439R924	26 x 1"	1"	26x3	51,5	37	1/30	120	10,49
7439R926	32 x 1"	1"	32x3	51,5	37	1/25	100	11,84
7439R928	32 x 1 1/4"	1 1/4"	32x3	53,5	46	1/20	80	19,80

Threads: G (UNI EN ISO 228-1).

GP 2601
LBP FITTINGS



Straight intermediate union joint, nickel-plated.

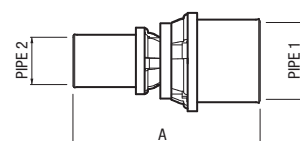


CODE	Size	Pipe	A mm	Pack pcs/box	Master pcs/box	Price €/pc
7426S829	16 x 16	16x2	61	10/100	400	5,11
7426S831	20 x 20	20x2	61	10/70	280	6,36
7426S833	26 x 26	26x3	70	5/35	140	9,66
7426S835	32 x 32	32x3	70	5/30	120	13,04

GP 2601
LBP FITTINGS



Straight intermediate reducing union joint, nickel-plated.

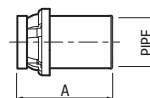


CODE	Size	Pipe 1	Pipe 2	A mm	Pack pcs/box	Master pcs/box	Price €/pc
7427S841	20 x 16	20x2	16x2	61	10/70	280	6,95
7427S843	26 x 16	26x3	16x2	65,5	5/50	200	9,10
7427S845	26 x 20	26x3	20x2	65,5	5/40	160	9,30
7427S846	32 x 16	32x3	16x2	65,5	5/30	120	11,26
7427S848	32 x 20	32x3	20x2	65,5	5/30	120	13,85
7427S849	32 x 26	32x3	26x3	70	5/30	120	12,52

GP 2601
LBP FITTINGS



Plug joint.

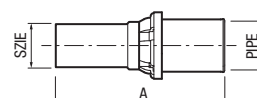


CODE	Size	Pipe	A mm	Pack pcs/box	Master pcs/box	Price €/pc
7445R916	16 x 2	16x2	31	1/100	400	4,53
7445R920	20 x 2	20x2	31	1/100	400	5,19
7445R926	26 x 3	26x3	36,5	5/50	200	7,14
7445R932	32 x 3	32x3	36,5	5/30	120	8,99

GP 2601
LBP FITTINGS



Pressing copper/multilayer adapter, nickel-plated.



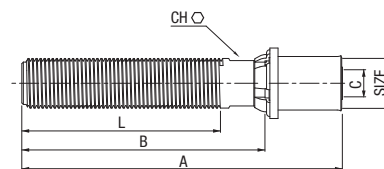
CODE	Size	Pipe	A mm	Pack pcs/box	Master pcs/box	Price €/pc
7427R150	15	16x2	53	1/50	200	7,14
7427R180	18	20x2	54	1/50	200	8,19
7427R220	22	20x2	62	1/50	200	9,37
7427R222	22	26x3	66,5	1/30	120	10,39
7427R280	28	32x3	68,5	1/25	100	12,73

Compatible with copper/bronze press fittings, V-profile (KSP4).

GP 2601
LBP FITTINGS



Straight male union joint, thread length L = 67 mm.

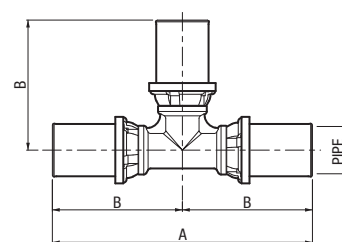


CODE	Size	Pipe	A mm	B mm	C mm	L mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
7421S901	16 x 3/8"	16x2	106	80,4	7	67	15	1/25	100	22,36

GP 2601
LBP FITTINGS



Intermediate tee joint, nickel-plated.

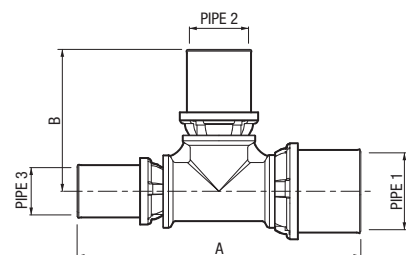


CODE	Size	Pipe	A mm	B mm	Pack pcs/box	Master pcs/box	Price €/pc
7429S852	16 x 16 x 16	16x2	83,3	41,7	5/40	160	8,61
7429S854	20 x 20 x 20	20x2	87,3	43,7	5/30	120	11,47
7429S856	26 x 26 x 26	26x3	102,3	51,2	5/20	80	18,28
7429S857	32 x 32 x 32	32x3	108,3	54,2	5/15	60	29,43

GP 2601
LBP FITTINGS



Intermediate reducing tee joint, nickel-plated.

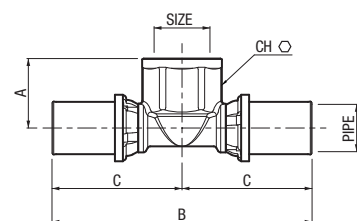


CODE	Size	Pipe 1	Pipe 2	Pipe 3	A mm	B mm	Pack pcs/box	Master pcs/box	Price €/pc
7430S861	16 x 20 x 16	16x2	20x2	16x2	87,3	43,7	5/30	120	10,84
7430S870	20 x 16 x 16	20x2	16x2	16x2	87,3	43,7	5/30	160	10,60
7430S871	20 x 16 x 20	20x2	16x2	20x2	87,3	43,7	5/30	120	11,47
7430S874	20 x 20 x 16	20x2	20x2	16x2	87,3	43,7	5/30	120	11,47
7430S875	20 x 26 x 20	20x2	26x3	20x2	93,3	51,2	5/25	100	16,55
7430S876	20 x 32 x 20	20x2	32x3	20x2	101,3	54,2	5/20	80	25,81
7430S820	26 x 16 x 16	26x3	16x2	16x2	97,8	46,65	5/25	100	19,35
7430S880	26 x 16 x 20	26x3	16x2	20x2	97,8	46,7	5/25	100	16,35
7430S881	26 x 16 x 26	26x3	16x2	26x3	102,3	46,7	5/25	100	17,29
7430S883	26 x 20 x 16	26x3	20x2	16x2	97,8	46,7	5/25	100	16,35
7430S884	26 x 20 x 20	26x3	20x2	20x2	97,8	46,7	5/25	100	16,55
7430S885	26 x 20 x 26	26x3	20x2	26x3	102,3	46,7	5/25	100	18,28
7430S878	26 x 26 x 16	26x3	26x3	16x2	97,8	51,2	5/25	100	16,66
7430S886	26 x 26 x 20	26x3	26x3	20x2	97,8	51,2	5/25	100	17,29
7430S887	26 x 32 x 26	26x3	32x3	26x3	108,3	54,2	5/15	60	28,25
7430S890	32 x 16 x 32	32x3	16x2	32x3	108,3	50,7	5/15	60	26,34
7430S892	32 x 20 x 20	32x3	20x2	20x2	103,8	49,7	5/20	80	25,81
7430S893	32 x 20 x 26	32x3	20x2	26x3	108,3	50,7	5/15	60	26,34
7430S894	32 x 20 x 32	32x3	20x3	32x3	108,3	50,7	5/15	60	28,25
7430S895	32 x 26 x 20	32x3	26x3	20x2	103,8	54,2	5/15	60	25,81
7430S896	32 x 26 x 26	32x3	26x3	26x3	108,3	54,2	5/15	60	26,34
7430S897	32 x 26 x 32	32x3	26x3	32x3	108,3	54,2	5/15	60	29,43
7430S889	32 x 32 x 16	32x3	32x3	16x2	104,8	54,2	5/15	60	26,34
7430S898	32 x 32 x 20	32x3	32x3	20x2	103,8	54,2	5/15	60	26,34
7430S899	32 x 32 x 26	32x3	32x3	26x3	108,3	54,2	5/15	60	28,25

GP 2601
LBP FITTINGS



Intermediate tee joint with female branch, nickel-plated.



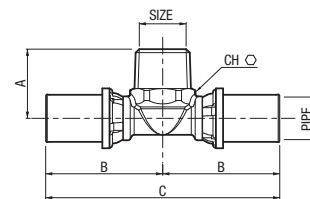
CODE	Size	Pipe	A mm	B mm	C mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
7425R817	16 x 1/2" x 16	16x2	23,5	88	44	24	10/50	200	8,60
7425R820	16 x 3/4" x 16	16x2	23,5	96	44	24	5/30	120	13,67
7425R819	20 x 1/2" x 20	20x2	23,5	88	44	24	5/40	160	9,46
7425R822	20 x 3/4" x 20	20x2	28	96	48	30	5/30	120	15,25
7425R830	26 x 1/2" x 26	26x3	26,5	105	52,5	27	5/20	80	18,28
7425R823	26 x 3/4" x 26	26x3	28	113	56,5	34	5/20	80	21,64
7425R891	32 x 1/2" x 32	32x3	29,5	113	56,5	38	5/15	60	28,67
7425R824	32 x 3/4" x 32	32x3	31	113	56,5	34	5/15	60	29,43
7425R826	32 x 1" x 32	32x3	33	113	56,5	38	5/15	60	28,25

Threads: Rp (UNI EN 10226-1).

GP 2601
LBP FITTINGS



Intermediate male tee joint, nickel-plated.



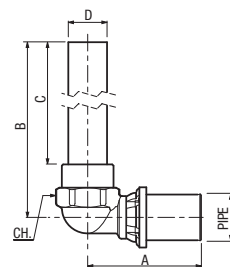
CODE	Size	Pipe	A mm	B mm	C mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
7431R817	16 x 1/2" x 16	16x2	26	44	88	22	10/50	200	8,60
7431R819	20 x 1/2" x 20	20x2	26	44	88	22	10/40	160	10,03
7431R822	20 x 3/4" x 20	20x2	31,5	48	96	27	10/30	120	13,92
7431R830	26 x 1/2" x 26	26x3	29,8	52,5	105	27	5/25	100	18,52
7431R823	26 x 3/4" x 26	26x3	31,5	52,5	105	27	5/20	80	15,48
7431R842	26 x 1" x 26	26x3	40,1	56,5	113	34	5/10	40	26,95
7431R826	32 x 1" x 32	32x3	40,1	56,5	113	34	5/10	40	27,72

Threads: R (UNI EN 10226-1).

GP 2601
LBP FITTINGS



Elbow fitting with copper pipe, nickel-plated.



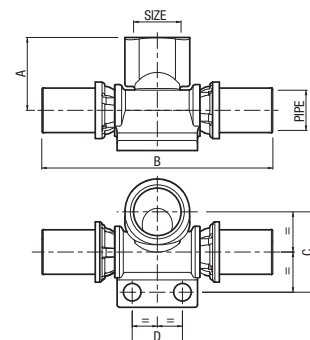
CODE	Size	Pipe	A mm	B mm	C mm	D mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
7447R803	16 x Ø15	16	44	165	144,5	Ø15	22	1/20	80	17,34

Not suitable for plumbing systems.

GP 2601
LBP FITTINGS



Female offset Tee joint, nickel-plated.



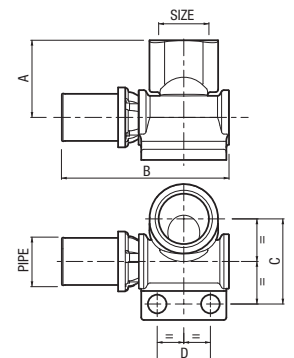
CODE	Size	Pipe	A mm	B mm	C mm	D mm	Pack pcs/box	Master pcs/box	Price €/pc
7433R817	16 x 1/2" x 16	16x2	29	94	32	20	5/25	100	19,11
7433R819	20 x 1/2" x 20	20x2	29	94	32	20	5/25	100	19,11

Threads: Rp (UNI EN 10226-1).

GP 2601
LBP FITTINGS



Right terminal offset union joint, nickel-plated.



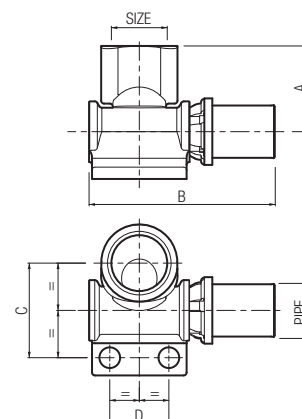
CODE	Size	Pipe	A mm	B mm	C mm	D mm	Pack pcs/box	Master pcs/box	Price €/pc
7434R802	16 x 1/2"	16x2	29	65	32	20	5/30	120	15,48
7434R804	20 x 1/2"	20x2	29	65	32	20	5/30	120	15,82

Threads: Rp (UNI EN 10226-1).

GP 2601
LBP FITTINGS



Left terminal offset union joint, nickel-plated.



CODE	Size	Pipe	A mm	B mm	C mm	D mm	Pack pcs/box	Master pcs/box	Price €/pc
7435R802	16 x 1/2"	16x2	29	65	32	20	5/30	120	15,48
7435R804	20 x 1/2"	20x2	29	65	32	20	5/30	120	15,82

Threads: Rp (UNI EN 10226-1).

GP 2601
LBP FITTINGS

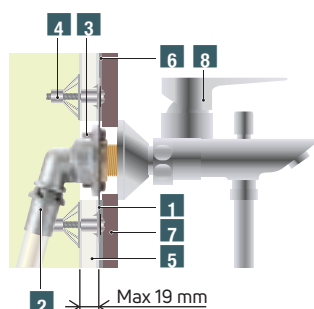


Bath/shower kit for plasterboard, LBP.

Composition

- 1 n° 1 steel plate, connection center distance 150 mm;
- 2 n° 2 LBP female elbow fittings, size 16 x 1/2", 105°;
- 3 n° 6 M4x12 screws, for fixing the fittings on the metal plate;
- 4 n° 8 M4 plugs, for fixing the plate to the plasterboard.

The Kit is suitable for installations on plasterboard sheets with a maximum thickness of 19 mm.



Installation example

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

CODE	Size	Pack pcs/box	Master pcs/box	Price €/pc
7448R105	16 x 1/2" - 105°	1/4	16	56,65

Threads: G (UNI EN ISO 228-1).

GP 2601
LBP FITTINGS

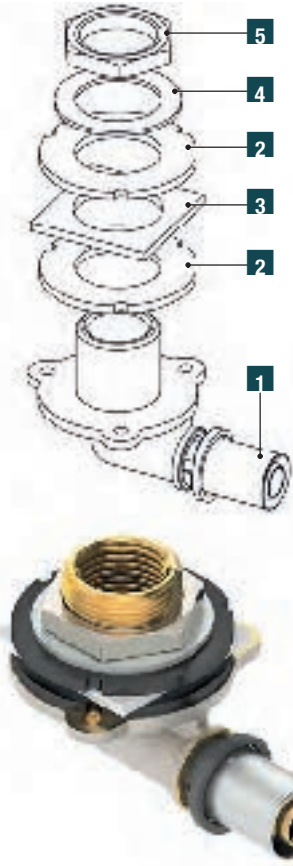
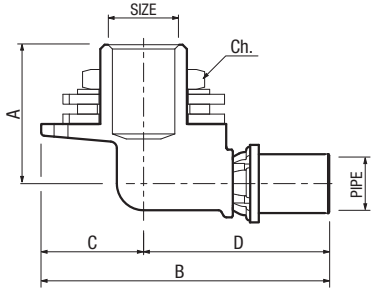
Elbow fitting for built-in WC flushing cistern.

Technical data

Operating temperature: 0 °C ÷ +95 °C
Operating pressure: 10 bar

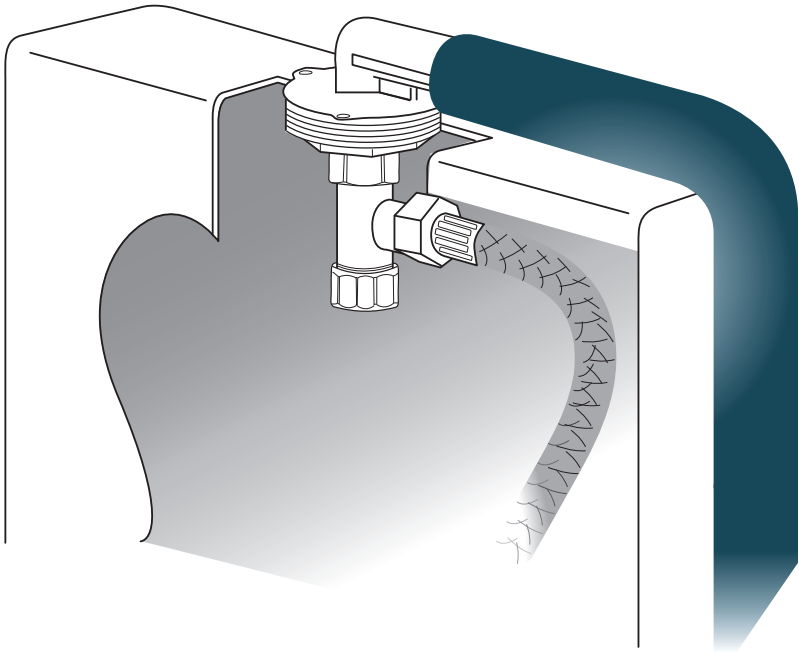
Composition

- 1 Male angle fitting
- 2 NBR gasket
- 3 Square polypropylene plate (PP)
- 4 Galvanised steel washer (Fe P13 EU111)
- 5 Hexagon locknut Wrench size 32 Brass (EN 12164 CW617N)



CODE	Size	Pipe	A mm	B mm	C mm	D mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
7447R906	16x1/2"	16x2	42	87	31	56	22	1/15	60	23,75

Threads: G (UNI EN ISO 228-1).



GP 2630
BRACKET



Multiple centre distance: 80 - 100 - 153 mm.

Recessed galvanized bracket for flanged elbows, including 6 M4.8x13 screws.

CODE	Pack pcs/box	Price €/pc
9543Z002	2	8,17

GP 2630
BRACKET



Centre distance: 153 mm.

Galvanized flat bracket for flanged elbows, including 2 M6x8 screws.

CODE	Pack pcs/box	Price €
9544Z001	1	5,31

GP 2630
BRACKET



Bracket for offset T-fitting.

CODE	Pack pcs/box	Price €/pc
9545Z001	2	5,78

GP 2630
PLUG



Red plug for circuit test with O-ring.

CODE	Size	Pack pcs/box	Price €/pc
9546P004	1/2"	50	0,91
9546P005	3/4"	50	1,47

GP 2630
PLUG



Blue plug for circuit test with O-ring.

CODE	Size	Pack pcs/box	Price €/pc
9547P004	1/2"	50	0,91
9547P005	3/4"	50	1,42

GP 2630
PLUG



Plug for circuit test for multi-layer pipes.

CODE	Size	Pack pcs/box	Price €
28101846	16x2	1	23,55
28101848	20x2	1	23,55

Complete with 1/2" F connection for vent valve (supplied as standard).

FIVPress LBP

Leak Before Pressed

UNDER-PLASTER VALVE PLURI-PROFILE



[UNI EN ISO 21003]

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



See FIVPress System introductory page (page 19) for details

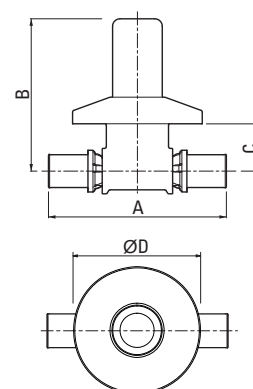
Components

Body	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
Large screw group	UNI EN 12164 CW617N - DW
Rosette - Sleeve - Handwheel	Brushed and chromed
Seal gasket	EPDM
	95 °C
Maximum operating temperature	
Max. operating temperature at 95 °C	6 bar

Material

GP 2601
UNDER-PLASTER LBP VALVE

Under-plaster valve complete with sleeve and rosette, chromed.



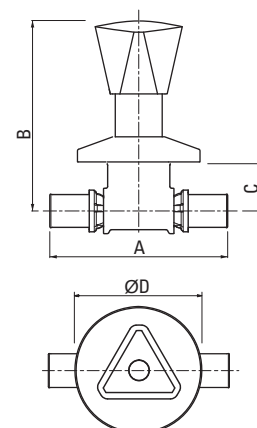
CODE	Size	A mm	B mm	C mm	ØD mm	Pack pcs	Master pcs/box	Price €/pc
7441R829	16 x 16	96	min. 83,5 ÷ max. 100	min. 35 ÷ max. 70	70	1/5	20	51,74
7441R831	20 x 20	96	min. 83,5 ÷ max. 100	min. 35 ÷ max. 70	70	1/5	20	51,74
7441R833	26 x 26	96	min. 83,5 ÷ max. 100	min. 35 ÷ max. 70	70	1/5	20	53,40

Complete with large screw protection cap.

GP 2601
UNDER-PLASTER LBP VALVE



Under-plaster valve complete with handwheel and rosette, chromed.



CODE	Size	A mm	B mm	C mm	Pack pcs	Master pcs/box	Price €/pc
7442R829	16 x 16	96	83,5	min. 35 ÷ max. 50	1/5	20	58,70
7442R831	20 x 20	96	108	min. 35 ÷ max. 50	1/5	20	58,32
7442R833	26 x 26	96	108	min. 35 ÷ max. 50	1/5	20	58,85

GP 2630
LARGE SCREW



Large screw of 3/4" extended (+20 mm) for large screw group.

CODE	Size	Note	Pack pcs	Price €/pc
90008172	3/4"	(1) (2)	10	19,60
90008180	3/4"	(3)	10	12,35

(1) For large screw group with blind sleeve.
(2) Complete with large screw protection cap.
(3) For large screw with handwheel and rosette.
Threads: G (UNI EN ISO 228-1).

GP 2910
GASKETS



Ball gaskets, of spare, for large screw stopper, in EPDM.

CODE	Pack pcs	Price €/pc
90008012	10	2,00

GP 2799
SPARE PARTS



Kit of 10 spare parts for plastic butterfly handle for under-plaster valve complete with sleeve and rosette.

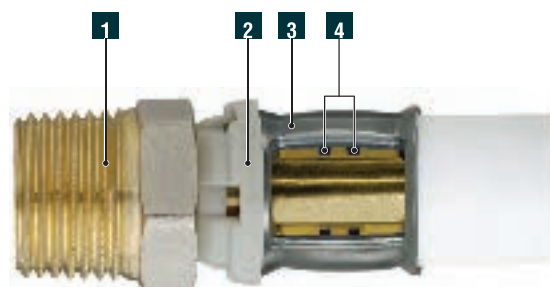
CODE	Pack pcs	Price €
90008194	1	3,49

GP 2799
ACCESSORIES



Kit of 10 brass handles for under-plaster valve complete with sleeve and rosette.

CODE	Pack pcs	Price €
90008192	1	30,33



MAVH · PIB · 097
PRODUKT Z ATESTEM

Components

Pcs

Material

1	Brass body (nickel plated only on surfaces not in contact with carried fluids DN 75 no nickel plating treatments on any surface) Female - Male connection Thread UNI EN 10226 (UNI EN ISO 7/1) (DIN 2999)	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
2	Bush holder ring nut	1	Polyamide
3	Bush	1	AISI 304 stainless steel
4	Double O-Ring	2	EPDM peroxidic 70 Sh
5	Matrices (pincers)	1	Steel

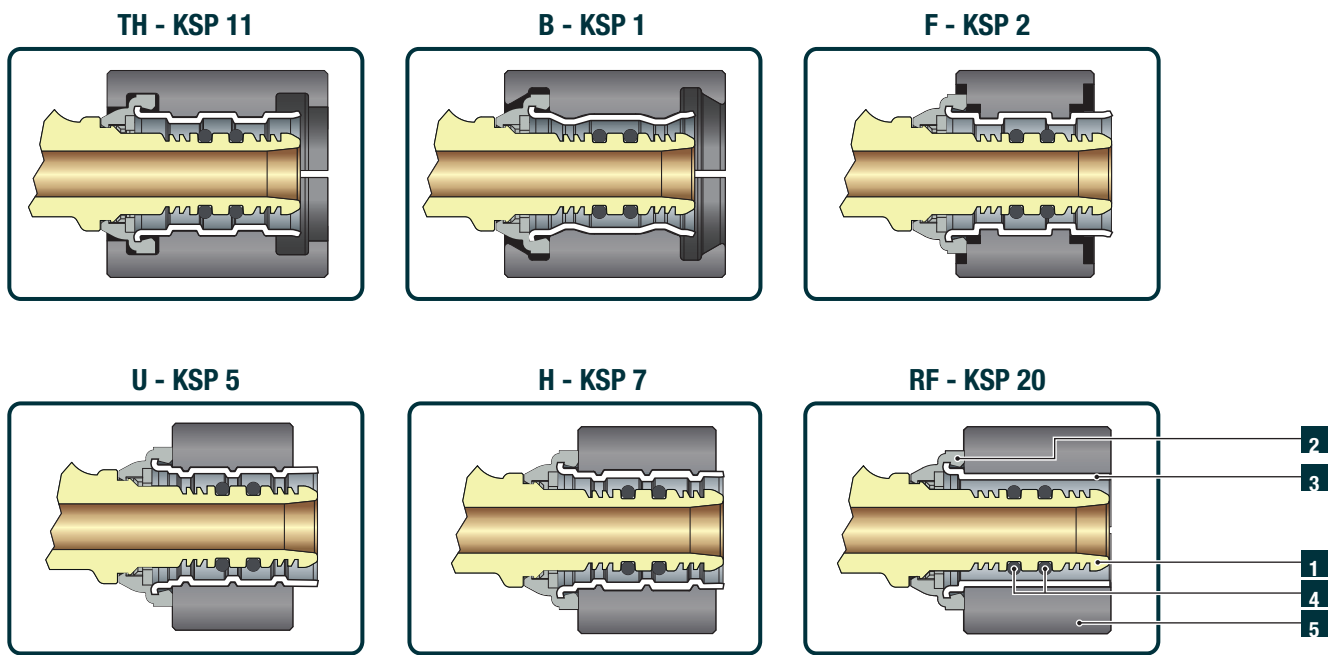
The FIVPress fittings allow quick, sure joining of the pipe and fitting by using a specific tool to press on the steel bush. The special profile of the fitting and the use of a double o-ring ensure perfect, long-lasting hydraulic and mechanical seal.

The press fittings of the FIVPress LBP system comply with the Decree of the Italian Ministry of Health n.174 of 06/04/2004.

The stainless steel bush is mounted on the fitting by means of a polyamide ring nut with windows. This performs the following tasks:

- it allows you to check that the pipe is correctly positioned with the pipe (thanks to the windows)
- it guides the pincers correctly around the bush
- it insulates the pipe from the brass of the fitting, preventing corrosion due to differences in electrical potential.

PRESSING PROFILE FIVPress FITTINGS

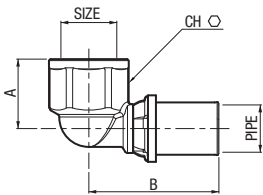


Profile and dimensions of the jaws that can be used with FIVPress fittings

	16	20	26	32	40	50	63	75
TH	✓	✓	✓	✓	✓	✓	✓	✓
B	✓	✓	✓	✓	✗	✗	✗	✗
U	✓	✓	✗	✗	✗	✗	✗	✗
H	✓	✓	✗	✗	✗	✗	✗	✗
F	✓	✓	✗	✗	✗	✗	✗	✓
RF	✓	✓	✗	✗	✗	✗	✗	✗

GP 2600
FITTINGS

Female connecting elbow, nickel-plated.



(*) Article available while stocks last.



CODE	Size	Pipe	A mm	B mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
9422R814	32 x 1" (*)	32x3	33	53	38	5/25	100	18,24
9422R813	40 x 1"1/4	40x3,5	39	69,2	46	1/12	48	34,80
9422R815	50 x 1"1/2	50x4	44	74	52	1/8	32	56,80
9422R816	63 x 2"	63x4,5	54	82	65	1/6	24	85,51
9422S900	75 x 2"1/2	75x5	66	101,5	84	1/2	8	173,00

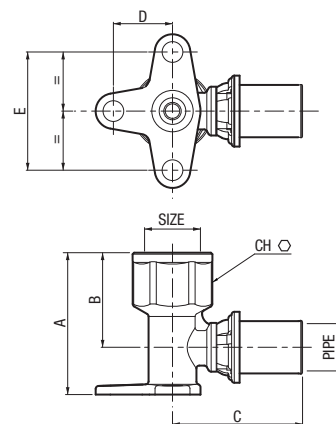
Threads: Rp (UNI EN 10226-1).

GP 2600
FITTINGS



Female elbow with flange, nickel-plated.

Article available while stocks last.



CODE	Size	Pipe	A mm	B mm	C mm	D mm	E mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
9424R807	20 x 3/4"	20x2	56	37	48	20	40	30	5/20	80	13,91

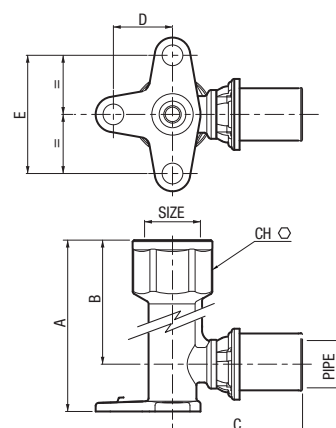
Threads: Rp (UNI EN 10226-1).

GP 2600
FITTINGS



Female coupling elbow fitting with long neck and flange, nickel-plated.

Article available while stocks last.



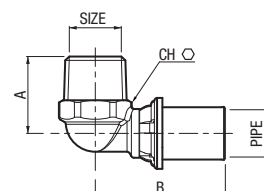
CODE	Size	Pipe	A mm	B mm	C mm	D mm	E mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
9443R804	20 x 1/2"	20x2	68	52	44	20	40	24	5/30	120	9,34

Threads: Rp (UNI EN 10226-1).

GP 2600
FITTINGS



Male connecting elbow, nickel-plated.



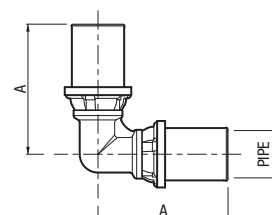
CODE	Size	Pipe	A mm	B mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
9423R813	40 x 1"1/4	40x3,5	44	69,5	46	1/12	48	38,54
9423R812	50 x 1"1/4	50x4	49	75,5	46	1/8	32	55,90
9423R815	50 x 1"1/2	50x4	49	75,5	52	1/8	32	57,99
9423R816	63 x 2"	63x4,5	61	81	65	1/6	24	75,73

Threads: R (UNI EN 10226-1).

GP 2600
FITTINGS



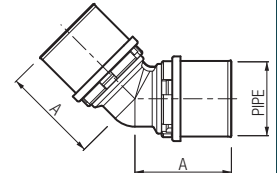
Intermediate elbow union joint, nickel-plated.



CODE	Size	Pipe	A mm	Pack pcs/box	Master pcs/box	Price €/pc
9428R836	40 x 40	40x3,5	66	1/10	40	50,82
9428R837	50 x 50	50x4	74,5	1/6	24	62,84
9428R838	63 x 63	63x4,5	82	1/4	16	80,65
9428S900	75 x 75	75x5	100,5	1/2	8	146,90

GP 2600
FITTINGS

Intermediate 45° elbow union joint, nickel-plated.

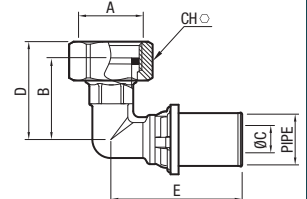


CODE	Size	Pipe	A mm	Pack pcs/box	Master pcs/box	Price €/pc
9444R836	40 x 40	40 x 3,5	54	1/10	40	37,34
9444R837	50 x 50	50 x 4	59,5	1/6	24	58,56
9444R838	63 x 63	63 x 4,5	63	1/4	16	71,15
9444S900	75 x 75	75x5	75,5	1/2	8	143,40

GP 2600
FITTINGS

Elbow fitting with swivel nut and flat seal, nickel-plated.

Article available while stocks last.

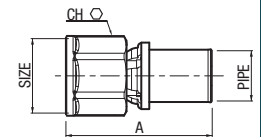


CODE	Size	Pipe	A	B mm	C mm	D mm	E mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
9438R917	16 x 1/2"	16	1/2"	28	6,6	32,8	44	25	1/50	200	7,29

Threads: G (UNI EN ISO 228-1).

GP 2600
FITTINGS

Straight female union joint, nickel-plated.



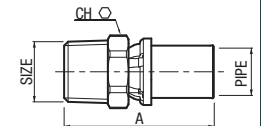
CODE	Size	Pipe	A mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
9420R813	40 x 1"1/4	40x3,5	68	46	1/14	56	27,50
9420R815	50 x 1"1/2	50x4	70	52	1/10	40	29,42
9420R816	63 x 2"	63x4,5	75	65	1/6	24	41,90
9420S900	75 x 2"1/2	75x5	94,5	85	1/4	16	157,80

Threads: Rp (UNI EN 10226-1).

GP 2600
FITTINGS

Straight male union joint, nickel-plated.

(*) Article available while stocks last.



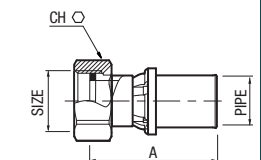
CODE	Size	Pipe	A mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
9421R801	16 x 3/8" (*)	16x2	48	22	10/100	400	4,61
9421R808	40 x 1"	40x3,5	71,5	46	1/16	64	33,40
9421R813	40 x 1"1/4	40x3,5	74	46	1/16	64	33,40
9421R812	50 x 1"1/4	50x4	77	52	1/12	48	38,10
9421R815	50 x 1"1/2	50x4	77	52	1/12	48	38,90
9421R816	63 x 2"	63x4,5	82,2	65	1/8	32	57,38
9421S900	75 x 2"1/2	75x5	95,7	78	1/4	16	117,70

Threads: R (UNI EN 10226-1).

GP 2600
FITTINGS

Straight joint with female swivel nut with flat seal, nickel-plated.

(*) Articles available while stocks last.



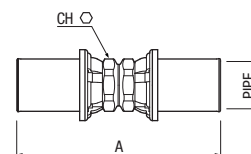
CODE	Size	Connection	Pipe	A mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
9439R917	16 x 1/2"	(*) 1/2"	16x2	44	25	1/50	200	6,98
9439R920	20 x 3/4"	(*) 3/4"	20x2	44	30	1/40	160	8,31
9439R922	26 x 3/4"	(*) 3/4"	26x3	44	30	1/35	140	8,56
9439R928	32 x 1"1/4	(*) 1"1/4	32x3	50	46	1/20	80	21,12
9439R930	40 x 1"1/2	1"1/2	40x3,5	60	52	1/12	48	36,98
9439R932	50 x 2"	2"	50x4	66,5	64	1/8	32	64,11
9439R934	63 x 2"1/2	2"1/2	63x4,5	73	80	1/6	24	90,05

Threads: G (UNI EN ISO 228-1).

GP 2600
FITTINGS



Straight intermediate union joint, nickel-plated.

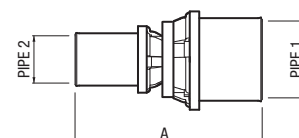


CODE	Size	Pipe	A mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
9426R836	40 x 40	40x3,5	95	40	1/14	56	38,90
9426R837	50 x 50	50x4	101	48	1/8	32	59,16
9426R838	63 x 63	63x4,5	103	60	1/6	24	72,07
9426S900	75 x 75	75x5	116	78	1/4	16	134,70

GP 2600
FITTINGS



Straight intermediate reducing union joint, nickel-plated.



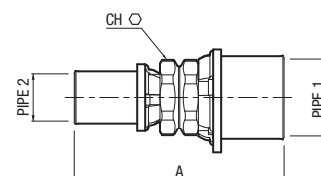
Article available while stocks last.

CODE	Size	Pipe 1	Pipe 2	A mm	Pack pcs/box	Master pcs/box	Price €/pc
9427S843	26 x 16	26x3	16x2	61	5/50	200	9,60

GP 2600
FITTINGS



Straight intermediate reducing union joint, nickel-plated.



(*) Article available while stocks last.

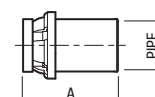
(**) LBP function only in 26x3 - 32x3 takeoffs.

CODE	Size	Pipe 1	Pipe 2	A mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
7427R844	40 x 26 (**)	40x3,5	26x3	86,5	40	1/16	64	33,74
7427R850	40 x 32 (**)	40x3,5	32x3	86	40	1/14	56	37,00
9427R847	50 x 32 (*)	50x4	32x3	91,5	48	1/12	48	50,82
7427R847	50 x 32 (**)	50x4	32x3	91,5	48	1/12	48	51,34
9427R851	50 x 40	50x4	40x3,5	99	48	1/10	40	57,99
9427R834	63 x 40	63x4,5	40x3,5	101	60	1/6	24	66,64
9427R832	63 x 50	63x4,5	50x4	103	60	1/6	24	68,95
9427S900	75 x 40	75x5	40x3,5	105,5	58	1/4	16	123,10
9427S901	75 x 50	75x5	50x4	108	58	1/4	16	124,60
9427S903	75 x 63	75x5	63x4,5	107,8	58	1/4	16	126,70

GP 2600
FITTINGS



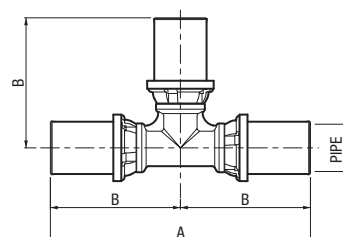
Plug joint.



CODE	Pipe	A mm	Pack pcs/box	Master pcs/box	Price €/pc
9445R940	40x3,5	43	1/16	64	28,44
9445R950	50x4	46	1/12	48	36,92

GP 2600
FITTINGS

Intermediate tee joint, nickel-plated.



CODE	Size	Pipe	A mm	B mm	Pack pcs/box	Master pcs/box	Price €/pc
9429R858	40 x 40 x 40	40x3,5	132	66	1/8	32	62,84
9429R859	50 x 50 x 50	50x4	149	74,5	1/4	16	81,97
9429R860	63 x 63 x 63	63x4,5	164	82	1/2	8	113,50
9429S900	75 x 75 x 75	75x5	201	100,5	1/1	4	232,30

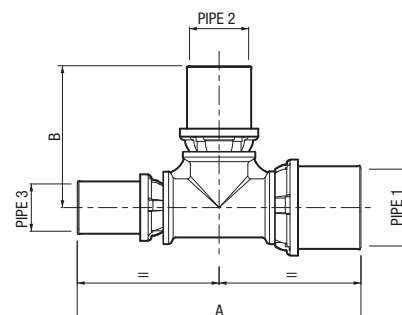
GP 2600
FITTINGS

Intermediate reducing tee joint, nickel-plated.



(*) Articles available while stocks last.

(**) LBP function only in 16x2 - 20x2 - 26x3 - 32x3 takeoffs.



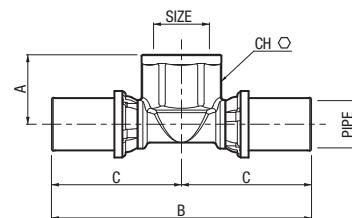
CODE	Size		Pipe 1	Pipe 2	Pipe 3	A mm	B mm	Pack pcs/box	Master pcs/box	Price €/pc
9430S861	16 x 20 x 16 (*)		16x2	20x2	16x2	87,3	43,7	5/30	120	10,81
9430S870	20 x 16 x 16 (*)		20x2	16x2	16x2	87,3	43,7	5/30	160	10,56
9430S880	26 x 16 x 20 (*)		26x3	16x2	20x2	93,3	46,7	5/25	100	16,26
9430S886	26 x 26 x 20 (*)		26x3	26x3	20x2	93,3	46,7	5/25	100	17,25
9430S887	26 x 32 x 26 (*)		26x3	32x3	26x3	101,3	50,7	5/15	60	28,19
9430S890	32 x 16 x 32 (*)		32x3	16x2	32x3	101,3	50,7	5/15	60	26,26
9430S893	32 x 20 x 26 (*)		32x3	20x2	26x3	101,3	50,7	5/15	60	26,26
9430S894	32 x 20 x 32 (*)		32x3	20x3	32x3	101,3	50,7	5/15	60	28,19
9430S897	32 x 26 x 32 (*)		32x3	26x3	32x3	101,3	50,7	5/15	60	29,36
9430S898	32 x 32 x 20 (*)		32x3	32x3	20x2	101,3	50,7	5/15	60	26,26
7430R741	40 x 16 x 40 (**)		40x3,5	16x2	40x3,5	132	57,5	1/8	32	60,50
7430R742	40 x 20 x 40 (**)		40x3,5	20x2	40x3,5	132	57,5	1/8	32	60,17
7430R855	40 x 26 x 32 (**)		40x3,5	26x3	32x3	124,5	57,5	1/8	32	58,57
7430R865	40 x 26 x 40 (**)		40x3,5	26x3	40x3,5	132	57,5	1/8	32	59,76
7430R853	40 x 32 x 32 (**)		40x3,5	32x3	32x3	124,5	58,5	1/8	32	58,57
7430R864	40 x 32 x 40 (**)		40x3,5	32x3	40x3,5	132	66	1/8	32	59,76
7430R869	40 x 40 x 32 (**)		40x3,5	40x3,5	32x3	124,5	66	1/8	32	59,76
7430R743	50 x 16 x 50 (**)		50x4	16x2	50x4	149	64	1/6	24	90,57
7430R744	50 x 20 x 50 (**)		50x4	20x2	50x4	149	64	1/6	24	89,70
7430R877	50 x 26 x 50 (**)		50x4	26x3	50x4	149	64	1/6	24	87,95
7430R867	50 x 32 x 50 (**)		50x4	32x3	50x4	149	63,5	1/6	24	77,97
9430R879	50 x 40 x 40		50x4	40x3,5	40x3,5	149	74,5	1/6	24	83,13
9430R866	50 x 40 x 50		50x4	40x3,5	50x4	149	72,5	1/6	24	79,71
7430R882	50 x 50 x 32 (**)		50x4	50x4	32x3	139,5	74,5	1/6	24	82,90
9430R888	50 x 50 x 40		50x4	50x4	40x3,5	149	74	1/4	16	85,13
7430R745	63 x 20 x 40 (**)		63x4,5	20x2	40x3,5	162	72	1/2	8	151,20
7430R746	63 x 20 x 63 (**)		63x4,5	20x2	63x4,5	164	72	1/2	8	151,50
7430R747	63 x 26 x 63 (**)		63x4,5	26x3	63x4,5	164	76,5	1/2	8	171,10
7430R762	63 x 32 x 63 (**)		63x4,5	32x3	63x4,5	164	76,5	1/2	8	171,20
9430R873	63 x 40 x 63		63x4,5	40x3,5	63x4,5	164	82,2	1/2	8	173,80
9430R872	63 x 50 x 63		63x4,5	50x4	63x4,5	164	82	1/2	8	113,50
9430S900	75 x 40 x 75		75x5	40x3,5	75x5	201	91	1/1	4	215,20
9430S901	75 x 50 x 75		75x5	50x4	75x5	201	91	1/1	4	217,40
9430S748	75 x 63 x 75		75x5	63x4,5	75x5	201	93	1/1	4	243,50

GP 2600 FITTINGS



Intermediate tee joint with female branch, nickel-plated.

(*) Articles available while stocks last.



CODE	Size	Pipe	A mm	B mm	C mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
9425R823	26 x 3/4" x 26 (*)	26x3	28	96	48	30	5/20	80	15,45
9425R824	32 x 3/4" x 32 (*)	32x3	33	106	53	38	5/15	60	29,36
9425R826	32 x 1" x 32 (*)	32x3	33	106	53	38	5/15	60	28,19
9425R825	40 x 3/4" x 40	40x3,5	35,5	130	65	38	1/10	40	62,84
9425R827	40 x 1" x 40	40x3,5	39	130	65	38	1/10	40	62,84
9425R839	40 x 1 1/4" x 40	40x3,5	48,5	140	71,5	47	1/6	24	96,42
9425R818	50 x 3/4" x 50	50x4	40	133	66,5	38	1/6	24	67,06
9425R828	50 x 1" x 50	50x4	41	133	66,5	38	1/6	24	66,64
9425R840	50 x 1 1/4" x 50	50x4	48,5	143	71,5	47	1/6	24	100,50
9425R821	63 x 1" x 63	63x4,5	46,5	143	71,5	47	1/4	16	90,03
9425R862	63 x 1 1/4" x 63	63x4,5	48,5	143	71,5	47	1/4	16	88,15
9425S900	75 x 1" x 75	75x5	56	201	100,5	-	1/2	8	218,80

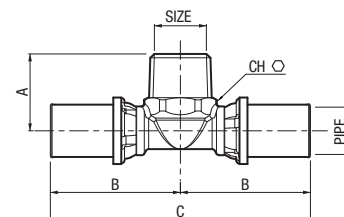
Threads: Rp (UNI EN 10226-1).

GP 2600 FITTINGS



Intermediate male tee joint with male branch, nickel-plated.

Article available while stocks last.



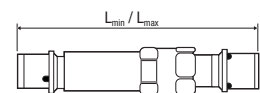
CODE	Size	Pipe	A mm	B mm	C mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
9431R817	16 x 1/2" x 16	16x2	26	44	88	22	10/50	200	8,56

Threads: R (UNI EN 10226-1).

GP 2600 FITTINGS



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



CODE	Size	Profilo	Lmin mm	Lmax mm	Pack pcs/box	Master pcs/box	Price €/pc
9985R001	16 x 16	TH (KSP11)	150	203,5	15	120	97,01
9985R002	20 x 20	TH (KSP11)	159	219,5	10	80	116,60
9985R003	26 x 26	TH (KSP11)	182	245,5	10	40	173,00

GP 2630 BRACKET

Recessed galvanized bracket for flanged elbows, including 6 M4.8x13 screws.



CODE	Pack pcs/box	Price €/pc
9543Z002	2	8,17

Multiple centre distance: 80 - 100 - 153 mm.

GP 2630
BRACKET



Centre distance: 153 mm.

Galvanized flat bracket for flanged elbows, including 2 M6x8 screws.

CODE	Pack pcs/box	Price €
9544Z001	1	5,31

GP 2630
BRACKET



Bracket for offset T-fitting.

CODE	Pack pcs/box	Price €/pc
9545Z001	2	5,78

GP 2630
PLUG



Red plug for circuit test with O-ring.

CODE	Size	Pack pcs/box	Price €/pc
9546P004	1/2"	50	0,91
9546P005	3/4"	50	1,47

GP 2630
PLUG



Blue plug for circuit test with O-ring.

CODE	Size	Pack pcs/box	Price €/pc
9547P004	1/2"	50	0,91
9547P005	3/4"	50	1,42

GP 2630
PLUG



Plug for circuit test for multi-layer pipes.

CODE	Size	Pack pcs/box	Price €
28101846	16x2	1	23,55
28101848	20x2	1	23,55

Complete with 1/2" F connection for vent valve (supplied as standard).



GP 2620

FIVPress



MP22 manual pressing machine from DN14 to DN32.

360° rotating head
Telescopic arms, extendable by 200 mm
Weight of the tool: approximately 3 kg. Length of the tool: 560 - 760 mm
Thrust force: 32 kN
Pressable fittings: between DN14 and DN32.

CODE	Pack pcs/box	Price €
9550X002	1	1.316,00

GP 2620

FIVPress



Matrixes for manual pressing machine (Profile TH - KSP11).

CODE	Size	Pack pcs/box	Price €
28100640	16 x 2	1	124,50
28100642	20 x 2	1	124,50
28100644	26 x 3	1	130,50
28100646	32 x 3	1	130,50

GP 2620

FIVPress



Electro-hydraulic pressing machine SPM32-230 at 230 Vac, for FIVPress jaws from DN14 to DN75.

Weight: 4.1 kg - Dimensions LxHxS: 410x296x80 mm
Thrust force: min. 32kN - Power supply: 230 Vac, 50 Hz
Power absorbed: 450 W - Degree of protection: IP40
Tightening time: from 8 to 12 s depending on the diameter
Operating temperature: -20 °C ÷ 50 °C - 360° rotatable head
Sound pressure level: <70 dB(A)
Automatic piston return
LED indicating malfunctions and operating status
Complete with plastic case.

CODE	Pack pcs/box	Price €
9553X003	1	3.813,00

GP 2620

FIVPress



18 Vdc battery-powered electro-hydraulic pressing machine SPM32-18 for FIVPress jaws from DN14 to DN75.

Weight including battery: 4.8 kg - Dimensions LxHxS: 409x335x82 mm
Thrust force: min. 32kN - Power supply: 18 Vdc
Battery charger: 230 Vac, 50 Hz - Battery capacity: 5.0 Ah - Degree of protection: IP40
Charging time: approx. 40 min - Pressing performance: approx. 200 (DN20)
Tightening time: from 4 to 7 s depending on the diameter
Operating temperature: -20 °C ÷ 50 °C - 360° rotatable head
Automatic piston return - USB port for remote diagnosis
LED indicating malfunctions and operating status
Complete with black plastic case, 18 Vdc lithium ion (Li-Ion) battery,
battery charger, USB cable, USB stick with analysis software.

CODE	Pack pcs/box	Price €
9559X003	1	5.004,00

GP 2620
FIVPress



18 Vdc battery for SPM32-18 battery-powered electro-hydraulic pressing machine.

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

CODE	Pack pcs/box	Price €
9559X013	1	471,00

GP 2620
FIVPress



14.4 Vdc spare battery for SPM32 pressing machine code 9553X002.
Li-ion Battery - Weight: 500 g.

CODE	Size	Pack pcs/box	Price €
9553X011	2,6 Ah	1	416,10

It is used to power by battery the SPM 32 230 V pressing machine code 9553X002, replacing the 230 V adapter.



GP 2620
FIVPress



14.4 Vdc spare battery charger for SPM32 pressing machine code 9553X002.

CODE	Pack pcs/box	Price €
9553X021	1	429,70

GP 2620
FIVPress



230 Vac spare adapter for SPM32 pressing machine code 9553X002.

CODE	Pack pcs/box	Price €
9553X031	1	927,40

GP 2620
FIVPress



Metal case, jaws holder.

CODE	Pack pcs/box	Price €
9557X000	1	356,90

Suitable for grippers up to size 40.

GP 2620
FIVPress

Jaw for SPM32 pressing machine (profile TH - KSP 11).



CODE	Size	Pack pcs/box	Price €
28100630	16 x 2	1	348,00
28100632	20 x 2	1	348,00
28100634	26 x 3	1	374,90
28100636	32 x 3	1	374,90

GP 2620
FIVPress

Jaw for SPM32 pressing machine (profile TH - KSP 11).



CODE	Size	Pack pcs/box	Price €
28100650	40 x 3,5	1	482,70
28100652	50 x 4	1	495,80

GP 2620
FIVPress

Jaw for SPM32 pressing machine (profile TH - KSP 11).



CODE	Size	Pack pcs/box	Price €
28100654	63 x 4,5	1	2.135,00
28100656	75 x 5	1	2.866,00

GP 2620
FIVPress

18 Vdc battery-powered pressing machine SPM19 for FIVPress jaw with inserts from DN 16 to DN 32.

Weight (including battery): 2.3 kg - LxHxS dimensions: 371x100x74 mm
 Thrust force: min 19 kN - Power supply: 18 Vdc - Battery charger: 230 Vac, 50 Hz
 Battery capacity: 2.0 Ah - Charging time: Approx. 30 min
 Tightening time: from 3 to 4 s (depending on the diameter) - Operating temperature: -10 °C to 40 °C
 Sound level: 75 dB(A) at a distance of 1 m - Vibrations: <2.5 m/s² (actual weighted value of acceleration)
 360° rotatable head - Automatic piston return
 USB port for remote diagnosis - LED indicating malfunctions and operating status
 Complete with metal case, 18 Vdc lithium-ion battery (Li-Ion), battery charger, USB cable and analysis software.



CODE	Pack pcs/box	Price €
9559X002	1	4.013,00



GP 2620
FIVPress

18 Vdc battery for SPM19 pressing machine.
Li-ion Battery - Weight: 430 g.



CODE	Size	Pack pcs/box	Price €
9559X012	2 Ah	1	409,30

GP 2620
FIVPress

18 Vdc battery charger for SPM19 and SPM32-18 pressing machines.



CODE	Pack pcs/box	Price €
9559X021	1	275,00

GP 2620
FIVPress

230 Vac adapter for SPM19 pressing machine.
It is used to power the SPM19 pressing machine, directly at 230 Vac, replacing it with the 18 Vdc battery.



CODE	Pack pcs/box	Price €
9559X031	1	948,90

GP 2620
FIVPress

FIVPress jaw with inserts for SPM19 pressing machine.



CODE	Pack pcs/box	Price €
28101828	1	429,60

GP 2620
FIVPress

Matrixes for jaw with inserts (Profile TH - KSP11) and insert-holder jaw for SPM19.



CODE	Size	Pack pcs/box	Price €
28100640	16 x 2	1	124,50
28100642	20 x 2	1	124,50
28100644	26 x 3	1	130,50
28100646	32 x 3	1	130,50

GP 2620

FIVPress



Flaring tool calibrator for screwdriver.

CODE	Size	Pack pcs/box	Price €
9563X016	ø 16	1	58,43
9563X020	ø 20	1	60,23
9563X026	ø 26	1	63,21
9563X032	ø 32	1	71,71

GP 2620

FIVPress



Handle for flaring tool calibrator.

CODE	Pack pcs/box	Price €
28100898	1	42,53

Article can be combined with codes 9563X016, 9563X020, 9563X026 and 9563X032.

GP 2620

FIVPress



Flaring tool calibrators kit for screwdriver.

Kit consisting of:

- n° 1 case;
- n° 1 flaring tool calibrator for ø 16 pipe;
- n° 1 flaring tool calibrator for ø 20 pipe;
- n° 1 flaring tool calibrator for ø 26 pipe;
- n° 1 flaring tool calibrator for ø 32 pipe;
- n° 1 handle for flaring tool calibrator.

CODE	Pack pcs/box	Price €
9563X001	1	327,80

GP 2620

FIVPress



Single flaring tool calibrator.

CODE	Size	Pack pcs/box	Price €
9563X514	ø 14	1	55,35
9563X516	ø 16	1	56,90
9563X520	ø 20	1	59,66
9563X526	ø 26	1	59,66
9563X532	ø 32	1	54,18
9563X540	ø 40	1	120,60
9563X550	ø 50	1	147,70
9563X563	ø 63	1	147,70
9563X575	ø 75	1	212,70

GP 2620

FIVPress



Multiple flaring tool calibrator.

CODE	Size	Pack pcs/box	Price €
9564X001	ø 16 - 20 - 26	1	81,03

GP 2620
FIVPress



Shear for FIVPex and FIVPert multilayer pipes.

CODE	Size	Pack pcs/box	Price €
28100602	ø 14 ÷ 32	1	64,94
28100943	SPARE BLADE FOR SHEAR	1	23,62

GP 2620
FIVPress



Shear for FIVPex and FIVPert multilayer pipes, with pipe guide.

Articles available while stocks last.

CODE	Size	Pack pcs/box	Price €
9567X520	ø 14 ÷ 20	1	179,20
9568X000	SPARE BLADE FOR SHEAR	1	40,27

GP 2620
FIVPress



Shear for FIVPex and FIVPert multilayer pipes.

CODE	Size	Pack pcs/box	Price €
28101890	UNTIL DN26	1	154,20
28101892	SPARE BLADE FOR SHEAR	1	64,33

GP 2620
FIVPress



Pipe cutter for FIVPex and FIVPert multilayer pipes.

CODE	Size	Pack pcs/box	Price €
28100944	ø 14 ÷ 32	1	93,60
28100948	SPARE WHEEL	1	31,55
28024081	ø 6 ÷ 75	1	227,60

GP 2620
FIVPress



Internal pipe bending spring.

CODE	Size	Pack pcs/box	Price €
28100622	ø 16 L=1000 mm	1	36,62
28100624	ø 20 L=1000 mm	1	41,84
28100626	ø 26 L=1000 mm	1	39,44

GP 2620
FIVPress



External pipe bending spring.

CODE	Size	Pack pcs/box	Price €
28100716	ø 16 L=500 mm	1	35,25
28100720	ø 20 L=500 mm	1	35,23



Floor and Wall

HEATING AND COOLING SYSTEMS 2



page 60

**Low-Thick
insulating panel
with graphite**



page 69

**FIVPex
multilayer pipe
PE-Xb/AL/PE-Xb**



page 61

**Basic
covered panel**



page 70

**PE-Xc Penta
oxygen
barrier pipe**



page 62 - 64

**Special 2 - Special
insulating panels**



page 71

**PE-Xa 5 layers
oxygen
barrier pipe**



page 65

**Special G
insulating panel
with graphite**



page 72

**PE-RT 5 layers
oxygen
barrier pipe**



page 66

**Phono-Term
sound-absorbent
panel**



page 73

**Accessories
for FIVPav**



page 67

**Roll-Plan
smooth coupled
insulating panel**



page 76

**Klettjet system
tear-off
fastening**



page 68

**FIVPert
multilayer pipe
PE-RT/AL/PE-RT**

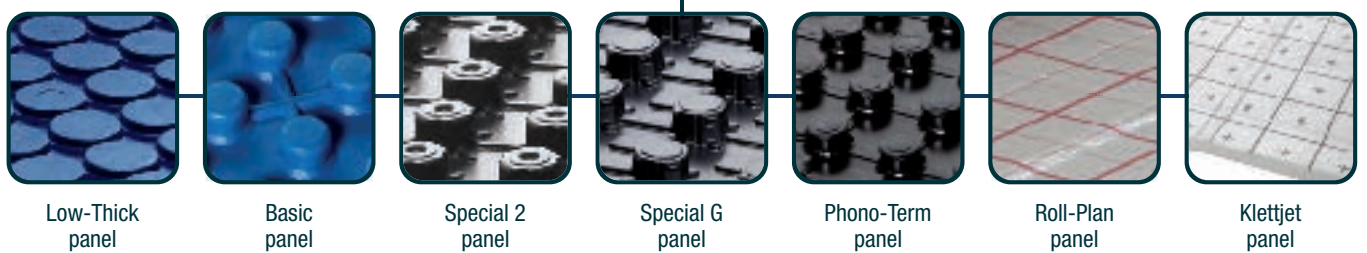
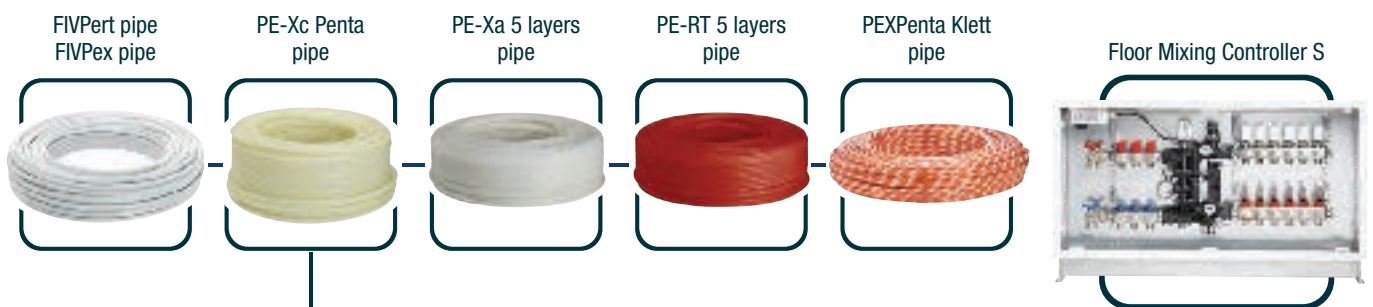


page 83

**FIVPar
system**

FIVPaV

Floor heating system



Advantages of the system

FIVPav

The floor heating system has become the ideal winter heating solution also in Italy.

Standards aimed at reducing emissions of pollutants, advanced electronic control systems, skilled specialised designers and clear and consistent information contribute to spreading this type of solution.

Today, the high technological level reached by the electronic control systems allow us to exploit in full safety the typical advantages of floor heating even for summer home cooling, thereby offering a climate control system that can be used 365 days a year.

COMFORT AND SAFETY

The FIVPav system is the safest and most comfortable solution for using the floor as a radiator during winter and as a cooling element during summer.

The thermal energy (hot or cold) is always well distributed among the rooms, without any annoying cold drafts, noise, dust movement and all in an invisible system.

During winter, the best temperature trend with respect to the height of the room is provided by a floor heating system, thereby obtaining ideal conditions in every point of the home.

Zero visual impact, environmental health and energy saving make this system the best winter heating solution.

ENABLES A COMPLETE SYSTEM

The complete range of FIVPav system components, used for heating only, is pre-set for broadening the system by adding the components for cooling.

Energy savings thanks to the system

FIVPav

Building energy consumption reduction is a primary goal for protecting our planet.

This can be achieved by improving the efficiency of the casing-system combination, using terminals to be supplied with low energy fluids, which can operate at low temperatures during winter and high temperatures during summer.

This is the only way to exploit the sun's free heat with thermal solar panels and to use electric heat pumps with photovoltaic panels as an alternative to fossil-fuel based heat generators.

Thanks to the FIVPav system, during winter, the low temperature system supply water enhances the performance of condensing boilers, thereby allowing for a drastic reduction of fuel consumption.



LOW-THICK

INSULATING PANEL WITH GRAPHITE
INTERVAL 100 MM



[UNI EN 13163]

Physical characteristics: properties

	Acronym	Standard	Value
Type		UNI EN 13163	EPS 250
Thermal conductivity	λ_D (λ_{ins})	UNI EN 12667 (UNI EN 1264-3)	0,031 W/mK
Density		UNI EN 1602	40 kg/m ³
Resistance to compression at 10% of crushing		UNI EN 826	≥ 250 kPa
Class of reaction to fire		UNI EN 13501-1	Euroclass E
Water absorption		UNI EN 12087	< 5%
Water vapour diffusion resistance factor	μ	UNI EN 12086	40 ÷ 100
Coating sheet thickness			0,16 mm

Technical data

	Acronym	Standard	Value
Thermal resistance	$R\lambda_{ins}$ (S_{ins} / λ_{ins})	UNI EN 1264-3:2021	0,15 m ² KW
Total length			1215 mm
Total width			615 mm
Total thickness			19 mm
Sheet thickness S_{ins}		UNI EN 1264-3	5 mm
Useful surface			0,72 m ²
Pipe spacing			100 mm
Installable pipes external $\varnothing$			12 mm

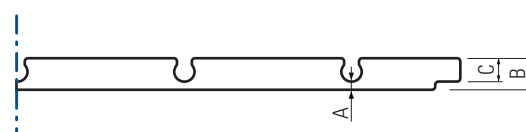
GP 2015
LOW-THICK



H = 5 mm

Expanded polystyrene (EPS) printed panel, reinforced with graphite, for thermal insulation, with profiled surface (pipe spacing 100 mm, for DN 12x2 pipe), male-female joints, self-adhesive base and rigid upper polystyrene film.

Perfect for renovations, owing to reduced space requirement, combined with state-of-the-art fluid screeds, allows the implementation of systems with minimum thickness of 40 mm (coating excluded), without giving up the heat insulation guaranteed by the EPS layer.



CODE	Size	Useful thickness	A mm	B mm	C mm	Pack m ²	Pallet m ²	Price €/m ²	Price €
9942P505	1.200 x 600 x 19	(H) 5 mm	5	19	14	12,96	181,44	38,91	504,30

For dimensions, panel sections and minimum overall dimensions of the system for civil buildings, see Technical Annexes Section.

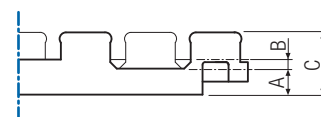


Physical characteristics: properties	Acronym	Standard	Mod. H 10 mm	Mod. H 20 mm
Type		UNI EN 13163	EPS 250	EPS 200
Thermal conductivity	λ_D (λ_{ins})	UNI EN 12667 (UNI EN 1264-3)	0,032 W/mK	0,033 W/mK
Density		UNI EN 1602	40 kg/m ³	30 kg/m ³
Resistance to compression at 10% of crushing		UNI EN 826	≥ 250 kPa	≥ 200 kPa
Class of reaction to fire		UNI EN 13501-1	Euroclass E	Euroclass E
Water absorption		UNI EN 12087	< 5%	< 5%
Water vapour diffusion resistance factor	μ	UNI EN 12086	40÷100	40÷100
Coating sheet thickness			0,16 mm	0,16 mm

Technical data	Acronym	Standard	Mod. H 10 mm	Mod. H 20 mm
Thermal resistance	$R\lambda_{ins}$ (S_{ins} / λ_{ins})	UNI EN 1264-3:2021	0,30 m ² K/W	0,60 m ² K/W
Total length			1135 mm	1135 mm
Total width			635 mm	635 mm
Total thickness			32 mm	48 mm
Sheet thickness S_{ins}		UNI EN 1264-3	10 mm	20 mm
Useful surface			0,66 m ²	0,66 m ²
Pipe spacing			50 mm	50 mm
External $\varnothing$ of installable pipes (mm)			16 - 17 mm	16 - 17 mm

GP 2015
BASIC

Panel in pressed expanded polystyrene (EPS), with surface bosses and tongue-and-groove edges, clad in a film of rigid polystyrene. Pipe spacing 5 cm.



CODE	Size	Useful thickness	Density	A mm	B mm	C mm	Pack m ²	Pallet m ²	Price €/m ²	Price €
9910P563	1.100 x 600 x 32	(H) 10 mm	40 kg/m ³	10	2	32	14,52	72,6	24,04	349,00
9910P569	1.100 x 600 x 48	(H) 20 mm	30 kg/m ³	20	7	48	9,24	92,4	22,98	212,30

For dimensions, panel sections and minimum overall dimensions of the system for civil buildings, see Technical Annexes Section.



[UNI EN 13163]

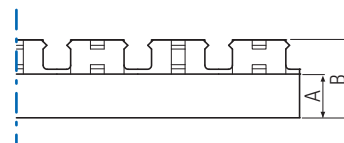
Physical characteristics: properties	Acronym	Standard	Mod. H=10 mm	Mod. H=20 / 30 / 40 / 51 / 60 mm
Type		UNI EN 13163	EPS 200	EPS 150
Thermal conductivity	$\lambda_D (\lambda_{ins})$	EN 12939	0,033 W/mK	0,034 W/mK
Density		UNI EN 1602	29 kg/m ³	24 kg/m ³
Resistance to compression at 10% of crushing		UNI EN 826	≥ 200 kPa	≥ 150 kPa
Class of reaction to fire		UNI EN 13501-1	Euroclass F	Euroclass F
Water absorption		UNI EN 12087	$\leq 5\%$	$\leq 5\%$
Water vapour diffusion resistance factor	μ	UNI EN 12086	40÷100	30÷70
Coating sheet thickness			0,6 mm	0,6 mm

Technical data	Acronym	Standard	Mod. H 10 mm	Mod. H 20 mm	Mod. H 30 mm	Mod. H 40 mm	Mod. H 51 mm	Mod. H 60 mm
Thermal resistance	$R\lambda_{ins} (S_{ins} / \lambda_{ins})$	UNI EN 1264-3:2021	0,30 m ² K/W	0,55 m ² K/W	0,85 m ² K/W	1,15 m ² K/W	1,50 m ² K/W	1,75 m ² K/W
Total length			1450 mm	1450 mm	1450 mm	1450 mm	1450 mm	1450 mm
Total width			850 mm	850 mm	850 mm	850 mm	850 mm	850 mm
Total thickness			33 mm	43 mm	53 mm	63 mm	74 mm	83 mm
Sheet thickness S_{ins}		UNI EN 1264-3	10 mm	20 mm	30 mm	40 mm	51 mm	60 mm
Useful surface			1,12 m ²	1,12 m ²	1,12 m ²	1,12 m ²	1,12 m ²	1,12 m ²
Pipe spacing			50 mm	50 mm	50 mm	50 mm	50 mm	50 mm
Installable pipes external $\varnothing$			16 - 17 mm	16 - 17 mm	16 - 17 mm	16 - 17 mm	16 - 17 mm	16 - 17 mm
Rebate			NO	NO	NO	NO	NO	NO

GP 2015
SPECIAL 2



Moulded expanded polystyrene (EPS) panel for thermal insulation, with surface bosses and cylindrical interlocking joints, coated with a rigid polystyrene thermoformed film. Pipe spacing 5 cm.



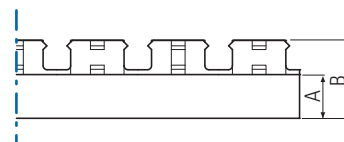
CODE	Size	Useful thickness	Density	A mm	B mm	Pack m ²	Pallet m ²	Price €/m ²	Price €
9914P110	1400 x 800 x 33	(H) 10 mm	29 kg/m ³	10	33	15,68	94,08	25,92	406,40
9914P120	1400 x 800 x 43	(H) 20 mm	24 kg/m ³	20	43	11,2	67,20	28,43	318,40
9914P130	1400 x 800 x 53	(H) 30 mm	24 kg/m ³	30	53	8,96	53,76	29,52	264,50

For dimensions, panel sections and minimum overall dimensions of the system for civil buildings, see Technical Annexes Section.

GP 2015
SPECIAL 2



Moulded expanded polystyrene (EPS) panel for thermal insulation, with surface bosses and cylindrical interlocking joints, coated with a rigid polystyrene thermoformed film. Pipe spacing 5 cm.



(*) Available only on request.

CODE	Size	Useful thickness	Density	A mm	B mm	Pack m ²	Pallet m ²	Price €/m ²	Price €
9914P140	1400 x 800 x 63	(H) 40 mm	24 kg/m ³	40	63	6,72	40,32	41,29	277,50
9914P150	1400 x 800 x 74	(H) 51 mm	24 kg/m ³	51	74	5,60	33,60	48,75	273,00
9914P160	1400 x 800 x 83 (*)	(H) 60 mm	24 kg/m ³	60	83	4,48	26,88	52,25	234,10

For dimensions, panel sections and minimum overall dimensions of the system for civil buildings, see Technical Annexes Section.



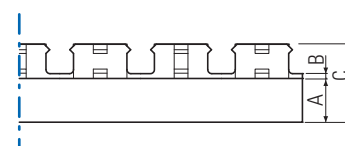
[UNI EN 13163]

Physical characteristics: properties	Acronym	Standard	Mod. H= 40 / 50 / 60 mm
Type		UNI EN 13163	EPS 150
Thermal conductivity	$\lambda_D (\lambda_{ins})$	EN 12939	0,033 W/mK
Density		UNI EN 1602	25 kg/m ³
Resistance to compression at 10% of crushing		UNI EN 826	150 kPa
Class of reaction to fire		UNI EN 13501-1	Euroclass E
Water absorption		UNI EN 12087	< 4%
Water vapour diffusion resistance factor	μ	UNI EN 12086	30 70
Coating sheet thickness			0,6 mm
Thermal conductivity of covered		EN 12939	0,14 W/mK

Technical data	Acronym	Standard	Mod. H 40 mm	Mod. H 50 mm	mod. H 60 mm
Thermal resistance	$R\lambda_{ins} (S_{ins} / \lambda_{ins})$	UNI EN 1264-3:2021	1,20 m ² K/W	1,50 m ² K/W	1,80 m ² K/W
Total length			1450 mm	1450 mm	1450 mm
Total width			760 mm	760 mm	760 mm
Total thickness			62 mm	72 mm	82 mm
Sheet thickness Sins		UNI EN 1264-3	62 mm	50 mm	60 mm
Useful surface			0,95 m ²	0,95 m ²	0,95 m ²
Pipe spacing			50 mm	50 mm	50 mm
Installable pipes external			16 - 17 mm	16 - 17 mm	16-17 mm
Rebate			YES	YES	YES

GP 2015
SPECIAL

Moulded expanded polystyrene (EPS) panel for thermal insulation, with surface bosses and cylindrical interlocking joints, coated with a rigid polystyrene thermoformed film.
Pipe spacing 5 cm.



Articles available while stocks last.



CODE	Size	Useful thickness	Density	A mm	B mm	C mm	Pack m ²	Pallet m ²	Price €/m ²	Price €
9914P540	1380 x 690 x 62	(H) 40 mm	25 kg/m ³	40	3	62	9,5	47,5	43,45	412,80
9914P550	1380 x 690 x 72	(H) 50 mm	25 kg/m ³	50	3	72	7,6	38	51,30	389,90
9914P560	1380 x 690 x 82	(H) 60 mm	25 kg/m ³	60	3	82	6,65	33,25	54,99	365,70

For dimensions, panel sections and minimum overall dimensions of the system for civil buildings, see Technical Annexes Section.

SPECIAL G

INSULATING PANEL WITH GRAPHITE INTERVAL 50 MM

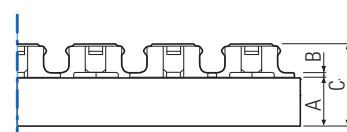


Physical characteristics: properties	Acronym	Standard	Mod. H 10 mm	Mod. H 23 / 38 / 45 mm
Type		UNI EN 13163	EPS 200	EPS 150
Thermal conductivity	$\lambda_D (\lambda_{ins})$	UNI EN 12667 (UNI EN 1264-3)	0,030 W/mK	0,030 W/mK
Density		UNI EN 1602	30 kg/m ³	25 kg/m ³
Resistance to compression at 10% of crushing		UNI EN 826	≥ 200 kPa	≥ 150 kPa
Class of reaction to fire		UNI EN 13501-1	Euroclass E	Euroclass E
Water absorption		EN 12087	< 2%	< 2%
Water vapour diffusion resistance factor	μ	UNI EN 12086	40 ÷ 100	40 ÷ 100
Coating sheet thickness			0,65 mm	0,65 mm

Technical data	Acronym	Standard	Mod. H 10 mm	Mod. H 23 mm	mod. H 38 mm	Mod. H 45 mm
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
Total length			1250 mm	1250 mm	1250 mm	1250 mm
Total width			850 mm	850 mm	850 mm	850 mm
Total thickness			32 mm	45 mm	60 mm	67 mm
Sheet thickness S_{ins}		UNI EN 1264-3	10 mm	23 mm	38 mm	45 mm
Useful surface			0,96 m ²	0,96 m ²	0,96 m ²	0,96 m ²
Pipe spacing			50 mm	50 mm	50 mm	50 mm
Installable pipes external Ø			16 - 17 mm	16 - 17 mm	16 - 17 mm	16 - 17 mm

GP 2015
SPECIAL G

Moulded expanded polystyrene (EPS) panel, reinforced with graphite, for thermal insulation, with surface bosses and cylindrical interlocking joints, coated with a rigid polystyrene thermoformed film.
Pipe spacing 5 cm.



Available only on request.



CODE	Size	Useful thickness	Density	A mm	B mm	C mm	Pack m ²	Pallet m ²	Price €/m ²	Price €
9910P501	1200 x 800 x 32	(H) 10 mm	30 kg/m ³	10	3	32	18,24	109,44	23,90	435,90
9910P502	1200 x 800 x 45	(H) 23 mm	25 kg/m ³	23	3	45	12,48	74,88	29,18	364,20
9910P503	1200 x 800 x 60	(H) 38 mm	25 kg/m ³	38	3	60	7,68	46,08	37,03	284,40
9910P504	1200 x 800 x 67	(H) 45 mm	25 kg/m ³	45	3	67	7,68	46,08	40,86	313,80

For dimensions, panel sections and minimum overall dimensions of the system for civil buildings, see Technical Annexes Section.



Physical characteristics: properties

	Acronym	Standard	Value
Type		UNI EN 13163	EPS-T
Thermal conductivity	$\lambda_D (\lambda_{ins})$	UNI EN 12667 (UNI EN 1264-3)	0,040 W/mK
Dynamic rigidity		EN 29052-1 / UNI EN 13163	< 20 MN/m ² /SD 20
Compressibility		EN 12431 / UNI EN 13163	≤ 2 mm/CP2
Class of reaction to fire		UNI EN 13501-1	Euroclass E
Water absorption		UNI EN 12087	< 5%
Coating sheet thickness			0,6 mm

Technical data

	Acronym	Standard	Value
Thermal resistance	$R\lambda_{ins} (S_{ins} / \lambda_{ins})$	UNI EN 1264-3:2021	0,75 m ² K/W
ΔLW (*) (index of evaluation of the attenuation of the level of walkway sound pressure)		UNI EN 12354-2	28 dB
Total length			1450 mm
Total width			850 mm
Total thickness			51 mm
Sheet thickness S_{ins}		UNI EN 1264-3	30 - 2 mm
Useful surface			1,12 m ²
Pipe spacing			50 mm
Installable pipes external $\varnothing$			16 - 17 mm

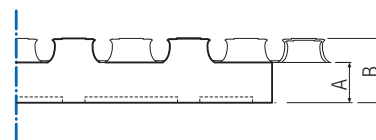
See the technical data table:

* calculation method for systems 'screed + resilient layer' (floating floors), valid with floors made of concrete or concrete and masonry, according to the simplified model provided for by EN 12354-2, table C1. Conditions: mass per unit of area of the screed: 100 kg/m², dynamic rigidity of the resilient status: 20 MN/m².

GP 2015
PHONO-TERM



Panel in pressed elasticized expanded polystyrene (EPS-T) for thermal and acoustic insulation (from walkway noise), with ashlar surface and perimeter insertions, covered with a rigid polystyrene film.
Pipe spacing 5 cm.



CODE	Size	Useful thickness	A mm	B mm	Pack m ²	Pallet m ²	Price €/m ²	Price €
9916P530	1.400 x 800 x 51	(H) 30 mm	30	51	6,72	47,04	28,26	189,90

For dimensions, panel sections and minimum overall dimensions of the system for civil buildings, see Technical Annexes Section.



H = 30 mm

ROLL-PLAN

SMOOTH COUPLED INSULATING PANEL



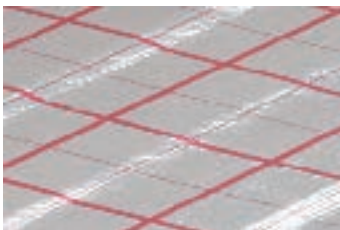
[UNI EN 13163]

Physical characteristics: properties	Acronym	Standard	Value
Type		UNI EN 13163	EPS 150
Thermal conductivity	$\lambda_D (\lambda_{ins})$	UNI EN 12667 (UNI EN 1264-3)	0,033 W/mK
Density		UNI EN 1602	25 kg/m ³
Resistance to compression at 10% of crushing		UNI EN 826	≥ 150 kPa
Class of reaction to fire		UNI EN 13501-1	Euroclass E
Water absorption		UNI EN 12087	< 5%
Dimensional stability		UNI EN 1604	$\pm 1\%$
Water vapour diffusion resistance factor	μ	UNI EN 12086	30÷70
Coating film thickness			0,16 mm

Technical data	Acronym	Standard	Value
Thermal resistance	$R\lambda_{ins} (S_{ins} / \lambda_{ins})$	UNI EN 1264-3:2021	0,90 m ² K/W
Total length			10000 mm (10 m)
Total width			1000 mm (1 m)
Total thickness			30 mm
Sheet thickness S_{ins}		UNI EN 1264-3	30 mm
Useful surface			10 m ²
Pipe spacing			50 mm

GP 2015
ROLL-PLAN

Closed-cell expanded polystyrene (EPS) panel in rolls combined with a reflective film and provided with a cross graphic marking. Laying interval 50 mm with overlapping interlocking of the film on one side.

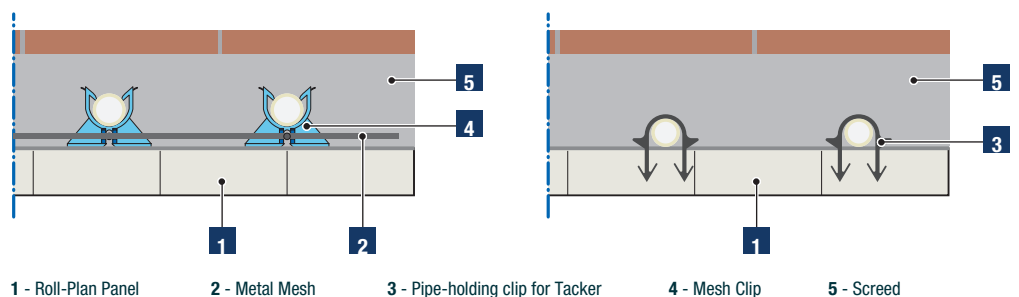


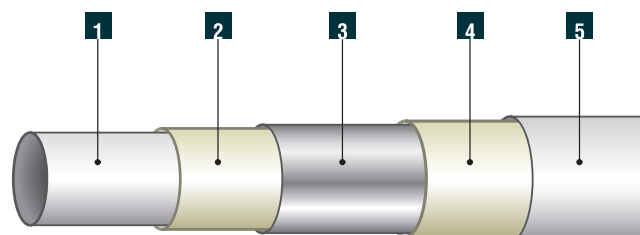
H = 30 mm

CODE	Size	Useful thickness	Density	Pack Pallet	Pack Pallet m ²	Pack m ²	Price €/m ²	Price €
9915P530	1.000 x 10.000 x 30	(H) 30 mm	25 kg/m ³	n° 6	60	10	23,03	230,30

For dimensions, panel sections and minimum overall dimensions of the system for civil buildings, see Technical Annexes Section.

INSTALLATION EXAMPLES





[UNI EN ISO 21003]



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



See FIVPress System introductory page (page 19) for details

Components

- 1 Inner pipe in PE-RT
- 2 Bonding layer connecting the inner pipe to the aluminium pipe
- 3 Butt-welded aluminium pipe (0.2 mm thickness for Ø16 x 2 size, 0.25 mm thickness for Ø 20 x 2 size)
- 4 Bonding layer connecting the outer pipe to the aluminium pipe
- 5 Outer pipe in PE-RT

CONSTRUCTION CHARACTERISTICS AND PERFORMANCE

The PE-RT/AL/PE-RT multilayer pipe for underfloor heating, heating and sanitary systems, belongs to the new generation of multilayer pipes for plumbing-sanitary systems. It consists of composite material, made even and more solid by a technologically advanced process, with which a PE-RT (crosslinked polyethylene with high resistance to high temperatures) pipe is implemented, reinforced by an aluminium core welded and covered externally by another layer of PE-RT.

COMPLIANCE WITH STANDARDS

The FIVPert pipe complies with UNI EN ISO 21003 standard (class 2/10 bar, class 5/10 bar) and with Italian Ministerial Decree 174/2004. In addition, the FIVPert 16x2 pipe has achieved the DVGW (Technical Rules W542 and W534) and KIWA (Technical Document Ki-0410) quality certificates.

CONDITIONS OF USE ACCORDING TO THE APPLICATION CLASSES IN COMPLIANCE WITH UNI EN ISO 21003-1 STANDARD (SEE TECHNICAL ATTACHMENTS).

EN TECHNICAL CHARACTERISTICS

Coefficient of linear expansion: 0,026 mm/m °C
Thermal conductivity: 0,45 W/m K
Minimum radius of bending: 5 x Ø pipe
Surface roughness of internal pipe: 7 µm
Fire reaction class: E_L (EN 13501-1)

OPERATING CONDITIONS OF FIVPert PIPE

Classes of application (UNI EN ISO 21003-1 - see table "Classifications of conditions of use" in the Technical Attachments section): 2/10 bar, 5/10 bar

Maximum operating conditions for 50 years:

- Design temperature T_D = 70 °C
- Design pressure p_D = 10 bar

APPLICATION: UNDERFLOOR HEATING, HEATING AND SANITARY SYSTEMS.

Regression curves and Linear expansion:
see chapter 1 "Multi-layer distribution systems for water".
Pressure drops: see Technical Attachments section.

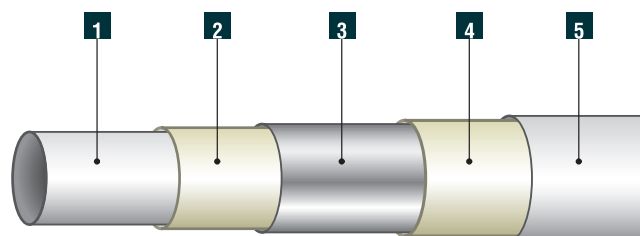
GP 2035
FIVPert PIPE

Multi-layer pipe for heating and plumbing system, made from composite material using a technologically advanced processing during which PE-RT (non-crosslinked polyethylene with high resistance to high temperatures) pipe is coupled with a aluminium core, soldered at the head and externally coated with another layer of PE-RT.

(*) Article available while stocks last.



CODE	Size	m Pallet	N° Rolls	Pack m	Price €/m
9517P917	16 x 2 mm	2200	22	100	1,89
9517P969	16 x 2 mm	2600	13	200	2,07
9517P971	16 x 2 mm	2000	4	500	2,07
9517P931	20 x 2 mm	1600	16	100	2,81
9517P240	20 x 2 mm (*)	1920	8	240	2,81



[UNI EN ISO 21003]



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



See FIVPress System introductory page (page 19) for details

Components

- 1 Inner pipe in PE-Xb crosslinked polyethylene
- 2 Bonding layer connecting the inner pipe to the aluminium pipe
- 3 Aluminium pipe (minimum thickness 0.2 mm)
- 4 Bonding layer connecting the outer pipe to the aluminium pipe
- 5 Outer pipe in PE-Xb crosslinked polyethylene

CONSTRUCTION CHARACTERISTICS AND PERFORMANCE

The FIVPex pipe is produced by constructing a layer of aluminum inside two layers of polyethylene and proceeding with the cross-linking process. This combines the advantages of metal (dimensional stability, high resistance to temperature and pressure) with those of plastic (easy working, good chemical inertia). The quality of materials used allow the FIVPex pipe to achieve the highest performance levels among products in its sector.

COMPLIANCE WITH STANDARDS

The FIVPex pipe complies with UNI EN ISO 21003 standard (class 2/10 bar, class 5/10 bar) and with Italian Ministerial Decree 174/2004.

CONDITIONS OF USE ACCORDING TO THE APPLICATION CLASSES IN COMPLIANCE WITH UNI EN ISO 21003-1 STANDARD (SEE TECHNICAL ATTACHMENTS).

EN TECHNICAL CHARACTERISTICS OF FIVPex PIPE

Minimum aluminium thickness 0.2 mm
Coefficient of linear expansion: 0.026 mm/m °C
Thermal conductivity: 0.45 W/m °C
Minimum curvature radius: 5 x Ø pipe
Surface roughness of internal pipe: 7 µm
Fire reaction class: E_L (EN 13501-1)

OPERATING CONDITIONS OF FIVPex PIPE

Classes of Application (UNI EN ISO 21003-1 - see table "Classifications of conditions of use" in the Technical Attachments section): 2/10 bar, 5/10 bar
Max. operating temperature for 50 years:
- Maximum temperature for shorts time: 95 °C
- Design pressure p_D = 10 bar

Regression curves and Linear expansion:
see chapter 1 "Multi-layer distribution systems for water".
Pressure drops: see Technical Attachments section.

GP 2026
FIVPex PIPE

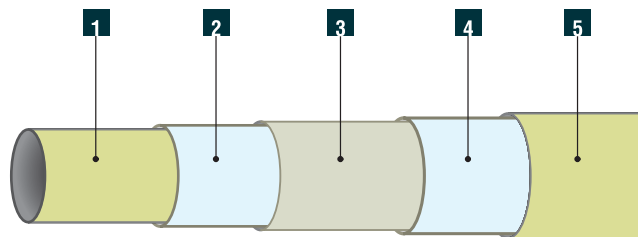
FIVPEX BARE pipe in rolls.



CODE	Size	m Pallet	N° Rolls	Pack m	Price €/m
9416P917	16 x 2	2200	22	100	2,07
9416P969	16 x 2	2600	13	200	2,07
9416P971	16 x 2	2000	4	500	2,07
9416P931	20 x 2	1600	16	100	2,82

PE-Xc PENTA

EVOH OXYGEN BARRIER 5 LAYERS PIPE


SKZ

[UNI EN ISO 21003-2]

Das Kunststoff-Zentrum

Components

- 1** Inner pipe in PE-Xc (cross-linked high density polyethylene)
- 2** Bonding layer connecting the inner pipe to the EVOH-oxygen barrier pipe
- 3** EVOH-oxygen barrier pipe
- 4** Bonding layer connecting the outer pipe to the EVOH-oxygen barrier pipe
- 5** Outer pipe in PE-Xc (cross-linked high density polyethylene)

CONSTRUCTION CHARACTERISTICS AND PERFORMANCE

The PE-Xc polyethylene pipe is crosslinked via an electronic method, and owing to the arrangement of the 5 layers, the EVOH oxygen barrier is protected from mechanical damage and, at the same time, the thickness of the inner PE-X layer is always equal to that of a 3-layer pipe, having the same size.

The several inspections and quality controls ensure maximum safety over time, as proven by the SKZ certification, accredited and certified institution in Europe for quality assurance monitoring for plastic material industrial sector.

COMPLIANCE WITH STANDARDS

The PE-Xc Penta EVOH 5-layers oxygen barrier pipe complies with the UNI EN ISO 21003-2 standard and is SKZ HR 3.2 certified.

CONDITIONS OF USE ACCORDING TO THE APPLICATION CLASSES IN COMPLIANCE WITH UNI EN ISO 21003-1 STANDARD (SEE TECHNICAL ATTACHMENTS).

EN TECHNICAL CHARACTERISTICS

Application classes / Operating pressure (bar):

size 12x2: Cl. 4/10 bar - Cl. 5/10 bar

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

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

size 20x2: Cl. 4/8 bar - Cl. 5/6 bar

Oxygen permeability (DIN 4726):

<0.32 mg/(m d) at 40 °C; <3.60 mg/(m d) at 80 °C

Density: 940 kg/m

Degree of cross-linking: ≥60%

Thermal conductivity: 0.41 W/mK

Average coefficient of linear expansion: 0.15 mm/m °C

Internal roughness: 7 µm

Water content: size 12x2: 0.05 l/m - size 16x2: 0.11 l/m

size 17x2: 0.133 l/m - size 20x2: 0.20 l/m

Application: heating systems (not suitable for sanitary systems).

Pipe regression curves, Pressure drops and Linear thermal expansion: see Technical Attachments section.

GP 2034
PE-Xc Penta PIPE

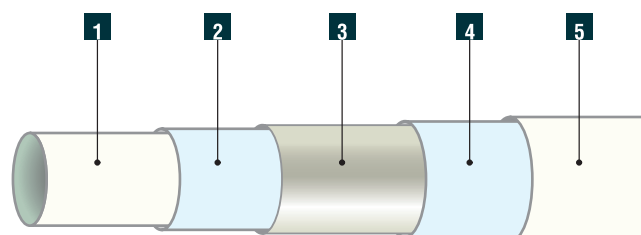


PE-Xc Penta EVOH 5 layers crosslinked polyethylene pipe via electronic method equipped with EVOH oxygen barrier, complies with the UNI EN ISO 21003-2 standard and is SKZ HR 3.2 certified.

CODE	Size	m Pallet	N. Rolls	Pack m	Price €/m
9518P001	12 x 2 mm	4320	18	240	2,30
9518P002	16 x 2 mm	2800	14	200	2,20
9518P003	16 x 2 mm	2880	12	240	2,20
9518P004	16 x 2 mm	2400	4	600	2,20
9518P005	17 x 2 mm	1920	8	240	2,45
9518P006	17 x 2 mm	2400	4	600	2,45
9518P007	20 x 2 mm	2000	4	500	2,98

PE-Xa 5 LAYERS

EVOH OXYGEN BARRIER 5 LAYERS PIPE



SKZ

Das Kunststoff-Zentrum

[UNI EN ISO 15875-2]

Components

- 1 Inner pipe in PE-Xa crosslinked polyethylene
- 2 Bonding layer connecting the inner pipe to the EVOH-oxygen barrier pipe
- 3 EVOH-oxygen barrier pipe
- 4 Bonding layer connecting the outer pipe to the EVOH-oxygen barrier pipe
- 5 Outer pipe in PE-Xa crosslinked polyethylene

CONSTRUCTION CHARACTERISTICS AND PERFORMANCE

The quality of a heating/cooling floor-mounted system essentially depends on the quality of the pipe used, especially for its flexibility and durability features over time. The PE-Xa crosslinked polyethylene pipes perfectly meet these requirements, while satisfying the international pertaining standards. The several inspections and quality controls ensure maximum safety over time, as witnessed by SKZ certification.

COMPLIANCE WITH STANDARDS

The PE-Xa pipe with 5 layers EVOH oxygen barrier complies with the UNI EN ISO 15875-2 European product standard and is SKZ HR 3.2 certified.

CONDITIONS OF USE ACCORDING TO THE APPLICATION CLASSES IN COMPLIANCE WITH UNI EN ISO 15875-1 STANDARD (SEE TECHNICAL ATTACHMENTS).

EN TECHNICAL CHARACTERISTICS

Application classes / Operating pressure (bar):

Cl. 4/10 bar - Cl. 5/8 bar

Oxygen permeability (DIN 4726):

< 0.32 mg/(m²d) at 40 °C; < 3.60 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 bend radius: 5 x external diameter

Internal roughness: 7 µm

Water content: 0.133 l/m

Application: heating systems (not suitable for sanitary systems).

Pipe regression curves: see Technical Attachments section.

GP 2044
PE-Xa 5 LAYERS PIPE

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



CODE	Size	m Pallet	N° Rolls	Pack m	Price €/m
9519P977	17 x 2 mm	1920	8	240	2,45
9519P978	17 x 2 mm	2400	4	600	2,45



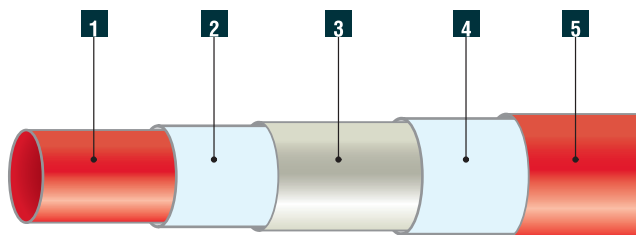
SKZ

Das Kunststoff-Zentrum

[UNI EN ISO 22391-2]

PE-RT 5 LAYERS

EVOH OXYGEN BARRIER 5 LAYERS PIPE



Components

- 1 Inner pipe in PE-RT
- 2 Bonding layer connecting the inner pipe to the EVOH-oxygen barrier pipe
- 3 EVOH-oxygen barrier pipe
- 4 Bonding layer connecting the outer pipe to the EVOH-oxygen barrier pipe
- 5 Outer pipe in PE-RT

CONSTRUCTION CHARACTERISTICS AND PERFORMANCE

The quality of a heating/cooling floor-mounted system essentially depends on the quality of the pipe used, especially for its flexibility and durability features over time. The PE-RT pipes (polyethylene with improved resistance to high temperatures) perfectly meet these requirements, while satisfying the international pertaining standards. The several inspections and quality controls ensure maximum safety over time, as witnessed by SKZ certification.

COMPLIANCE WITH STANDARDS

The PE-RT pipe with 5 layers EVOH oxygen barrier complies with the UNI EN ISO 22391-2 European product standard and is SKZ HR 3.16 certified.

CONDITIONS OF USE ACCORDING TO THE APPLICATION CLASSES IN COMPLIANCE WITH UNI EN ISO 22391-1 STANDARD (SEE TECHNICAL ATTACHMENTS).

EN TECHNICAL CHARACTERISTICS

Application classes / Operating pressure (bar):
Cl. 4/8 bar - Cl. 5/6 bar
Oxygen permeability (DIN 4726):
< 0.32 mg/(m²d) at 40 °C; < 3,60 mg/(m²d) at 80 °C
Density: 941-947 kg/m³
Thermal conductivity: 0.4 W/mK

Linear expansion coefficient: 0.18 mm/m °C
Minimum bend radius: 5 x external diameter
Internal roughness: 7 µm
Water content: 0.133 l/m

Application: heating systems (not suitable for sanitary systems).

Pipe regression curves, Pressure drops and Linear thermal expansion:
see Technical Attachments section.

GP 2035
PE-RT 5 LAYERS PIPE

5-layer PE-RT pipe type II, complies with the UNI EN ISO 22391-2 standard and provided with an oxygen barrier in compliance with DIN 4726 standard SKZ HR 3.16 certified.



CODE	Size	m Pallet	N. Rolls	Pack m	Price €/m
9517P011	17 x 2 mm	1920	8	240	1,56
9517P010	17 x 2 mm	2400	4	600	1,54

GP 2630
ACCESSORIES



Insulating perimeter strip, in closed-cell expanded polyethylene (density 23 kg/m³), with adhesive surface for fixing to a wall and moveable polyethylene strip on the panel side.

Suitable for separating floors from vertical structures of buildings.

CODE	Height	Thickness	Pack m	Price €/m
9920P561	150 mm	7 mm	60	2,26

GP 2630
ACCESSORIES



Insulating perimeter strip, in closed-cell expanded polyethylene (density 23 kg/m³), with adhesive surface for fixing to a wall, without moveable polyethylene strip.

Suitable for separating floors from vertical structures of buildings.

CODE	Height	Thickness	Pack m	Price €/m
9920P562	100 mm	5 mm	50	1,24

GP 2630
ACCESSORIES



Plastic expansion joint profile with adhesive base and seat for 7-8 mm thick insulating strip.

CODE	Size	Pack m	Price €/m
9925P010	WxHxD 2000x35x20 mm	10	28,88
28130032	WxHxD 2000x35x20 mm	50	12,63

GP 2630
ACCESSORIES



Super-fluidifying additive for screeds.

Reduces the mixing water considerably, significantly increases the mechanical strength of the concrete increasing its thermal conductivity.
Improves workability and reduces porosity and hygrometric shrinkage.
Dosage: 1 ÷ 1.5 kg per 100 kg of concrete.

CODE	kg/Pack	Price €/Kg
28130414	10	4,82

GP 2630
ACCESSORIES



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)

CODE	Kg/Pack	Price €/pack
02706396	5	128,00

GP 2630
ACCESSORIES



Polymer fibers for screeds.

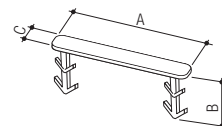
Structural polymer fibers with a length of 30 mm designed to improve the tensile strength characteristics of concrete in the post-cracking phase.
They reinforce 'moist soil' type concrete, increasing its ductility and toughness.
Suitable for making heated screeds.
Suggested dose: 1+3 kg/m³.

CODE	Pack	Pack pcs/box	Price €/pc
28130418	1,0 kg bag	1	37,62

GP 2630
ACCESSORIES



Straddle clip in plastic material. It is applied on the panel ashlars to hold the pipes in the critical points.
Not suitable for panels with hard thermoformed film.

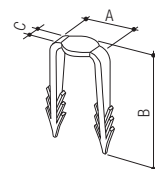


CODE	A mm	B mm	C mm	Pack pcs/box	Price €/pc
28134452	88	28	14	100	0,18

GP 2630
ACCESSORIES



Manual pipe-holder clip, made of plastic, to further secure the pipes at critical points.

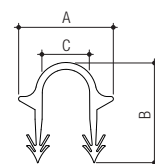


CODE	A mm	B mm	C mm	Pack pcs/box	Price €/pc
28134456	25	49	5	100	0,19

GP 2630
ACCESSORIES



Pipe holding clip for Tacker made with plastic material to secure Ø 16-20 mm pipes, suitable for the Roll-Plan smooth panel.



CODE	Size	A mm	B mm	C mm	Pack pcs/box	Price €/pc
28134454	Ø 16 +20 mm	39	42	20	300	0,24

GP 2630
ACCESSORIES



Clip holding Tacker, allows to easily secure pipes to the Roll-Plan smooth panel sitting upright.

CODE	Pack pcs/box	Price €
9926X001	1	452,10

GP 2630
ACCESSORIES



Support curve for pipes with diameter from 14 to 17 mm.
It supports the pipes at the base of the manifolds.

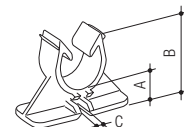
CODE	Size	Pack pcs/box	Price €/pc
28134464	Ø 14 +17 mm	10	0,96

GP 2630
ACCESSORIES



Pipe-holding clip for metal mesh, for $\varnothing$ 16-17 mm pipes, to be used with metal mesh, $\varnothing$ 3 mm wire.

Article available while stocks last.



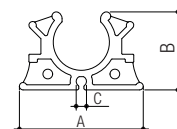
CODE	A mm	B mm	C mm	Pack pcs/box	Price €/pc
9929P000	13	36	4,2	200	0,30

GP 2630
ACCESSORIES



Pipe-holding clip for metal mesh, for $\varnothing$ 16-17 mm pipes, to be used with metal mesh, $\varnothing$ 3 mm wire.

It will be supplied when stocks run out of the code 9929P000.



CODE	Size	A mm	B mm	C mm	Pack pcs/box	Price €/pc
28134458	$\varnothing$ 16 ÷ 17 mm	35	22	$\varnothing$ 3	1000	0,16

Medium consumption: 35 pcs/m².

GP 2630
ACCESSORIES



Mesh clip-holding tool, to be used with clips code 28134458.

CODE	Pack pcs/box	Price €
28134462	1	853,20

GP 2630
ACCESSORIES



Non-woven felt for FIVPav system.
Made of polypropylene staple. Thickness 4 mm. Density: 500 g/m².

CODE	Size	Pack m ²	Price €/m ²
6320R002	2 x 25 m	50	6,39

GP 2630
ACCESSORIES



Roofing sheet in regenerated polyethylene with grid (in roll).

CODE	Size	Thickness	Pack m ²	Price €/pack
28141020	2 x 50 m	0,2 mm	100	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. S_d (vapor transmission): $\geq$ 100 m.

GP 2630
ACCESSORIES



Completely disassembled roll dispenser, for rolls from 38 cm to max 100 cm, max height 60 cm (maximum roll weight: 80 kg).

CODE	Pack pcs/box	Price €
ARTICLE WITH GROUP PERSONALISATION		
28130041	1	622,90

Advantages of the system Klettjet

This is the FIV system for underfloor heating and cooling systems realization, which adopts the quick strap fastening system to make the installer's work easier and faster.

With the simple pressure of a foot, the special spiral wrapped tape around the PE-Xc cross-linked polyethylene pipes, catches firmly onto the Klettjet panels film, keeping the pipes firmly in place and setting a new standard for floor-drowned radiant systems with flat panels.

Traditional pipe fastening systems such as clips, plastic bars and the use of special tools are no longer required. The system allows the installer to operate autonomously, to easily modify the installation of the circuits, as the pipe can be detached and reattached several times from the panel, as for all the strap fastening systems we use daily within the clothing field.

Klettjet system is suitable for any type of building, especially where rooms have irregular shapes where it is possible to lay the circuits without restrictions, respecting the executive design, following the black traces of the grid printed on panels surface.

SYSTEM ELEMENTS

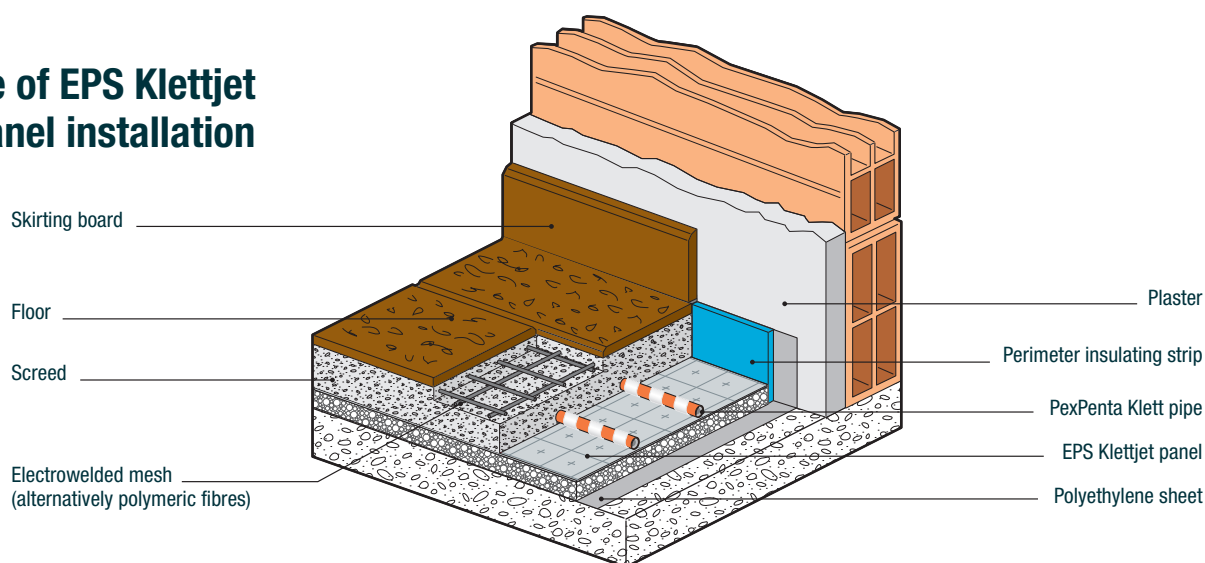
Klettjet panels are supplied on a roll and can be easily cut with a large blade cutter. They are available with 20 or 30 mm thick EPS thermic insulation or with only 6 mm thick thermic-acoustic insulation, with full self-adhesive base, ideal for building renovations, which can be laid directly on existing floors or other insulating layers.

PexPenta Klett PE-Xc 16x2 mm, 5-layers high density polyethylene pipe, cross-linked with an electronic system, highly flexible and equipped with an oxygen barrier positioned in the middle layer, is wrapped externally in a spiral shape by a special tape for rapid fastening of strap type on the Klettjet panels.

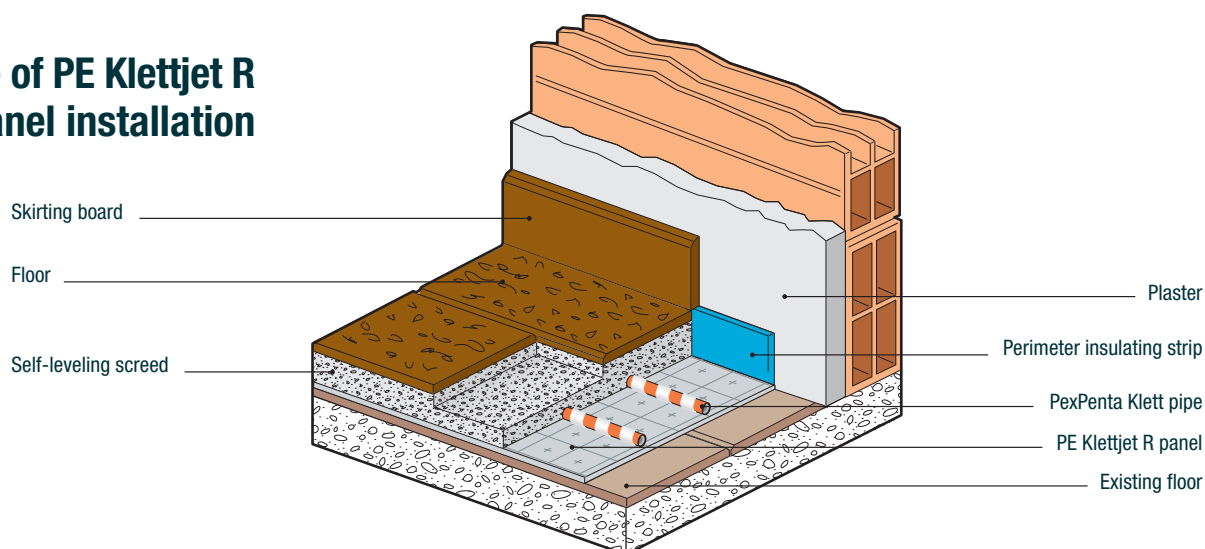
It complies with DIN 4726 and UNI EN ISO 21003-2, Certificate DIN CERTCO 3V365 MVR (P).

This system is integrated by Eurocono Monoblocco certified tightening fittings for the connection of the pipe to the distribution manifold, by a special roll tape to join the panels with relevant unrolling tool and by a tool to keep the pipes raised from the floor.

Example of EPS Klettjet panel installation



Example of PE Klettjet R panel installation



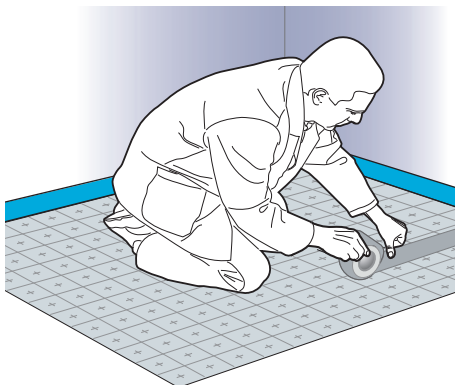
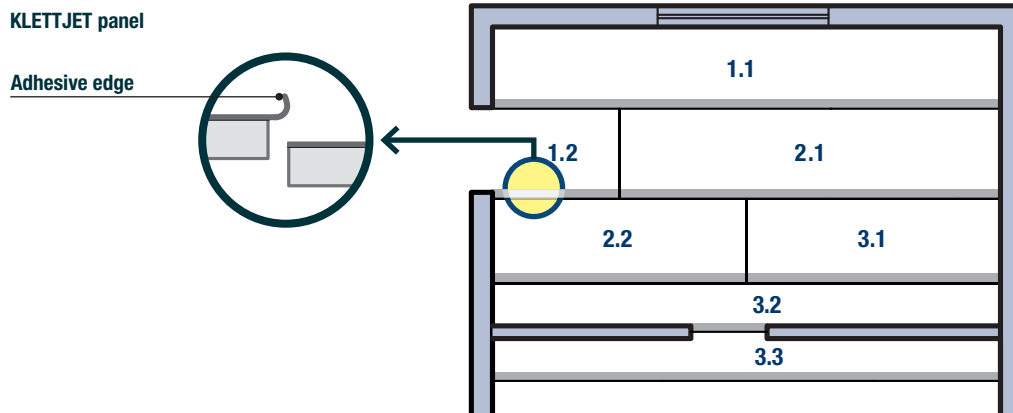
Laying of insulating panels

LAYING THE SMOOTH COUPLED INSULATION KLETTJET PANEL

Before the system installation, make sure that the support on which the panel is to be laid is as flat, smooth and clean as possible. It is recommended to start laying the roll, both for the EPS Klettjet panel and the PE Klettjet R panel, starting from a room corner in the direction of the longest wall of it, so that the edge lays next to the perimeter strip.

Exceeding cut parts should be reused in the next row, respecting if possible the alignment of the printed grid on the superficial film, in order to minimize material waste.

Example of laying and recovering the cut part of the Klettjet panel



Seal the rolls along the short side with its adhesive tape.

In the case of EPS panels (20 or 30 mm thick) join the panels using the appropriate 50 mm adhesive tape. In the case of PE panels (6 mm thick), remove the film on the back of the panel before laying it, in order to reveal the adhesive surface.

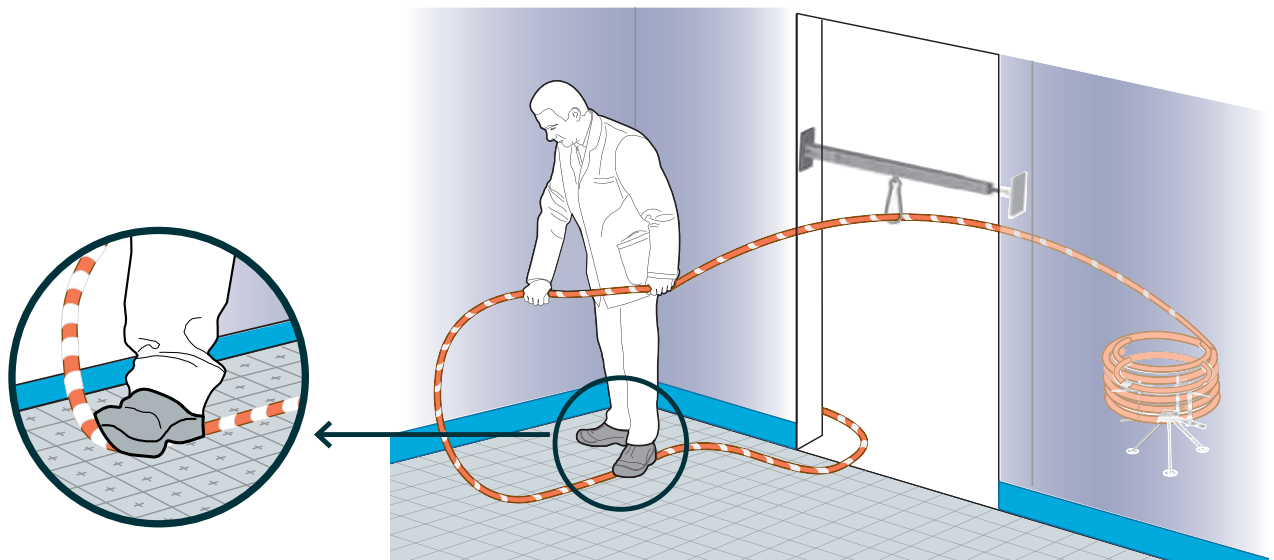
If the support is raw, it is advisable to check that the surface guarantees perfect fixing of the panels. If necessary, check the application of specific primers.

LAYING THE PIPE PEXPENTA KLETT

When installing the PexPenta Klett pipe, it is advisable to use the appropriate gloves and use the pipe support positioned between the door jambs to pass the PexPenta Klett pipe through the carabiner and lay it over the panels installed according to the design scheme and following the grid drawn on the panels with a simple foot pressure.

The tube will be fixed to the tissue film of the panel by means of the quick fastening tape.

In the event of installation changes, the pipe can be easily removed and fastened again.



PE KLETTJET R

REDUCED PE INSULATING PANEL
INTERVAL 50 MM



Physical characteristics: properties

	Acronym	Standard	Model H6
Type		UNI EN 14313	Extruded PE
Thermal conductivity	$\lambda_D (\lambda_{ins})$	EN 12939 (UNI EN 1264)	0,045 W/mK
Dynamic rigidity		EN 29052-1	< 210 MN/m³
Compressibility		EN 12431	≤ 2 mm
Maximum load		/	5,0 kPa
Class of reaction to fire		UNI EN 13501-1	Euroclass E

Technical data

	Acronym	Standard	Model H6
Thermal resistance	$R\lambda_{ins} (S_{ins} / \lambda_{ins})$	UNI EN 1264-3:2021	0,10 m² K/W
ΔLw (*) (index of evaluation of the attenuation of the level of walkway sound pressure)		UNI EN 12354-2	13 dB
Total length			20.000 mm
Total width			1.000 mm
Total thickness			6 mm
Sheet thickness S_{ins}		UNI EN 1264-3	6 mm
Pipe spacing			50 mm

See the technical data table:

* calculation method for systems "screed + resilient layer" (floating floors), valid with floors made of concrete or concrete and masonry, according to the simplified model provided for by EN 12354-2, table C1. Conditions: mass per unit of area of the screed: 100 kg/m², dynamic rigidity of the resilient status: 210 MN/m³

GP 2015
PE KLETTJET R



H = 6 mm

Smooth panel in 6 mm thick roll, made of extruded closed cell polyethylene with self-adhesive base, for thermal and acoustic insulation (from impact noise), coupled with a film suitable for fastening PexPenta Klett pipes with tear-off system. The film features a 5 cm pitch black markings and a self-adhesive edge along the 20 metre side.



CODE	Size	Useful thickness	A mm	B mm	Pack m²	Pallet m²	Price €/m²	Price €
28134286	20000 x 1000 x 6	(H) 6 mm	40	6	20	120	28,40	568,00

For dimensions, panel sections and minimum overall dimensions of the system for civil buildings, see Technical Annexes Section.

EPS KLETTJET

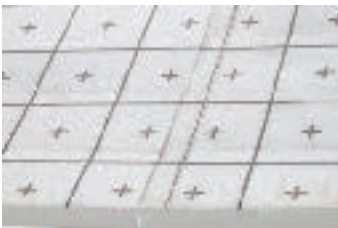
EPS INSULATING PANEL
INTERVAL 50 MM



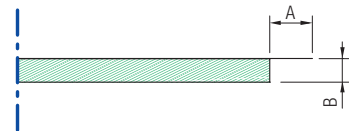
Physical characteristics: properties	Acronym	Standard	Model H 20 mm	Model H 30 mm
Type		UNI EN 13163	EPS 150	EPS 150
Thermal conductivity	λ_D (λ_{ins})	UNI EN 12667	0,033 W/mK	0,033 W/mK
Density		UNI EN 1602	25 kg/m ³	25 kg/m ³
Resistance to compression at 10% of crushing		UNI EN 826	≥ 150 kPa	≥ 150 kPa
Class of reaction to fire		UNI EN ISO 11925	Euroclass E	Euroclass E
Water absorption		UNI EN 12087	< 5%	< 5%
Water vapour diffusion resistance factor	μ	UNI EN 12086	40 ÷ 100	40 ÷ 100

Technical data	Acronym	Standard	Model H 20 mm	Model H 30 mm
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
Total length			10.000 mm	10.000 mm
Total width			1.000 mm	1.000 mm
Total thickness			20 mm	30 mm
Sheet thickness S_{ins}		UNI EN 1264-3	20 mm	30 mm
Pipe spacing			50 mm	50 mm

GP 2015
EPS KLETTJET



Smooth panel in roll, consisting of slats (dimensions: 100 x 1000 mm) made of expanded Polystyrene (EPS) moulded for thermal insulation, coupled with a film suitable for fastening PexPenta Klett pipes with tear-off system.
The film features a 5 cm pitch black markings and a self-adhesive edge along the 10 metre side.



CODE	Size	Useful thickness	Density	A mm	B mm	Pack m ²	Pallet m ²	Price €/m ²	Price €
9915P001	10000 x 1000 x 20	(H) 20 mm	25	40	20	10	90	23,43	234,30
9915P002	10000 x 1000 x 30	(H) 30 mm	25	40	30	10	70	26,50	265,00

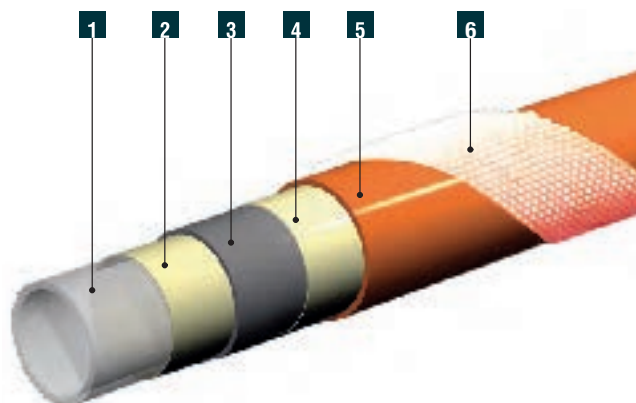
For dimensions, panel sections and minimum overall dimensions of the system for civil buildings, see Technical Annexes Section.

PEXPENTA KLETT

5-LAYER PE-Xc / EVOH / PE-Xc PIPE



[UNI EN ISO **21003-2**]



Components

- | | |
|----------|---|
| 1 | Inner pipe in PE-Xc (cross-linked high density polyethylene) |
| 2 | Bonding layer connecting the inner pipe to the EVOH-oxygen barrier pipe |
| 3 | EVOH-oxygen barrier pipe |
| 4 | Bonding layer connecting the outer pipe to the EVOH-oxygen barrier pipe |
| 5 | Outer pipe in PE-Xc (cross-linked high density polyethylene) |
| 6 | Tape for tear-off fastening |

CONDITIONS OF USE ACCORDING TO THE APPLICATION CLASSES IN COMPLIANCE WITH UNI EN ISO 21003-1 STANDARD (SEE TECHNICAL ATTACHMENTS).

EN TECHNICAL CHARACTERISTICS

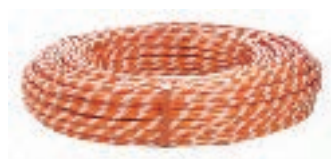
Application classes / Operating pressure (bar):
Cl. 4 / 6 bar - 5 / 6 bar
Oxygen permeability: (DIN 4726):
< 0.32 mg/(m²d) at 40 °C; < 3.60 mg/(m²d) at 80 °C
Density: 940 kg/m³
Thermal conductivity: 0.41 W/(mK)

Degree of cross-linking: $\geq 60\%$
Average coefficient of linear expansion: $1.5 \times 10^{-4} \text{ K}^{-1}$
Minimum bending radius: 5 x external diameter
Internal roughness: 6 μm - Water content: 0.11 l/m

APPLICATION: HEATING SYSTEMS.

GP 2034
PEXPENTA KLETT PIPE

5-layer pipe made of high density polyethylene, cross-linked with electronic system, in accordance with UNI EN ISO 21003-2, equipped with oxygen barrier in accordance with standard DIN 4726 in the intermediate layer, externally wrapped with special tape for fast tear-off fastening on Klettjet panels. DIN CERTCO 3V365 MVR (P) certified.

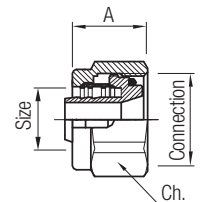


CODE	Size	m Pallet	N° Rolls	Pack m	Price €/m
28141830	16 x 2 mm	1920	8	240	3,56
28141832	16 x 2 mm	2400	4	600	3,56

GP 2615
MONOBLOCCO SEAL

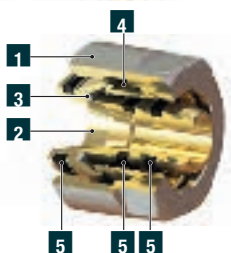


Monoblocco nickel-plated seal, for PexPenta Klett pipe.



CODE	Size	Connection	Maximum torque (Nm)	A mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
6239R917	16x2	24x19	30+35	20,5	27	62	40	640	5,78

GP 2615
MONOBLOCCO 2.0 SEAL

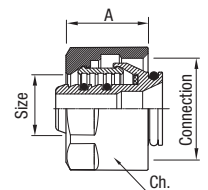


Monoblocco 2.0, nickel-plated 3/4" Eurocone seal, for PexPenta Klett pipe.

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

Available only on request.



CODE	Size	Connection	Maximum torque (Nm)	A mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
9510R100	16x2	EUROCONO	30+35	20	27	69	10	320	5,28

Supplied with O-rings.

GP 2630
ACCESSORIES



50 mm adhesive tape for joining Klettjet panels.

CODE	Height	Roll per pack	Pack m	Price €/pack
28134290	50 mm	1	100	109,20

GP 2630
ACCESSORIES



Reel for 50 mm tape for Klettjet panels.

CODE	Pack pcs/box	Price €
28134294	1	181,20

GP 2630
ACCESSORIES



Support for PexPenta Klett pipe.

CODE	Pack pcs/box	Price €
28134296	1	648,10

GP 2630
ACCESSORIES

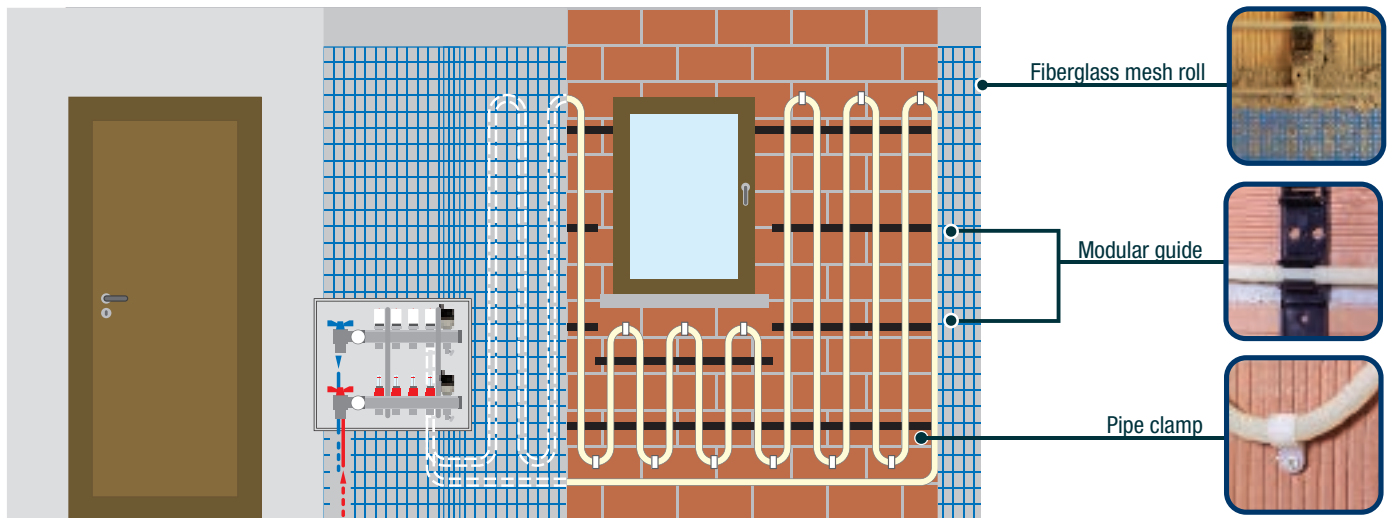


Gloves for PexPenta Klett pipe.

CODE	Pack pcs/box	Price €
28134299	1 pair	19,45

FIVPar SYSTEM

ACCESSORIES FOR WALL SYSTEM



GP 2630
ACCESSORIES



Modular guide for pipe anchoring $\varnothing$ 12 mm, with minimum interval 60 mm.

CODE	Size	Pack pcs/box	Price €/pc
9943P012	(LxHxW) 900x20x35 mm	30	4,57

GP 2630
ACCESSORIES



Pipe clamp for $\varnothing$ 12 mm pipe.

CODE	Size	Pack pcs/box	Price €/pc
9944P012	Pipe $\varnothing$ 12 mm	50	0,41

GP 2630
ACCESSORIES



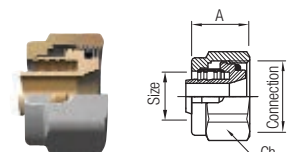
Fibreglass mesh roll for plaster.

CODE	Size	Pack m ²	Price €/pack
9945X050	50 x 1 m	50	220,00

GP 2615
MONOBLOCCO SEAL



Monoblocco nickel-plated compression seal, for PE-X/PP pipes.



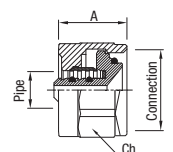
CODE	Size	Connection	Maximum torque (Nm)	A mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
6239R906	12x2	24x19	30+35	20,5	27	67	40	640	6,26

GP 2615
MONOBLOCCO SEAL



Monoblocco nickel-plated compression seal, for multilayer pipes and plastic pipes.

Available only on request.



CODE	Size	Connection	Maximum torque (Nm)	A mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
6245R912	12x2	EUROCONO	30+35	22,5	27	65	10	400	8,43

Supplied with O-rings.



Manifolds, 3

CABINETS AND MIXING GROUPS



page 88

**Controller
brass manifold**



pages 132 - 134

**Istant and
Thermoday
simple manifolds**



pages 90 - 93

**Controller
Compact and Easy
brass manifolds**



page 136

**Intersept
steel complanar
manifold**



page 96

**Controller
single brass
manifolds**



page 138

**Plastibox
plastic box
for manifolds**



page 101

**Controller F
brass manifold**



page 140

**Motorvalv
motor driven
ball valve**



page 114

**Controller S
steel manifold**



page 143

**Floor Mixing
Controller S
pre-assembled
regulation group**



page 126

**Box System Plus
cabinet for
manifolds**



page 152

**UFH Mixing Controller
pre-assembled
regulation group**



page 130

**Electrothermic
head and
electronic system**



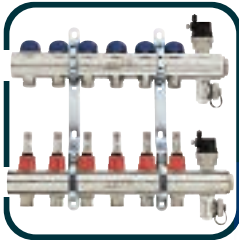
page 156

**Modular Mixing Group
distribution
modules**

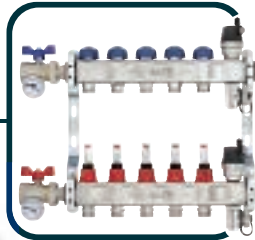
CONTROLLER - CONTROLLER S

Pre-assembled distribution manifolds

CONTROLLER



CONTROLLER S



BOX SYSTEM PLUS



FIV TOUCH EVO



A versatile and complete system

The CONTROLLER and CONTROLLER S pre-assembled distribution manifolds, with its multiplicity of components, represent the ideal answer to the needs of the modern heating plumber, offering a significant number of equipment solutions, from the simplest to the most complex.

The demanding installer has the opportunity to offer a complete system which adds value to the entire plant, however it is simple.

In addition it is possible in any time to modify or add to the distribution system without any difficulty. Even a simple apartment can thus be equipped with a cutting-edge system.

The CONTROLLER and CONTROLLER S pre-assembled distribution manifolds can be fitted with all the essential components and more: from the adjustable discharge cock to the air bleed valve; from the electrothermic head valve to the flow meter; all in a nickel-plated finish.

FINALLY EVEN A SMALL HOUSE CAN HAVE A LARGE SYSTEM.

SPEED, EASE AND SAFETY OF EXECUTION

FIV offers to the installer a system consisting of components which combine with each other in a simple way, favouring speed and safety of installation.

The CONTROLLER System has been devised to facilitate the work of the installer, who is enabled to carry out complex installations in a confined space with a significant saving of time, and improve the service offered to the client.

Quality and reliability

The high standard of quality of the materials used, the robustness of the components and their level of finish, ensure the CONTROLLER System's long-term reliability and functionality, prolonging equipment life and reducing maintenance.

The qualitative guarantee is the consequence of a highly automated production process, ensuring consistency of the constructional and hydrodynamic characteristics of an entire production batch. All components are subjected to severe checks, and further quality control tests are carried out on the hydraulic test-bench to verify performance in critical conditions of use (1).

(1) Pre-assembled manifolds are 100% tested before packing.

Customised comfort

With the CONTROLLER System, it is possible to divide the building into the desired zones (2), without limit as to number, simply by fitting electrothermic heads to control the valves. The heating engineer will be able to achieve intelligent temperature regulation in individual rooms, without obstacles imposed by the layout of the building and without requiring other modifications, because only the distribution box is involved.

The CONTROLLER AND CONTROLLER S manifolds thus becomes the true control centre for the entire heating system.

(2) Italian Presidential Decree n. 412/93 makes division into zones compulsory "where there are definable parts of the building under separate occupancy ...", with the aim of splitting up the delivery of heat on the basis of the pattern of occupancy of the premises (art. 5 comma 12).

Investment targeted on saving

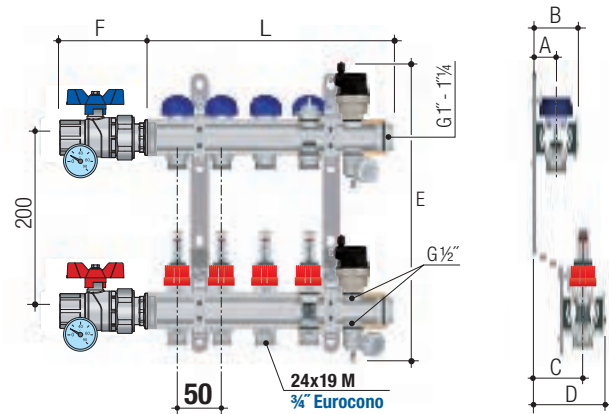
The greater initial investment for the purchase of materials is compensated by the significant reduction in installation and running costs.

Temperature control for each room is independent and personalised, without wastage, and this favours energy saving which continues little by little throughout the life of the system: heat in the right place at the right time.

WITH FIV THE SAVING TAKES PLACE WITHIN THE FOUR WALLS OF THE HOUSE.

CONTROLLER

PRE-ASSEMBLED DISTRIBUTION BRASS MANIFOLD WITH STEEL BRACKETS



The dimensions given are valid for all the models listed below; the value **L** will vary depending on the number of ways fitted to the manifold (see corresponding table).

Components		Material
1	Manifold	UNI EN 12168 CW614N
2	Seals	EPDM
3	Fixing brackets	UNI Fe 320 UNI 10440

All manifold distribution Controller and accessories are nickel plated.

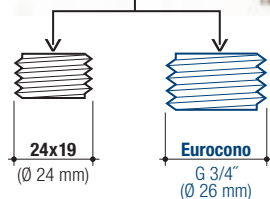
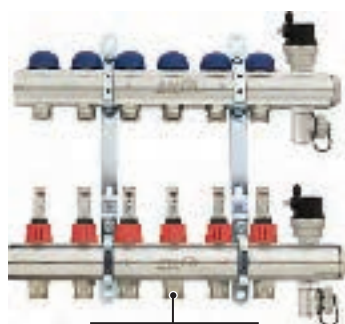
- EN
- GENERAL CHARACTERISTICS

Main connection 1", 1"1/4

Connection for seals 24x19 or 3/4" Eurocone, centre distance 50 mm.

- OPERATING CONDITIONS
- Maximum working temperature: +90 °C
- Maximum working pressure: 6 bar
- Instructions and diagrams in the Technical Attachments.

GP 2750
CONTROLLER

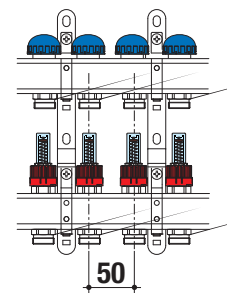


Takeoffs at **50 mm** centres
(flow and return).

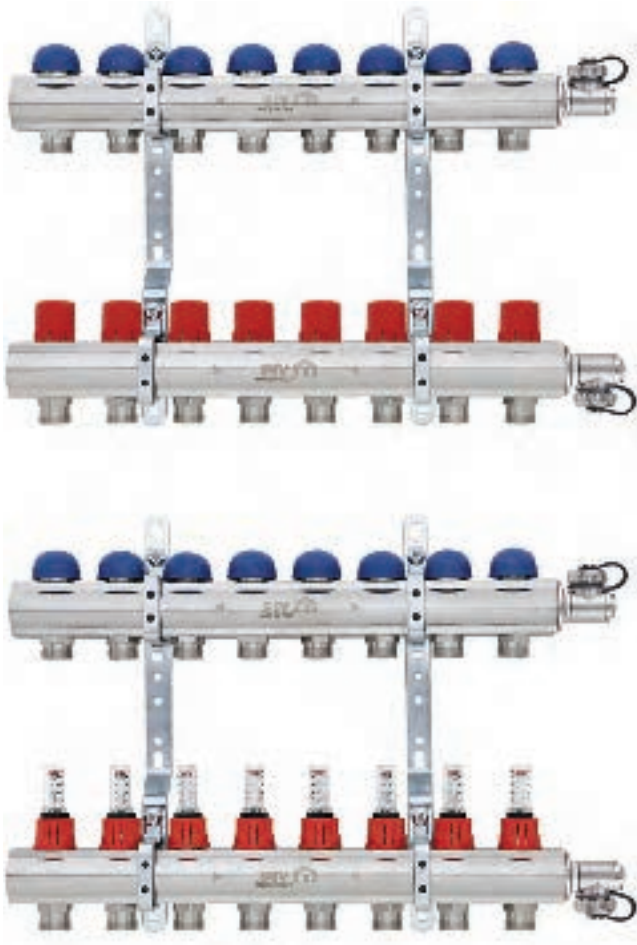
1" and 1 1/4" pre-assembled distribution manifold nickel-plated, 24x19 or 3/4" Eurocono takeoffs, consisting of: manual valves with valve-caps, set up to take electrothermic heads, Flow meter 0-4 l/min, brackets and additional unions with 2 bleed valves and 2 drain valves.

(*) Available only on request.

(**) Articles available while stocks last.

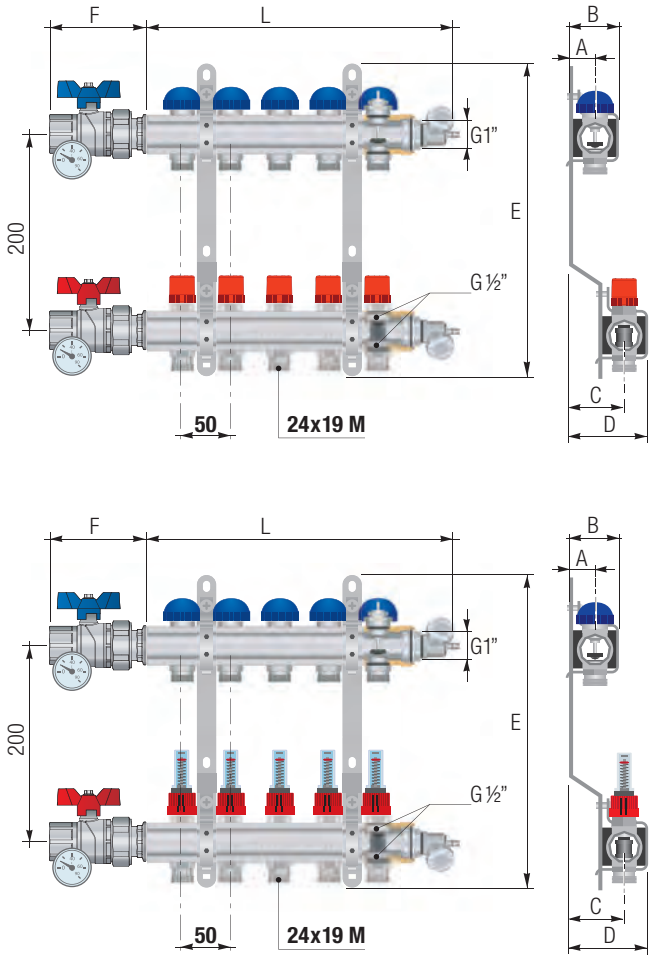


CODE	Model	L mm	A mm	B mm	C mm	D mm	E mm	F mm	Takeoff	Pack pcs/box	Price €
6246R002	2 WAYS - 1"	172	26,5	51	56,5	81	361,5	97	24x19	1	232,80
6246R003	3 WAYS - 1"	222	26,5	51	56,5	81	361,5	97	24x19	1	268,80
6246R004	4 WAYS - 1"	272	26,5	51	56,5	81	361,5	97	24x19	1	307,50
6246R005	5 WAYS - 1"	322	26,5	51	56,5	81	361,5	97	24x19	1	346,70
6246R006	6 WAYS - 1"	372	26,5	51	56,5	81	361,5	97	24x19	1	385,70
6246R007	7 WAYS - 1"	422	26,5	51	56,5	81	361,5	97	24x19	1	424,60
6246R008	8 WAYS - 1"	472	26,5	51	56,5	81	361,5	97	24x19	1	462,90
6246R009	9 WAYS - 1"	522	26,5	51	56,5	81	361,5	97	24x19	1	516,30
6246R010	10 WAYS - 1"	572	26,5	51	56,5	81	361,5	97	24x19	1	559,40
6246R011	11 WAYS - 1"	622	26,5	51	56,5	81	361,5	97	24x19	1	595,40
6246R012	12 WAYS - 1"	672	26,5	51	56,5	81	361,5	97	24x19	1	631,60
6247R003	3 WAYS - 1" (**)	222	26,5	51	56,5	81	361,5	97	Eurocono	1	275,00
6247R004	4 WAYS - 1" (**)	272	26,5	51	56,5	81	361,5	97	Eurocono	1	316,00
6247R007	7 WAYS - 1" (**)	422	26,5	51	56,5	81	361,5	97	Eurocono	1	439,50
6247R008	8 WAYS - 1" (**)	472	26,5	51	56,5	81	361,5	97	Eurocono	1	479,50
6247R009	9 WAYS - 1" (**)	522	26,5	51	56,5	81	361,5	97	Eurocono	1	535,20
9879R006	6 WAYS - 1 1/4" (*)	382	30,5	58,5	60,5	89,5	371,5	135	24x19	1	419,00
9879R007	7 WAYS - 1 1/4" (*)	432	30,5	58,5	60,5	89,5	371,5	135	24x19	1	463,50
9879R008	8 WAYS - 1 1/4" (*)	482	30,5	58,5	60,5	89,5	371,5	135	24x19	1	506,30
9879R009	9 WAYS - 1 1/4" (*)	532	30,5	58,5	60,5	89,5	371,5	135	24x19	1	562,10
9879R010	10 WAYS - 1 1/4" (*)	582	30,5	58,5	60,5	89,5	371,5	135	24x19	1	608,90
9879R011	11 WAYS - 1 1/4" (*)	634	30,5	58,5	60,5	89,5	371,5	135	24x19	1	650,60
9879R012	12 WAYS - 1 1/4" (*)	682	30,5	58,5	60,5	89,5	371,5	135	24x19	1	691,90
9880R009	9 WAYS - 1 1/4" (**)	532	30,5	58,5	60,5	89,5	371,5	135	Eurocono	1	575,10



CONTROLLER COMPACT

COMPACT DISTRIBUTION BRASS MANIFOLD



The dimensions given are valid for all the models listed below; the value **L** will vary depending on the number of ways fitted to the manifold (see corresponding table).

Components

- 1 Manifold
- 2 Seals
- 3 Fixing brackets

Material

UNI EN 12168 CW614N
EPDM
UNI Fe 320 UNI 10440

All manifold distribution Controller and accessories are nickel plated.

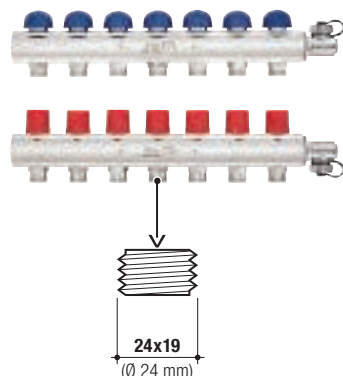
EN GENERAL CHARACTERISTICS

Main connection 1"
Connection for seals 24x19 or 3/4" Eurocone
Centre distance 50 mm

OPERATING CONDITIONS

Maximum working temperature: +110 °C (+90 °C with flow meters)
Maximum working pressure: 10 bar (6 bar with flow meters)
Instructions and diagrams in the Technical Attachments.

GP 2750
CONTROLLER COMPACT

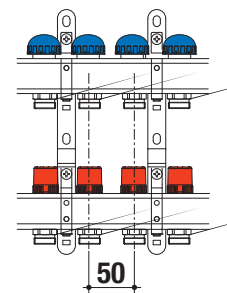


Takeoffs at **50 mm** centres (flow and return).
It is also possible to insert the flow meter cartridge into the lockshield.

1" distribution manifold nickel-plated - 24x19 takeoffs, consisting of: manual valves with valve-caps, set up to take electrothermic heads, with double-adjustable lockshields, brackets and with 2 drain valves.

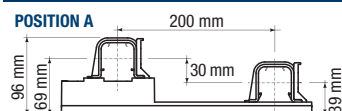
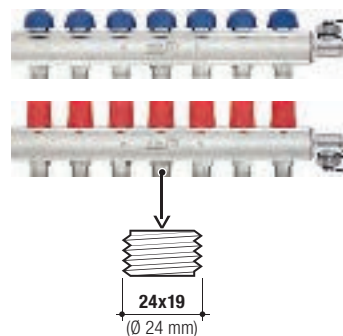
The article is supplied disassembled from the fixing brackets.

Available only on request.



CODE	Model	L mm	A mm	B mm	C mm	D mm	E mm	F mm	Takeoff	Pack pcs/box	Price €
6129R522	2 WAYS - 1"	165,5	26,5	51	56,5	81	323	97	24x19	1	195,20
6129R523	3 WAYS - 1"	215,5	26,5	51	56,5	81	323	97	24x19	1	225,70
6129R524	4 WAYS - 1"	265,5	26,5	51	56,5	81	323	97	24x19	1	258,00
6129R525	5 WAYS - 1"	315,5	26,5	51	56,5	81	323	97	24x19	1	290,90
6129R526	6 WAYS - 1"	365,5	26,5	51	56,5	81	323	97	24x19	1	323,60
6129R527	7 WAYS - 1"	415,5	26,5	51	56,5	81	323	97	24x19	1	356,40
6129R528	8 WAYS - 1"	465,5	26,5	51	56,5	81	323	97	24x19	1	388,50
6129R529	9 WAYS - 1"	515,5	26,5	51	56,5	81	323	97	24x19	1	433,20
6129R530	10 WAYS - 1"	565,5	26,5	51	56,5	81	323	97	24x19	1	469,40
6129R531	11 WAYS - 1"	615,5	26,5	51	56,5	81	323	97	24x19	1	499,70
6129R532	12 WAYS - 1"	665,5	26,5	51	56,5	81	323	97	24x19	1	529,80

GP 2750
CONTROLLER COMPACT



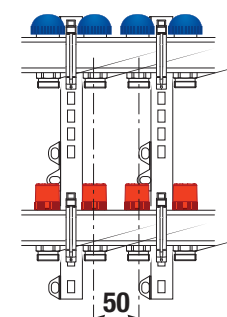
Dimensions refer to manifolds in position A.

Takeoffs at **50 mm** centres (flow and return).
It is also possible to insert the flow meter cartridge into the lockshield.

1" distribution manifold nickel-plated - 24x19 takeoffs, consisting of: manual valves with valve-caps, set up to take electrothermic heads, with double-adjustable lockshields, adjustable-brackets and with 2 drain valves.

The article is supplied disassembled from the fixing brackets.

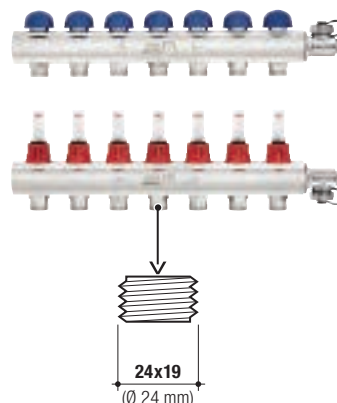
Articles available while stocks last.



CODE	Model	L mm	A mm	B mm	C mm	D mm	E mm	F mm	Takeoff	Pack pcs/box	Price €
6128R502	2 WAYS - 1"	165,5	39	66	69	96	320	97	24x19	1	195,20
6128R503	3 WAYS - 1"	215,5	39	66	69	96	320	97	24x19	1	225,70
6128R504	4 WAYS - 1"	265,5	39	66	69	96	320	97	24x19	1	258,00
6128R505	5 WAYS - 1"	315,5	39	66	69	96	320	97	24x19	1	290,90
6128R507	7 WAYS - 1"	415,5	39	66	69	96	320	97	24x19	1	356,40
6128R508	8 WAYS - 1"	465,5	39	66	69	96	320	97	24x19	1	388,50
6128R509	9 WAYS - 1"	515,5	39	66	69	96	320	97	24x19	1	433,20
6128R510	10 WAYS - 1"	565,5	39	66	69	96	320	97	24x19	1	469,40
6128R511	11 WAYS - 1"	615,5	39	66	69	96	320	97	24x19	1	499,70
6128R512	12 WAYS - 1"	665,5	39	66	69	96	320	97	24x19	1	529,80

For installation in FIV metal boxes, replace the plastic brackets supplied as standard with the steel brackets code 9688Z006.

GP 2750
CONTROLLER COMPACT

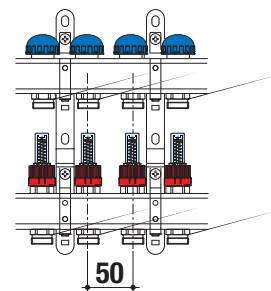


Takeoffs at **50 mm** centres
(flow and return).

1" distribution manifold nickel-plated - 24x19 takeoffs, consisting of: manual valves with valve-caps, set up to take electrothermic heads, Flow meter 0÷4 l/min, brackets and with 2 drain valves.

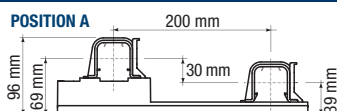
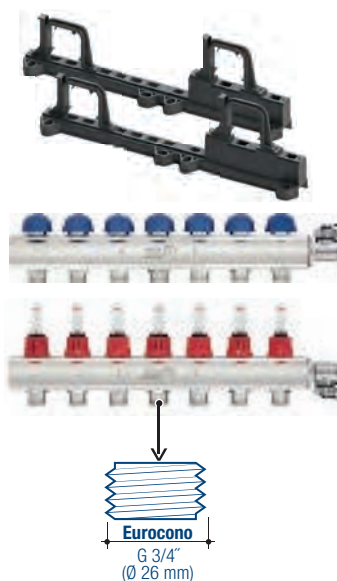
The article is supplied disassembled from the fixing brackets.

Available only on request.



CODE	Model	L mm	A mm	B mm	C mm	D mm	E mm	F mm	Takeoff	Pack pcs/box	Price €
6187R022	2 WAYS - 1"	165,5	26,5	51	56,5	81	323	97	24x19	1	154,50
6187R023	3 WAYS - 1"	215,5	26,5	51	56,5	81	323	97	24x19	1	183,40
6187R024	4 WAYS - 1"	265,5	26,5	51	56,5	81	323	97	24x19	1	218,70
6187R025	5 WAYS - 1"	315,5	26,5	51	56,5	81	323	97	24x19	1	256,50
6187R026	6 WAYS - 1"	365,5	26,5	51	56,5	81	323	97	24x19	1	294,80
6187R027	7 WAYS - 1"	415,5	26,5	51	56,5	81	323	97	24x19	1	332,00
6187R028	8 WAYS - 1"	465,5	26,5	51	56,5	81	323	97	24x19	1	372,00
6187R029	9 WAYS - 1"	515,5	26,5	51	56,5	81	323	97	24x19	1	409,80
6187R030	10 WAYS - 1"	565,5	26,5	51	56,5	81	323	97	24x19	1	462,50
6187R031	11 WAYS - 1"	615,5	26,5	51	56,5	81	323	97	24x19	1	505,80
6187R032	12 WAYS - 1"	665,5	26,5	51	56,5	81	323	97	24x19	1	541,50

GP 2750
CONTROLLER COMPACT



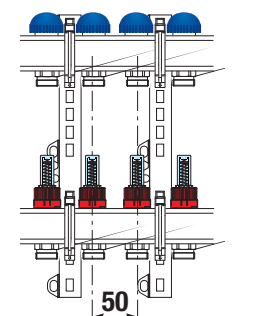
Dimensions refer to manifolds in position A.

Takeoffs at **50 mm** centres
(flow and return).

1" distribution manifold nickel-plated - 3/4" Eurocono takeoffs, consisting of: manual valves with valve-caps, set up to take electrothermic heads, Flow meter 0÷4 l/min, adjustable-brackets and with 2 drain valves.

The article is supplied disassembled from the fixing brackets.

Articles available while stocks last.

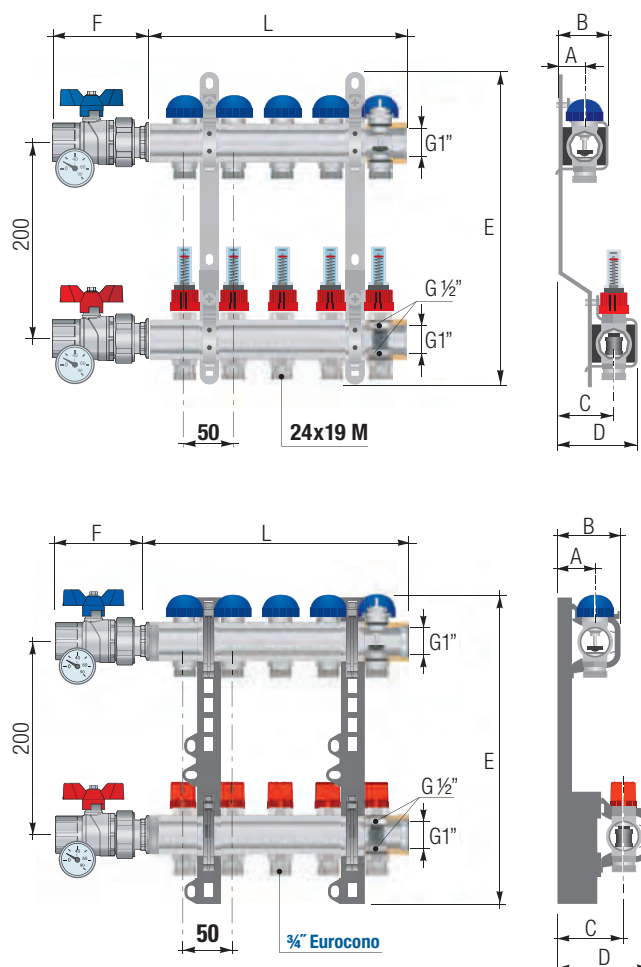


CODE	Model	L mm	A mm	B mm	C mm	D mm	E mm	F mm	Takeoff	Pack pcs/box	Price €
6112R006	6 WAYS - 1"	365,5	39	66	69	96	320	97	Eurocono	1	352,60
6112R007	7 WAYS - 1"	415,5	39	66	69	96	320	97	Eurocono	1	393,00
6112R009	9 WAYS - 1"	515,5	39	66	69	96	320	97	Eurocono	1	475,10
6112R012	12 WAYS - 1"	665,5	39	66	69	96	320	97	Eurocono	1	614,00

For installation in FIV metal boxes, replace the plastic brackets supplied as standard with the steel brackets code 9688Z006.

CONTROLLER EASY

COMPACT DISTRIBUTION BRASS MANIFOLD



The dimensions given are valid for all the models listed below; the value **L** will vary depending on the number of ways fitted to the manifold (see corresponding table).

Components

Material

1	Manifold	UNI EN 12168 CW614N
2	Seals	EPDM
3	Fixing brackets	UNI Fe 320 UNI 10440

All manifold distribution Controller and accessories are nickel plated.

EN GENERAL CHARACTERISTICS

Main connection 1"

Connection for seals 24x19 or 3/4" Eurocono

Centre distance 50 mm

OPERATING CONDITIONS

Maximum working temperature: +110 °C (+90 °C with flow meters)

Maximum working pressure: 10 bar (6 bar with flow meters)

Instructions and diagrams in the Technical Attachments.

GP 2750
CONTROLLER EASY

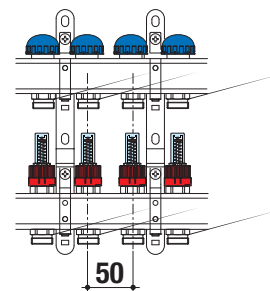


Takeoffs at **50 mm** centres
(flow and return).

1" distribution manifold nickel-plated - 24x19 takeoffs, consisting of: manual valves with cap configured for electrothermic heads, 0÷4 l/min flow meters, brackets.

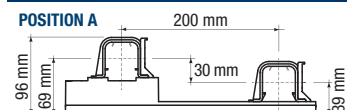
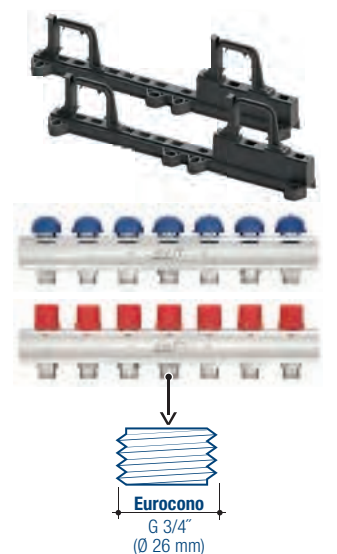
Item packed with manifolds detached from brackets.

Available only on request.



CODE	Model	L mm	A mm	B mm	C mm	D mm	E mm	F mm	Takeoff	Pack pcs/box	Price €
6129R022	2 WAYS - 1"	114	26,5	51	56,5	81	323	97	24x19	1	148,00
6129R023	3 WAYS - 1"	164	26,5	51	56,5	81	323	97	24x19	1	183,40
6129R024	4 WAYS - 1"	214	26,5	51	56,5	81	323	97	24x19	1	218,70
6129R025	5 WAYS - 1"	264	26,5	51	56,5	81	323	97	24x19	1	256,50
6129R026	6 WAYS - 1"	314	26,5	51	56,5	81	323	97	24x19	1	294,80
6129R027	7 WAYS - 1"	364	26,5	51	56,5	81	323	97	24x19	1	332,00
6129R028	8 WAYS - 1"	414	26,5	51	56,5	81	323	97	24x19	1	372,00
6129R029	9 WAYS - 1"	464	26,5	51	56,5	81	323	97	24x19	1	409,80
6129R030	10 WAYS - 1"	514	26,5	51	56,5	81	323	97	24x19	1	462,50
6129R031	11 WAYS - 1"	564	26,5	51	56,5	81	323	97	24x19	1	505,80
6129R032	12 WAYS - 1"	614	26,5	51	56,5	81	323	97	24x19	1	541,50

GP 2750
CONTROLLER EASY



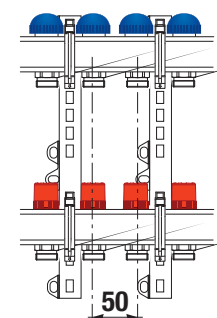
Dimensions refer to manifolds in position A.

Takeoffs at **50 mm** centres (flow and return).
It is also possible to insert the flow meter cartridge into the lockshield.

1" distribution manifold nickel-plated - 3/4" Eurocono takeoffs, consisting of: manual valves with cap configured for electrothermic heads, double-adjustable lockshields, adjustable brackets.

Item packed with manifolds detached from brackets.

Articles available while stocks last.



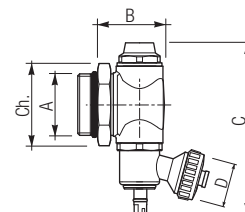
CODE	Model	L mm	A mm	B mm	C mm	D mm	E mm	F mm	Takeoff	Pack pcs/box	Price €
6187R502	2 WAYS - 1"	114	28	55	58	85	310	120	Eurocono	1	133,60
6187R503	3 WAYS - 1"	164	28	55	58	85	310	120	Eurocono	1	170,20
6187R504	4 WAYS - 1"	214	28	55	58	85	310	120	Eurocono	1	206,60
6187R505	5 WAYS - 1"	264	28	55	58	85	310	120	Eurocono	1	243,40

CONTROLLER EASY ACCESSORIES

GP 2799
ACCESSORIES



Couple of terminal with manual vent valve and adjustable bibcock.
Supplied with 1/2" manual vent valve and 1/2" water bibcock for water charge/drain
with adjustable 3/4" connection.
Usable with Controller brass manifolds (with appropriate black O-ring in the package).

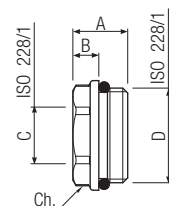


CODE	Size	A	B mm	C mm	D	Ch. mm	PN	Pack pcs/box	Price €/couple
01306158	1"	1"	36	92	3/4"	38	10	1	56,04

GP 2799
ACCESSORIES



Male/female reducer, nickel-plated, with O-Ring seal.

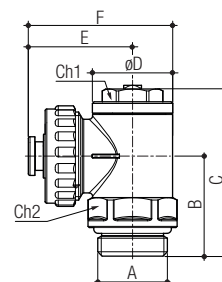


CODE	Size		A mm	B mm	ØC	ØD	Ch. mm	PN	Pack pcs/box	Price €/pc
9685R027	1" M x 1/2" F	with O-Ring EP 851	18,5	10	1/2"	1"	27	10	20	6,93

GP 2799
ACCESSORIES



Adjustable discharge cock of 1/2" with pipe-fitting M 3/4", nickel-plated.



CODE	Size	A	B mm	C mm	ØD mm	E mm	F mm	Ch1 mm	Ch2 mm	Pack pcs/box	Price €/pc
6322R004	1/2"	1/2"	29,8	49,7	23,9	31	43	16	24	36	12,37

GP 2799
ACCESSORIES

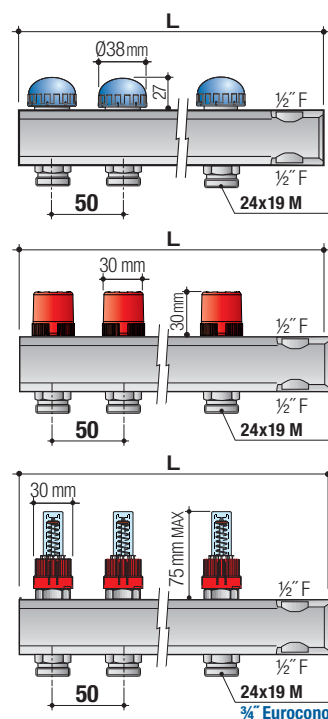


Blind plug M, nickel-plated, with O-Ring EP 851.

CODE	Size	Pack pcs/box	Price €/pc
9683R006	1" M	20	4,35

CONTROLLER

SINGLE BAR DISTRIBUTION BRASS MANIFOLD



The dimensions given are valid for all the models listed below; the value **L** will vary depending on the number of ways fitted to the manifold (see corresponding table).



Components

- 1 Manifold
- 2 Seals

All manifold distribution Controller and accessories are nickel plated.

Material

UNI EN 12168 CW614N
EPDM

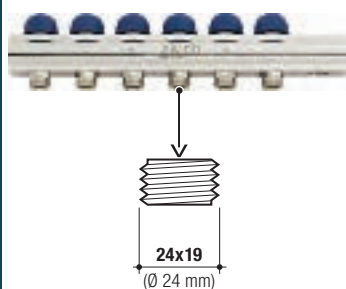
GENERAL CHARACTERISTICS

Main connection 1"
Connection for seals 24x19 or 3/4" Eurocone
Centre distance 50 mm

OPERATING CONDITIONS

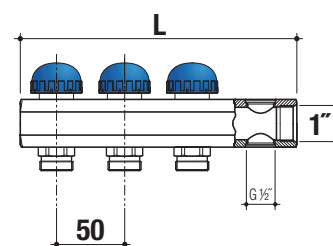
Maximum working temperature: +110 °C (+90 °C with flow meters)
Maximum working pressure: 10 bar (6 bar with flow meters)
Instructions and diagrams in the Technical Attachments.

GP 2750
CONTROLLER



Takeoffs at 50 mm centres with valves (return).

1" return manifold nickel-plated, 24x19 takeoffs, complete with manual valves with valve-caps, set up to take electrothermic heads, and with additional connections for bleed valve and drain cock.



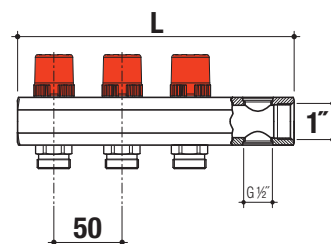
CODE	Model	L mm	Takeoff	Pack pcs/box	Price €/pc
9779R002	2 WAYS - 1"	164	24x19	2	64,67
9779R003	3 WAYS - 1"	214	24x19	2	81,64
9779R004	4 WAYS - 1"	264	24x19	2	100,30
9779R005	5 WAYS - 1"	314	24x19	2	117,70
9779R006	6 WAYS - 1"	364	24x19	2	134,50
9779R007	7 WAYS - 1"	414	24x19	2	153,50
9779R008	8 WAYS - 1"	464	24x19	2	170,70
9779R009	9 WAYS - 1"	514	24x19	2	195,10
9779R010	10 WAYS - 1"	564	24x19	2	214,30
9779R011	11 WAYS - 1"	614	24x19	2	231,40
9779R012	12 WAYS - 1"	664	24x19	2	248,40

GP 2750
CONTROLLER



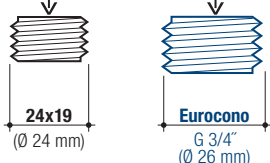
Takeoffs at **50 mm** centres (flow).

1" flow manifold nickel-plated, 24x19 takeoffs, complete with double-adjustable lockshields and with additional connections for bleed valve and drain cock.



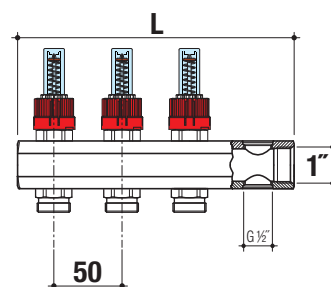
CODE	Model	L mm	Takeoff	Pack pcs/box	Price €/pc
9867R502	2 WAYS - 1"	164	24x19	2	68,24
9867R503	3 WAYS - 1"	214	24x19	2	85,27
9867R504	4 WAYS - 1"	264	24x19	2	104,20
9867R505	5 WAYS - 1"	314	24x19	2	121,80
9867R506	6 WAYS - 1"	364	24x19	2	138,80
9867R507	7 WAYS - 1"	414	24x19	2	157,80
9867R508	8 WAYS - 1"	464	24x19	2	174,90
9867R509	9 WAYS - 1"	514	24x19	2	199,70
9867R510	10 WAYS - 1"	564	24x19	2	218,80
9867R511	11 WAYS - 1"	614	24x19	2	236,20
9867R512	12 WAYS - 1"	664	24x19	2	253,50

GP 2750
CONTROLLER



Takeoffs at **50 mm** with lockshields incorporating flow meters (flow).

1" Nickel-plated delivery manifold - 24x19 or 3/4" Eurocono takeoffs, including lockshields with incorporated flow meters 0-4 l/min. and extra attachments for the bleed valve and drain cock.



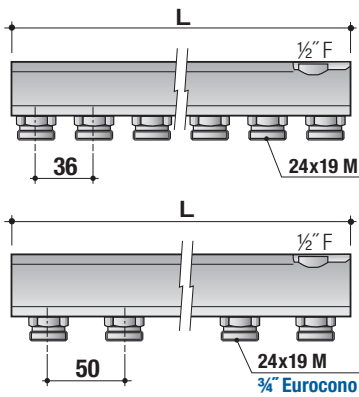
(*) Available only on request.

(**) Articles available while stocks last.

CODE	Model	L mm	Takeoff	Pack pcs/box	Price €/pc
9867R002	2 WAYS - 1"	164	24x19	2	71,17
9867R003	3 WAYS - 1"	214	24x19	2	91,23
9867R004	4 WAYS - 1" (*)	264	24x19	2	113,00
9867R005	5 WAYS - 1" (*)	314	24x19	2	133,50
9867R006	6 WAYS - 1" (*)	364	24x19	2	153,20
9867R007	7 WAYS - 1" (*)	414	24x19	2	175,40
9867R008	8 WAYS - 1" (*)	464	24x19	2	195,40
9867R009	9 WAYS - 1" (*)	514	24x19	2	223,00
9867R010	10 WAYS - 1" (*)	564	24x19	2	245,30
9867R011	11 WAYS - 1" (*)	614	24x19	2	265,40
9867R012	12 WAYS - 1" (*)	664	24x19	2	285,40
9868R005	5 WAYS - 1" (**)	314	Eurocono	2	138,10
9868R006	6 WAYS - 1" (**)	364	Eurocono	2	158,90

CONTROLLER

SINGLE BAR DISTRIBUTION BRASS MANIFOLD



Components

- 1 Manifold
- 2 Seals

All manifold distribution Controller and accessories are nickel plated.

Material

UNI EN 12168 CW614N
EPDM

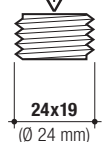
GENERAL FEATURES

- Main connection 3/4", 1" and 1 1/4"
- Connection for seals 24x19, 3/4" Eurocono
- Takeoffs at 36 mm or 50 mm centres
- Upper union connection G 1/2" F

OPERATING CONDITIONS

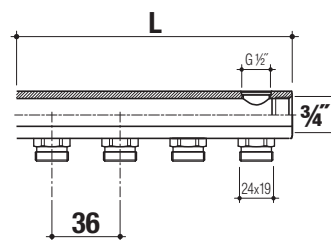
- Maximum working temperature: +110 °C
- Maximum working pressure: 10 bar
- Instructions and diagrams in the Technical Attachments.

GP 2750
CONTROLLER



Takeoffs at **36 mm** centres.

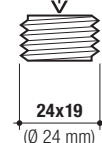
3/4" distribution manifold nickel-plated, complete with 24x19 takeoff connections, with hole on upper side for bleed valve. Takeoffs at 36 mm centres.



Available only on request.

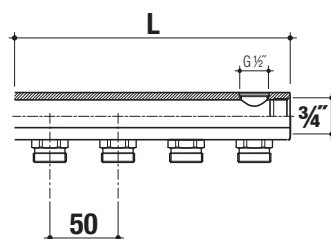
CODE	Model	L mm	Takeoff	Pack pcs/box	Price €/pc
9758R002	2 WAYS - 3/4"	85	24x19	4	28,04
9758R003	3 WAYS - 3/4"	121	24x19	4	37,41
9758R004	4 WAYS - 3/4"	157	24x19	4	46,84
9758R005	5 WAYS - 3/4"	193	24x19	4	56,63
9758R006	6 WAYS - 3/4"	229	24x19	4	65,96
9758R007	7 WAYS - 3/4"	265	24x19	4	75,27
9758R008	8 WAYS - 3/4"	301	24x19	4	85,29
9758R009	9 WAYS - 3/4"	337	24x19	4	94,38
9758R010	10 WAYS - 3/4"	373	24x19	4	101,00
9758R011	11 WAYS - 3/4"	409	24x19	4	109,80
9758R012	12 WAYS - 3/4"	445	24x19	4	118,20

GP 2750
CONTROLLER



Takeoffs at **50 mm** centres.

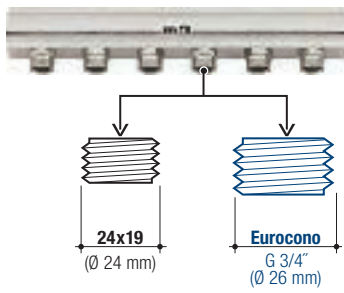
3/4" distribution manifold nickel-plated, complete with 24x19 takeoff connections, with hole on upper side for bleed valve. Takeoffs at 50 mm centres.



Available only on request.

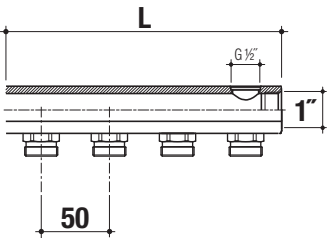
CODE	Model	L mm	Takeoff	Pack pcs/box	Price €/pc
9759R002	2 WAYS - 3/4"	103	24x19	4	32,92
9759R003	3 WAYS - 3/4"	153	24x19	4	43,78
9759R004	4 WAYS - 3/4"	203	24x19	4	57,47
9759R005	5 WAYS - 3/4"	253	24x19	4	67,85
9759R006	6 WAYS - 3/4"	303	24x19	4	83,02
9759R007	7 WAYS - 3/4"	353	24x19	4	95,34
9759R008	8 WAYS - 3/4"	403	24x19	4	107,90
9759R009	9 WAYS - 3/4"	453	24x19	4	116,70
9759R010	10 WAYS - 3/4"	503	24x19	4	133,90
9759R011	11 WAYS - 3/4"	553	24x19	4	146,80
9759R012	12 WAYS - 3/4"	603	24x19	4	160,10

GP 2750
CONTROLLER



Take offs at 50 mm centres.

1" distribution manifold nickel-plated, complete with 24x19 or 3/4" Eurocono takeoff connections, with hole on upper side for bleed valve. Takeoffs at 50 mm centres.

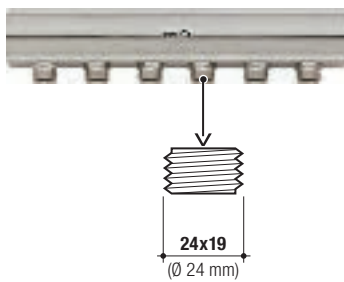


Available only on request.

(*) Articles available while stocks last.

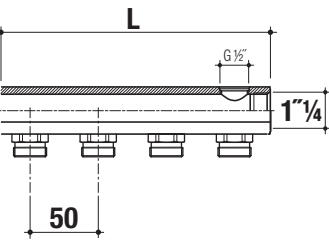
CODE	Model	L mm	Takeoff	Pack pcs/box	Price €/pc
9761R002	2 WAYS - 1"	114	24x19	4	33,17
9761R003	3 WAYS - 1"	164	24x19	4	48,94
9761R004	4 WAYS - 1"	214	24x19	4	63,42
9761R005	5 WAYS - 1"	264	24x19	4	75,31
9761R006	6 WAYS - 1"	314	24x19	4	87,17
9761R007	7 WAYS - 1"	364	24x19	4	101,80
9761R008	8 WAYS - 1"	414	24x19	4	114,90
9761R009	9 WAYS - 1"	464	24x19	4	130,40
9761R010	10 WAYS - 1"	514	24x19	4	146,90
9761R011	11 WAYS - 1"	564	24x19	4	163,20
9761R012	12 WAYS - 1"	614	24x19	4	174,20
9762R008	8 WAYS - 1" (*)	414	Eurocono	4	120,60
9762R012	12 WAYS - 1" (*)	614	Eurocono	4	186,80

GP 2750
CONTROLLER



Takeoffs at 50 mm centres.

1 1/4" distribution manifold nickel-plated, complete with 24x19 takeoff connections, with hole on upper side for bleed valve. Takeoffs at 50 mm centres.



Available only on request.

CODE	Model	L mm	Takeoff	Pack pcs/box	Price €/pc
9763R004	4 WAYS - 1 1/4"	220	24x19	2	78,80
9763R005	5 WAYS - 1 1/4"	270	24x19	2	96,68
9763R006	6 WAYS - 1 1/4"	320	24x19	2	103,20
9763R007	7 WAYS - 1 1/4"	370	24x19	2	117,60
9763R008	8 WAYS - 1 1/4"	420	24x19	2	146,60
9763R009	9 WAYS - 1 1/4"	470	24x19	2	156,60
9763R010	10 WAYS - 1 1/4"	520	24x19	2	168,60
9763R011	11 WAYS - 1 1/4"	570	24x19	2	192,60
9763R012	12 WAYS - 1 1/4"	620	24x19	2	209,40

CONTROLLER F

Pre-assembled distribution manifold

CONTROLLER F



TEF 08



BOX SYSTEM PLUS



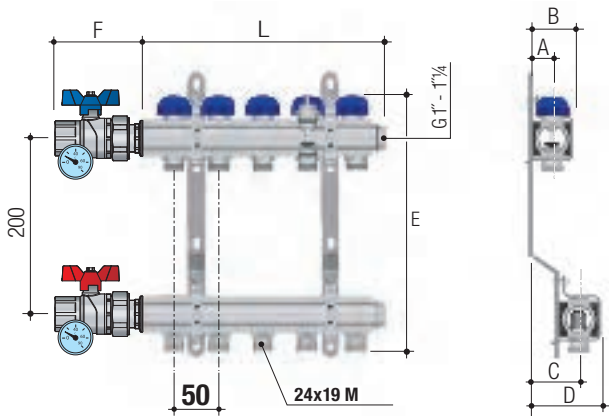
FIV TOUCH EVO





CONTROLLER F

PRE-ASSEMBLED DISTRIBUTION BRASS MANIFOLD
WITH STEEL BRACKETS



The dimensions given are valid for all the models listed below; the value **L** will vary depending on the number of ways fitted to the manifold (see corresponding table).

Components		Material
1	Manifold	UNI EN 12168 CW614N
2	Seals	EPDM
3	Fixing brackets	UNI Fe 320 UNI 10440

All manifold distribution Controller and accessories are nickel plated.

EN GENERAL CHARACTERISTICS

Main connection 1", 1"1/4

Connection for seals 24x19, centre distance 50 mm

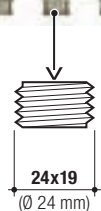
OPERATING CONDITIONS

Maximum working temperature: +110 °C

Maximum working pressure: 10 bar

Instructions and diagrams in the Technical Attachments.

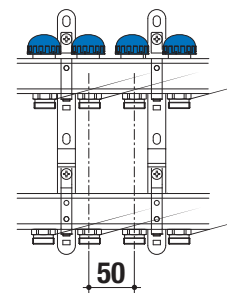
GP 2750
CONTROLLER F



Takeoffs at **50 mm** centres (flow and return).

1" and 1 1/4" pre-assembled distribution manifold nickel-plated, 24x19 takeoffs (flow and return), indicated for hydronic distribution of radiators and fan coils.
Supplied with: manual adjustment valves set up to take thermo-electric heads, nr. 2 blind plugs with o-ring and nr. 2 double metal supports.

(*) Available only on request.



CODE	Model	L mm	A mm	B mm	C mm	D mm	E mm	F mm	Takeoff	Pack pcs/box	Price €
6246R102	2 WAYS - 1"	124	26,5	51	56,5	81	323	97	24x19	1	139,50
6246R103	3 WAYS - 1"	174	26,5	51	56,5	81	323	97	24x19	1	169,20
6246R104	4 WAYS - 1"	224	26,5	51	56,5	81	323	97	24x19	1	199,70
6246R105	5 WAYS - 1"	274	26,5	51	56,5	81	323	97	24x19	1	229,50
6246R106	6 WAYS - 1"	324	26,5	51	56,5	81	323	97	24x19	1	260,50
6246R107	7 WAYS - 1"	374	26,5	51	56,5	81	323	97	24x19	1	292,10
6246R108	8 WAYS - 1"	424	26,5	51	56,5	81	323	97	24x19	1	323,90
6246R109	9 WAYS - 1"	474	26,5	51	56,5	81	323	97	24x19	1	352,70
6246R110	10 WAYS - 1"	524	26,5	51	56,5	81	323	97	24x19	1	398,00
6246R111	11 WAYS - 1"	574	26,5	51	56,5	81	323	97	24x19	1	432,10
6246R112	12 WAYS - 1"	624	26,5	51	56,5	81	323	97	24x19	1	464,80
9879R104	4 WAYS - 1 1/4"	232	30,5	58,5	60,5	89,5	364	135	24x19	1	230,50
9879R105	5 WAYS - 1 1/4"	282	30,5	58,5	60,5	89,5	364	135	24x19	1	263,90
9879R106	6 WAYS - 1 1/4"	332	30,5	58,5	60,5	89,5	364	135	24x19	1	299,20
9879R107	7 WAYS - 1 1/4"	382	30,5	58,5	60,5	89,5	364	135	24x19	1	334,10
9879R108	8 WAYS - 1 1/4"	432	30,5	58,5	60,5	89,5	364	135	24x19	1	369,40
9879R109	9 WAYS - 1 1/4" (*)	482	30,5	58,5	60,5	89,5	364	135	24x19	1	402,80
9879R110	10 WAYS - 1 1/4" (*)	532	30,5	58,5	60,5	89,5	364	135	24x19	1	447,30
9879R111	11 WAYS - 1 1/4" (*)	582	30,5	58,5	60,5	89,5	364	135	24x19	1	487,10
9879R112	12 WAYS - 1 1/4" (*)	632	30,5	58,5	60,5	89,5	364	135	24x19	1	521,30



EN TECHNICAL DATA

Valve body thread with Female fitting: UNI EN 10226-1 (ISO 7-1: 1994)
End sleeve thread with Male fitting: UNI EN ISO 228-1
Tang and nut thread: UNI EN ISO 228-1
TOTAL BORE

O-RING SEAL:

Stem upper seal O-Ring: VITON 70 Sh A (ASTM D2240)
Stem lower seal O-Ring: EPDM Peroxidic 70 Sh A (ASTM D2240)
O-ring tang seal: EPDM Peroxidic 70 Sh A (ASTM D2240)

Flow direction: Both ways.

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

Maximum pressure (T = 120 °C): 10 Bar

Nominal pressure (T = 20 °C): See tables

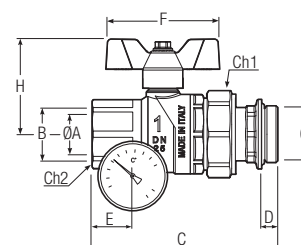
** In absence of steam; for temperatures below 0 °C use mixes of water and glycol.

Valves must be used in fully open or fully closed position.

GP 2258
ACCESSORIES



Kit consisting of 2 nickel-plated Evolution straight valves with Blue/Red butterfly handles, with pipe union with o-ring seal and 2 thermometers.
Valve with total bore and ISO 7/1 thread.

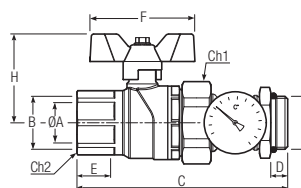


CODE	Size	DN	ØA mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	Ch.1 mm	Ch.2 mm	gr	Pack pcs/box	Price €
6061R006	1"	25	25	1"	106,4	9,2	22	65	1"	54,5	47	38	1390	1	105,00

GP 2258
ACCESSORIES



Kit consisting of 2 nickel-plated Evolution straight valves with Blue/Red butterfly handles, with pipe union thermometer holder with o-ring seal and 2 thermometers.
Valve with total bore and ISO 7/1 thread.

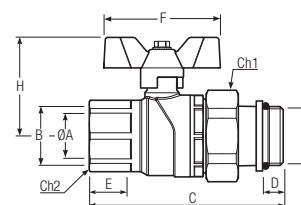


CODE	Size	DN	ØA mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	Ch.1 mm	Ch.2 mm	gr	Pack pcs/box	Price €
9722R007	1"1/4	32	32	1"1/4	144	10,5	24	65	1"1/4	62	52	47	2135	1	161,60

GP 2258
ACCESSORIES



Kit consisting of 2 nickel-plated Evolution straight valves with Blue/Red butterfly handles, with pipe union with o-ring seal.
Valve with total bore and ISO 7/1 thread.

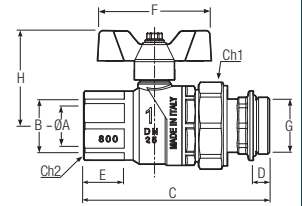


CODE	Size	DN	ØA mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	Ch.1 mm	Ch.2 mm	gr	Pack pcs/box	Price €
9723R005	3/4"	20	20	3/4"	95	10	18,3	60	3/4"	49	37	31	818	1	61,35
9723R007	1"1/4	32	32	1"1/4	126,5	11,5	24	65	1"1/4	62	52	47	1850	1	135,30

GP 2258
ACCESSORIES



Kit consisting of 2 nickel-plated Evolution straight valves with Blue/Red butterfly handles, with pipe union with o-ring seal. Valve with total bore and ISO 7/1 thread.

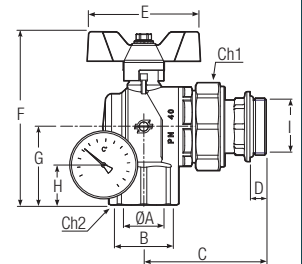


CODE	Size	DN	ØA mm	B	C mm	D mm	E mm	F mm	G mm	H mm	Ch.1 mm	Ch.2 mm	gr	Pack pcs/box	Price €
6062R006	1"	25	25	1"	106,4	9,2	22	65	1"	54,5	47	38	1286	1	88,41

GP 2258
ACCESSORIES



Kit consisting of 2 nickel-plated Evolution angle valves with Blue/Red butterfly handles, with pipe union with O-Ring seal and 2 thermometers. Valve with total bore and ISO 7/1 thread.

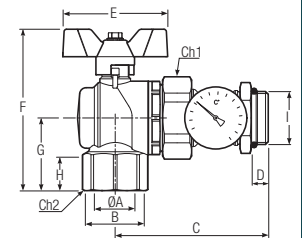


CODE	Size	DN	ØA mm	B	C mm	D mm	E mm	F mm	G mm	H mm	I	Ch.1/2 mm	gr	Pack pcs/box	Price €
6063R006	1"	25	25	1"	70,3	9,2	65	99,3	45	22	1"	47/38	1534	1	115,30

GP 2258
ACCESSORIES



Kit consisting of 2 nickel-plated Evolution angle valves with Blue/Red butterfly handles, with pipe union thermometer holder with O-Ring seal and 2 thermometers. Valve with total bore and ISO 7/1 thread.

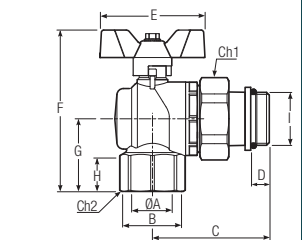


CODE	Size	DN	ØA mm	B	C mm	D mm	E mm	F mm	G mm	H mm	I	Ch.1/2 mm	gr	Pack pcs/box	Price €
9744R007	1"1/4	32	32	1"1/4	95	10,5	65	113	53	24	1"1/4	52/47	2400	1	195,90

GP 2258
ACCESSORIES



Kit consisting of 2 nickel-plated Evolution angle valves with Blue/Red butterfly handles, with pipe union with o-ring seal. Valve with total bore and ISO 7/1 thread.

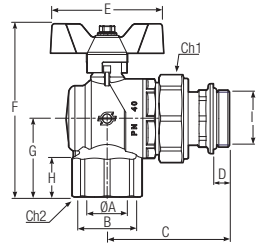


CODE	Size	DN	ØA mm	B	C mm	D mm	E mm	F mm	G mm	H mm	I	Ch.1/2 mm	gr	Pack pcs/box	Price €
9745R005	3/4"	20	20	3/4"	63,5	10	60	80,6	38	18,3	3/4"	37/31	865	1	67,27
9745R007	1"1/4	32	32	1"1/4	83,5	11,5	65	113	53	24	1"1/4	52/47	2125	1	161,20

GP 2258
ACCESSORIES



Kit consisting of 2 nickel-plated Evolution angle valves with Blue/Red butterfly handles, with pipe union with o-ring seal. Valve with total bore and ISO 7/1 thread.



CODE	Size	DN	ØA mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Ch.1/2 mm	gr	Pack pcs/box	Price €
6064R006	1"	25	25	1"	70,3	9,2	65	99,3	45	22	1"	47/38	1424	1	96,58

GP 2778
ACCESSORIES



Kit consisting of 2 nickel-plated Evolution angle valves with Blue/Red butterfly handles and pipe unions with o-ring seal and by-pass valve, which can be calibrated from 0.2 to 0.5 bar.

Article available while stocks last.

CODE	Size	Pack pcs/box	Price €
9732R006	1"	1	184,80

Note: Invert the flow and return arrangement for pre-assembled ones.



CONTROLLER

ACCESSORIES FOR CONTROLLER BRASS MANIFOLD

GP 2258
ACCESSORIES



Thermometer tang kit complete with nut, thermometer and O-ring.

CODE	Size	Pack pcs/box	Price €/pc
9729R006	1"	10	23,03
9729R007	1"1/4	8	29,32

GP 2000
ACCESSORIES



Tang kit complete with seal, complete with nut and O-ring.

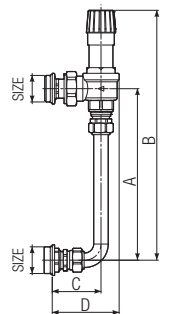
CODE	Size	Pack pcs/box	Price €/pc
9731R006	1"	12	11,89
9731R007	1"1/4	8	17,51

GP 2778
ACCESSORIES



TERMINAL kit, nickel plated, for Controller and Controller S manifolds, with By-pass valve and O-Ring seals.

Maximum operating temperature: 110 °C.
Maximum operating pressure: 6 bar.
Thread: UNI EN ISO 228-1



CODE	Size	A mm	B mm	C mm	D mm	Pack pcs/box	Price €
01307010	1" (*)	210 max.	309	60	83	1	247,20
01307012	1" 1/4	210 max.	309	72	95	1	250,20

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

GP 2000
ACCESSORIES



Overpressure valve.

Maximum pressure: 6 bars
Maximum temperature: 110 °C
Calibration range: 0.03÷0.50 bar

CODE	Size	Pack pcs/box	Price €
90000064	3/4"	1	130,70

GP 2799
ACCESSORIES



Additional way kit for Controller manifolds.

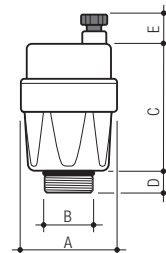
CODE	Size	Pack pcs/box	Price €
01300018	For 1" Controller manifolds	1	48,89
01300020	For 1"1/4 Controller manifolds	1	63,91

Use the 2 Tee fittings provided in the kit to install the 2 air vent valves and the 2 taps supplied as standard with the manifold.
Install the flow meter and the valve provided in the kit on the manifold way left free.

GP 2070
ACCESSORIES



Wind, air vent valve nickel-plated.

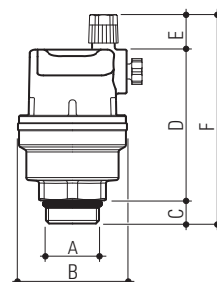


CODE	Size	ØA mm	B	C mm	D mm	E mm	PN	Pack pcs/box	Master pcs/box	Price €/pc
00400676	1/2"	40	1/2"	50	10	12	10	12	96	12,30

GP 2070
ACCESSORIES



Wind Plus. air bleed valve with plastic cover.

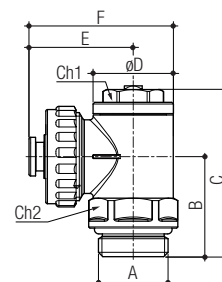


CODE	Size	A	B mm	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Master pcs/box	Price €/pc
9461R004	1/2"	G 1/2"	42	9	58,5	13,5	81	10	12	96	10,25

GP 2799
ACCESSORIES



Adjustable discharge cock of 1/2" with pipe-fitting M 3/4", nickel-plated.

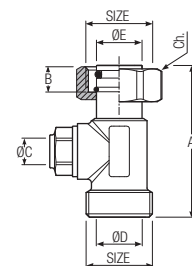


CODE	Size	A	B mm	C mm	ØD mm	E mm	F mm	Ch1 mm	Ch2 mm	Pack pcs/box	Price €/pc
6322R004	1/2"	1/2"	29,8	49,7	23,9	31	43	16	24	36	12,37

GP 2799
ACCESSORIES



Tee union with pipe union for thermometer, nickel-plated.



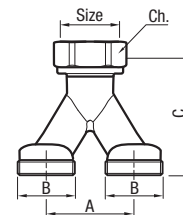
CODE	Size	A mm	B mm	ØC mm	ØD mm	ØE mm	Ch. mm	PN	gr	Pack pcs/box	Price €/pc
9737R524	M-F 24x19	59	10	10,5	18,2	18	30	10	155	30	13,08

GP 2799
ACCESSORIES



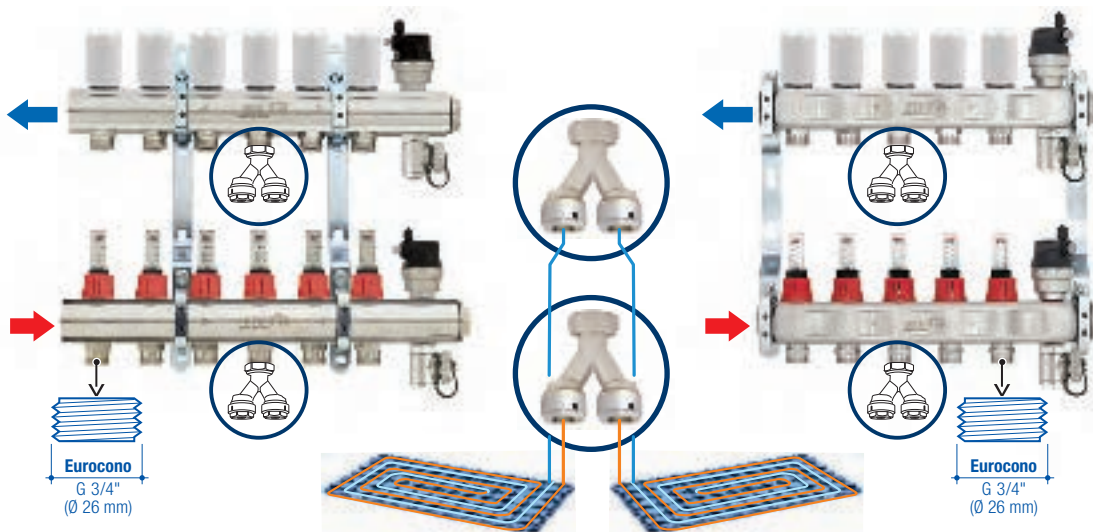
Splitter fitting with 24x19 or 3/4 "Eurocone takeoffs, for CONTROLLER brass manifolds and CONTROLLER S steel manifolds, with takeoffs with 50 mm centre distance.
UNI EN ISO 228-1 thread.

(*) Available only on request.



CODE	Size	A mm	B	C mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
01300000	24x19	36	24x19	58	27	130	2	80	23,97
6320R001	3/4" (*)	36	3/4"	49,5	27	122	2	90	23,50

Example of application of the splitter fitting cod. 6320R001 + 12x2, 24x19 or 3/4" EK Monoblocco seal to Controller and Controller S manifolds



GP 2799
ACCESSORIES



Fitting Female 24x19 - Male M32x1,5.

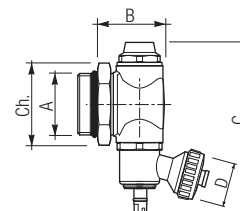
CODE	Size	Pack pcs/box	Price €/pc
01306252	24x19 - M32x1,5	10	13,08

Complete with O-Ring and adapter female side.

GP 2799
ACCESSORIES



Couple of terminal with manual vent valve and adjustable bibcock.
Supplied with 1/2" manual vent valve and 1/2" water bibcock for water charge/drain with adjustable 3/4" connection.
Also usable with Controller S steel manifolds, replacing the black O-Ring with the red ones supplied in the package.



CODE	Size	A	B mm	C mm	D	Ch. mm	PN	Pack pcs/box	Price €/couple
01306158	1"	1"	36	92	3/4"	38	10	1	56,04

GP 2799
ACCESSORI



Thermometer Ø 40.

CODE	Temperature	Pack pcs/box	Price €/pc
5836R562	0 ÷ 80 °C	48	8,10

GP 2799
ACCESSORIES



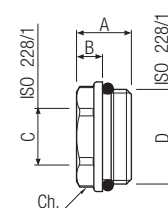
Hand wheel.

CODE	Pack pcs/box	Price €/pc
9681P500	6	2,24

GP 2799
ACCESSORIES



Male/female reducer, nickel-plated, with O-Ring seal.



CODE	Size		A mm	B mm	C	D	Ch. mm	PN	Pack pcs/box	Price €/pc
9685R024	3/4" M x 3/8" F	with O-Ring EP 851	16,5	10	3/8"	3/4"	30	10	30	2,97
9685R026	3/4" M x 1/2" F	with O-Ring EP 851	16,5	10	1/2"	3/4"	30	10	25	3,14
9685R092	1" M x 3/8" F	with O-Ring EP 851	18,5	10	3/8"	1"	27	10	15	6,93
9685R027	1" M x 1/2" F	with O-Ring EP 851	18,5	10	1/2"	1"	27	10	20	6,93
9685R030	1" M x 3/4" F	with O-Ring EP 851	19,5	10	3/4"	1"	30	10	15	4,25
9685R028	1"1/4 M x 1/2" F	with O-Ring EP 851	23,5	12,5	1/2"	1"1/4	38	10	8	8,69
9685R034	1"1/4 M x 1" F	with O-Ring EP 851	23,5	12,5	1"	1"1/4	38	10	10	7,01

GP 2799
ACCESSORIES



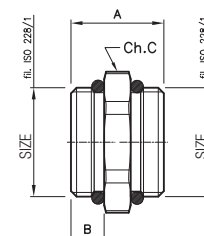
Wrench for nipples CH 37 - 48.

CODE	Pack pcs/box	Price €
01306044	1	13,36

GP 2799
ACCESSORIES



Male/Male nipple, nickel-plated, with O-Ring seal.



CODE	Size	A mm	B mm	Ch. C mm	PN	Pack pcs/box	Price €/pc
9686R033	1" M x 1" M	27	10	37	10	2/30	9,09

GP 2799
ACCESSORIES



M-M swivel threaded fitting for Controller manifolds, with O-ring, nickel-plated.

CODE	Size	Pack pcs/box	Price €/pc
9682R029	3/4" M x 3/4" M	2/30	19,60
01307426	1" M x 1" M (*)	2/30	18,04
9682R034	1"1/4 M x 1" M	2/30	21,98
9682R036	1"1/4 M x 1"1/4 M	2/30	32,68
9682R027	1" M x 1/2" M	2/30	26,20
9682R030	1" M x 3/4" M	2/30	23,90

(*) For coupling to Controller brass manifolds use the two pre-assembled black O-Rings supplied as standard. For coupling to Controller S steel manifolds replace the two pre-assembled black O-Rings with the two red O-Rings supplied in the package.

GP 2799
ACCESSORIES



Blind plug M, nickel-plated, with O-Ring EP 851.

CODE	Size	Pack pcs/box	Price €/pc
9683R004	1/2" M	50	2,15
9683R005	3/4" M	25	2,97
9683R006	1" M	20	4,35
9683R007	1"1/4 M	10	6,93

GP 2799
ACCESSORIES



Solid plug F, nickel-plated, for flat seal with gasket.

CODE	Size	Pack pcs/box	Price €/pc
5833R005	3/4" F	50	2,84
5833R006	1" F	50	4,35

GP 2615
ACCESSORIES



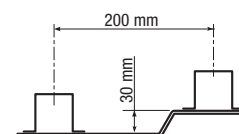
Blind monobloc seal (plug).

CODE	Size	Pack pcs/box	Price €/pc
6047R001	24 x 19 F	20	3,38

GP 2799
ACCESSORIES



Pair of double metal brackets for manifolds, zinc-plated.



CODE	Size	Takeoff	Pack pcs/box	Price €/couple
9688Z005	3/4"	200 mm	1	16,08
9688Z006	1"	200 mm	1	16,08
9688Z007	1"1/4	200 mm	1	16,08

GP 2799
ACCESSORIES



Insulating shell for Controller manifold.

CODE	Size	Pack pcs/box	Price €
5480P006	1"	1	43,29
5480P007	1"1/4	1	43,52

No. of branch holes: 12, centre distance 50 mm. To be cut to size according to the number of ways of the manifold to be insulated.

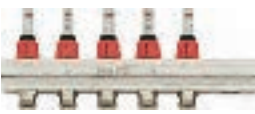
GUIDE TO SELECTING THE COMPONENTS



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A

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COD. 01306302 Range 0÷4 l/min

COD. 01306312 For manifolds 1" - 24x19

COD. 01306314 For manifolds 1" - ¾" eurocono

COD. 01306316 For manifolds 1"¼ - 24x19

COD. 01306318 For manifolds 1"¼ - ¾" eurocono



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B

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COD. 01306300 Kit lockshields

COD. 01306312 For manifolds 1" - 24x19

COD. 01306314 For manifolds 1" - ¾" eurocono

COD. 01306316 For manifolds 1"¼ - 24x19

COD. 01306318 For manifolds 1"¼ - ¾" eurocono



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C

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COD. 01306828 Range 0÷2,5 l/min

COD. 01306830 Range 0÷4 l/min

COD. 01306832 Range 0÷6 l/min

GP 2798
COMPONENTS



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

CODE	Range	Pack pcs/box	Price €/pc
01306302	0÷4 l/min	4	10,23

A

GP 2799
COMPONENTS



Kit lockshield.

CODE	Pack pcs/box	Price €/pc
01306300	4	7,36

B

GP 2798
COMPONENTS



Kit Flow meter.

CODE	Range	Pack pcs/box	Price €/pc
01306828	0÷2,5 l/min	4	6,12
01306830	0÷4 l/min	4	5,17
01306832	0÷6 l/min	4	5,19

For manifolds produced from week 31 of 2017.

C

GP 2798
COMPONENTS



Lockshield / Flow meter seat.

CODE	Size	Pack pcs/box	Price €/pc
01306312	For manifolds 1" - 24x19	4	4,45
01306314	For manifolds 1" - 3/4" Eurocono	4	5,41
01306316	For manifolds 1"1/4 - 24x19	4	5,23
01306318	For manifolds 1"1/4 - 3/4" Eurocono	4	5,65

Ⓓ

GP 2799
ACCESSORIES



Kit thermostatic shutter valve.

CODE	Size	Pack pcs/box	Price €/pc
01306114	1" - 24x19	4	8,69
01306118	1"1/4 - 24x19	4	10,94
01306290	1" - 3/4" Eurocono	4	11,10
01306292	1"1/4 - 3/4" Eurocono	4	13,08

GP 2799
ACCESSORIES



Nipple with O-Ring.

CODE	Size	Pack pcs/box	Price €/pc
9741R004	1/2" - 24x19	30	4,29
9741R005	1/2" - 3/4" Eurocono	30	6,22

GP 2798
ACCESSORIES



Sealing collar (tamper-proof).

CODE	Size	Pack pcs/box	Price €/pc
01306320	For manifolds 1" - 1"1/4	12	14,58

GP 2799
ACCESSORIES



Blue ABS knob for manifold thermostatic shutter.

(*) Article available while stocks last.

CODE		Pack pcs/box	Price €
90006590 (*)		1	0,50
90067510		1	0,48

GP 2799
ACCESSORIES



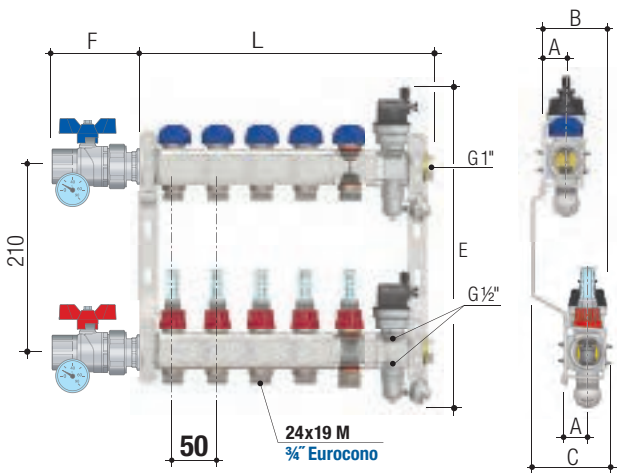
Red ABS lockshield valve cover cap.

CODE		Pack pcs/box	Price €/pc
90023360		1	0,58



CONTROLLER S

DISTRIBUTION STEEL MANIFOLD WITH STEEL BRACKETS



The dimensions given are valid for all the models listed below; the value **L** will vary depending on the number of ways fitted to the manifold (see corresponding table).

Components		Material
1	Manifold	AISI 304 stainless steel
2	Seals	EPDM
3	Fixing brackets	UNI Fe 320 UNI 10440

- EN
- GENERAL CHARACTERISTICS

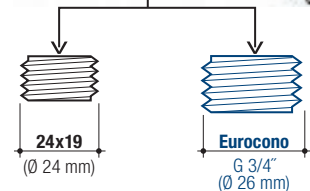
Main connection 1"

Connection for seals 24x19 or 3/4" Eurocone

Centre distance 50 mm

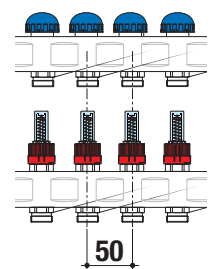
- OPERATING CONDITIONS
- Maximum working temperature: +90 °C
- Maximum working pressure: 6 bar
- Instructions and diagrams in the Technical Attachments.

GP 2755
CONTROLLER S



Takeoffs at **50 mm** centres (flow and return).

AISI 304 stainless steel distribution manifold with brushed finish, 1" - 24x19 or 3/4" Eurocono derivations, consisting of: manual valves with cap designed for electrothermic heads, flow meters 0÷4 l/min, brackets and additional connections with 2 vent valves and 2 drain cocks.



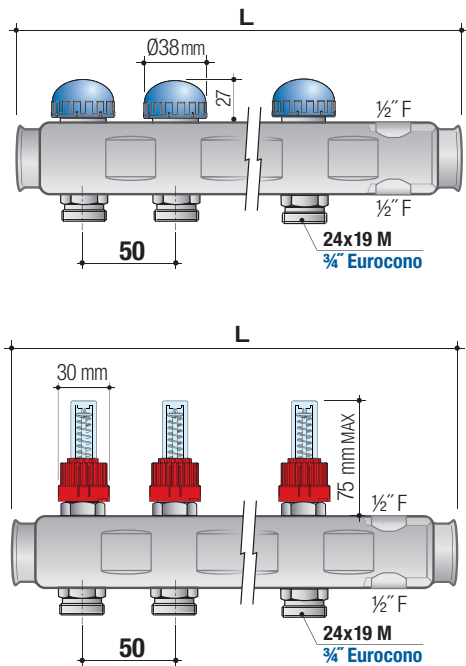
The article is supplied with the fixing brackets dismantled.

CODE	Model	L mm	A mm	B mm	C mm	Takeoff	Pack pcs/box	Price €
6281Z002	2 WAYS - 1"	185	25,5	69,5	85,5	24x19	1	182,30
6281Z003	3 WAYS - 1"	235	25,5	69,5	85,5	24x19	1	210,50
6281Z004	4 WAYS - 1"	285	25,5	69,5	85,5	24x19	1	240,90
6281Z005	5 WAYS - 1"	355	25,5	69,5	85,5	24x19	1	271,40
6281Z006	6 WAYS - 1"	385	25,5	69,5	85,5	24x19	1	301,90
6281Z007	7 WAYS - 1"	435	25,5	69,5	85,5	24x19	1	332,50
6281Z008	8 WAYS - 1"	485	25,5	69,5	85,5	24x19	1	362,50
6281Z009	9 WAYS - 1"	535	25,5	69,5	85,5	24x19	1	404,30
6281Z010	10 WAYS - 1"	585	25,5	69,5	85,5	24x19	1	437,90
6281Z011	11 WAYS - 1"	635	25,5	69,5	85,5	24x19	1	466,00
6281Z012	12 WAYS - 1"	685	25,5	69,5	85,5	24x19	1	494,40
6282Z002	2 WAYS - 1"	185	25,5	69,5	85,5	Eurocono	1	185,50
6282Z003	3 WAYS - 1"	235	25,5	69,5	85,5	Eurocono	1	215,40
6282Z004	4 WAYS - 1"	285	25,5	69,5	85,5	Eurocono	1	247,50
6282Z005	5 WAYS - 1"	355	25,5	69,5	85,5	Eurocono	1	279,60
6282Z006	6 WAYS - 1"	385	25,5	69,5	85,5	Eurocono	1	311,70
6282Z007	7 WAYS - 1"	435	25,5	69,5	85,5	Eurocono	1	344,10
6282Z008	8 WAYS - 1"	485	25,5	69,5	85,5	Eurocono	1	375,40
6282Z009	9 WAYS - 1"	535	25,5	69,5	85,5	Eurocono	1	419,00
6282Z010	10 WAYS - 1"	585	25,5	69,5	85,5	Eurocono	1	454,40
6282Z011	11 WAYS - 1"	635	25,5	69,5	85,5	Eurocono	1	484,20
6282Z012	12 WAYS - 1"	685	25,5	69,5	85,5	Eurocono	1	514,00



CONTROLLER S

SINGLE BAR DISTRIBUTION STEEL MANIFOLD



The dimensions given are valid for all the models listed below; the value **L** will vary depending on the number of ways fitted to the manifold (see corresponding table).

Components		Material
1	Manifold	AISI 304 stainless steel
2	Seals	EPDM
3	Fixing brackets	UNI Fe 320 UNI 10440

- EN
- GENERAL CHARACTERISTICS

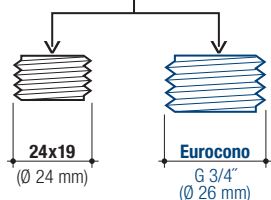
Main connection 1"

Connection for seals 24x19 or 3/4" Eurocone

Centre distance 50 mm

- OPERATING CONDITIONS
- Maximum working temperature: +90 °C
- Maximum working pressure: 6 bar
- Instructions and diagrams in the Technical Attachments.

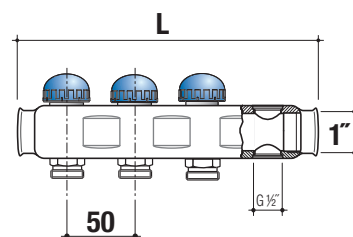
GP 2755
CONTROLLER S



Takeoffs at **50 mm** centres with valves (return).

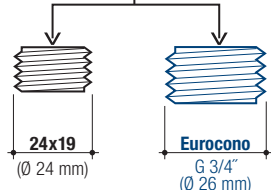
AISI 304 stainless steel return manifold with brushed finish, 1" - 24x19 or 3/4" Eurocono derivations, complete with manual valves with cap designed for electrothermic heads and additional connections for vent valve and drain cock.

Available only on request.



CODE	Model	L mm	Takeoff	Pack pcs/box	Price €/pc
6306Z002	2 WAYS - 1"	175	24x19	2	51,99
6306Z003	3 WAYS - 1"	225	24x19	2	65,78
6306Z004	4 WAYS - 1"	275	24x19	2	79,90
6306Z005	5 WAYS - 1"	325	24x19	2	93,69
6306Z006	6 WAYS - 1"	375	24x19	2	108,10
6306Z007	7 WAYS - 1"	425	24x19	2	121,80
6306Z008	8 WAYS - 1"	475	24x19	2	135,80
6306Z009	9 WAYS - 1"	525	24x19	2	149,60
6306Z010	10 WAYS - 1"	575	24x19	2	163,50
6306Z011	11 WAYS - 1"	625	24x19	2	177,30
6306Z012	12 WAYS - 1"	675	24x19	2	191,00
6310Z002	2 WAYS - 1"	175	Eurocono	2	51,31
6310Z003	3 WAYS - 1"	225	Eurocono	2	66,39
6310Z004	4 WAYS - 1"	275	Eurocono	2	82,20
6310Z005	5 WAYS - 1"	325	Eurocono	2	96,74
6310Z006	6 WAYS - 1"	375	Eurocono	2	110,20
6310Z007	7 WAYS - 1"	425	Eurocono	2	126,50
6310Z008	8 WAYS - 1"	475	Eurocono	2	141,30
6310Z009	9 WAYS - 1"	525	Eurocono	2	160,70
6310Z010	10 WAYS - 1"	575	Eurocono	2	176,00
6310Z011	11 WAYS - 1"	625	Eurocono	2	190,70
6310Z012	12 WAYS - 1"	675	Eurocono	2	205,90

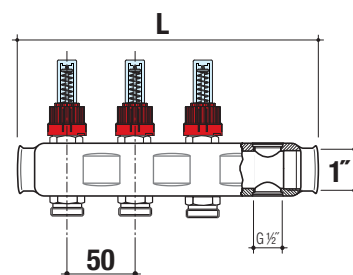
GP 2755
CONTROLLER S



Takeoffs at **50 mm** with lockshields incorporating flow meters (flow).

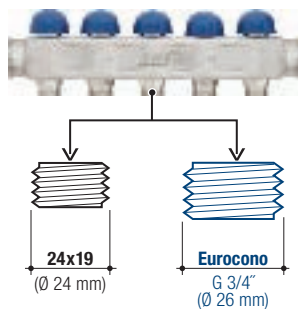
AISI 304 stainless steel delivery manifold with brushed finish, 1" - 24x19 or 3/4" Eurocono derivations, complete with lockshields with built-in flow meters 0-4 l/min and additional connections for vent valve and drain cock.

Available only on request.



CODE	Model	L mm	Takeoff	Pack pcs/box	Price €/pc
6307Z002	2 WAYS - 1"	175	24x19	2	57,58
6307Z003	3 WAYS - 1"	225	24x19	2	74,13
6307Z004	4 WAYS - 1"	275	24x19	2	90,96
6307Z005	5 WAYS - 1"	325	24x19	2	107,70
6307Z006	6 WAYS - 1"	375	24x19	2	124,60
6307Z007	7 WAYS - 1"	425	24x19	2	141,20
6307Z008	8 WAYS - 1"	475	24x19	2	157,80
6307Z009	9 WAYS - 1"	525	24x19	2	174,40
6307Z010	10 WAYS - 1"	575	24x19	2	191,00
6307Z011	11 WAYS - 1"	625	24x19	2	207,60
6307Z012	12 WAYS - 1"	675	24x19	2	224,10
6311Z002	2 WAYS - 1"	175	Eurocono	2	56,15
6311Z003	3 WAYS - 1"	225	Eurocono	2	73,66
6311Z004	4 WAYS - 1"	275	Eurocono	2	91,96
6311Z005	5 WAYS - 1"	325	Eurocono	2	109,10
6311Z006	6 WAYS - 1"	375	Eurocono	2	124,40
6311Z007	7 WAYS - 1"	425	Eurocono	2	143,40
6311Z008	8 WAYS - 1"	475	Eurocono	2	160,30
6311Z009	9 WAYS - 1"	525	Eurocono	2	182,70
6311Z010	10 WAYS - 1"	575	Eurocono	2	200,40
6311Z011	11 WAYS - 1"	625	Eurocono	2	217,90
6311Z012	12 WAYS - 1"	675	Eurocono	2	235,50

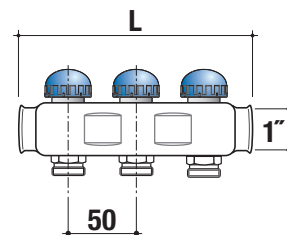
GP 2755 CONTROLLER S



Takeoffs at **50 mm** centres with valves (return).

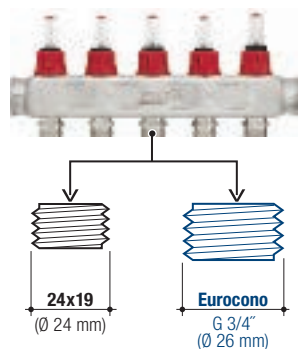
AISI 304 stainless steel return manifold with brushed finish, 1" - 24x19 or 3/4" Eurocono derivations, **WITHOUT** additional way, complete with manual valves with cap designed for electrothermic heads and additional connections for vent valve and drain cock.

Available only on request.



CODE	Model	L mm	Takeoff	Pack pcs/box	Price €/pc
6304Z002	2 WAYS - 1"	125	24x19	2	45,50
6304Z003	3 WAYS - 1"	175	24x19	2	60,00
6304Z004	4 WAYS - 1"	225	24x19	2	74,94
6304Z005	5 WAYS - 1"	275	24x19	2	89,21
6304Z006	6 WAYS - 1"	325	24x19	2	101,70
6304Z007	7 WAYS - 1"	375	24x19	2	117,80
6304Z008	8 WAYS - 1"	425	24x19	2	132,10
6304Z009	9 WAYS - 1"	475	24x19	2	150,80
6304Z010	10 WAYS - 1"	525	24x19	2	165,30
6304Z011	11 WAYS - 1"	575	24x19	2	180,00
6304Z012	12 WAYS - 1"	625	24x19	2	194,20
6308Z002	2 WAYS - 1"	125	Eurocono	2	48,11
6308Z003	3 WAYS - 1"	175	Eurocono	2	61,78
6308Z004	4 WAYS - 1"	225	Eurocono	2	75,48
6308Z005	5 WAYS - 1"	275	Eurocono	2	89,46
6308Z006	6 WAYS - 1"	325	Eurocono	2	103,20
6308Z007	7 WAYS - 1"	375	Eurocono	2	117,50
6308Z008	8 WAYS - 1"	425	Eurocono	2	130,90
6308Z009	9 WAYS - 1"	475	Eurocono	2	144,40
6308Z010	10 WAYS - 1"	525	Eurocono	2	158,10
6308Z011	11 WAYS - 1"	575	Eurocono	2	173,00
6308Z012	12 WAYS - 1"	625	Eurocono	2	186,50

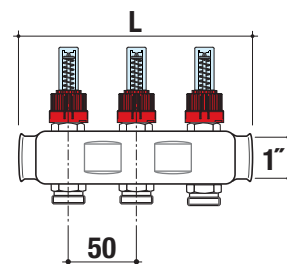
GP 2755 CONTROLLER S



Takeoffs at **50 mm** with lockshields incorporating flow meters (flow).

AISI 304 stainless steel delivery manifold with brushed finish, 1" - 24x19 or 3/4" Eurocono derivations, **WITHOUT** additional way, complete with lockshields with built-in flow meters 0-4 l/min and additional connections for vent valve and drain cock.

Available only on request.



CODE	Model	L mm	Takeoff	Pack pcs/box	Price €/pc
6305Z002	2 WAYS - 1"	125	24x19	2	49,71
6305Z003	3 WAYS - 1"	175	24x19	2	66,29
6305Z004	4 WAYS - 1"	225	24x19	2	83,38
6305Z005	5 WAYS - 1"	275	24x19	2	99,75
6305Z006	6 WAYS - 1"	325	24x19	2	114,30
6305Z007	7 WAYS - 1"	375	24x19	2	127,50
6305Z008	8 WAYS - 1"	425	24x19	2	138,80
6305Z009	9 WAYS - 1"	475	24x19	2	154,60
6305Z010	10 WAYS - 1"	525	24x19	2	166,00
6305Z011	11 WAYS - 1"	575	24x19	2	177,70
6305Z012	12 WAYS - 1"	625	24x19	2	189,20
6309Z002	2 WAYS - 1"	125	Eurocono	2	51,34
6309Z003	3 WAYS - 1"	175	Eurocono	2	68,79
6309Z004	4 WAYS - 1"	225	Eurocono	2	86,77
6309Z005	5 WAYS - 1"	275	Eurocono	2	104,00
6309Z006	6 WAYS - 1"	325	Eurocono	2	119,20
6309Z007	7 WAYS - 1"	375	Eurocono	2	138,40
6309Z008	8 WAYS - 1"	425	Eurocono	2	155,20
6309Z009	9 WAYS - 1"	475	Eurocono	2	177,70
6309Z010	10 WAYS - 1"	525	Eurocono	2	195,10
6309Z011	11 WAYS - 1"	575	Eurocono	2	212,60
6309Z012	12 WAYS - 1"	625	Eurocono	2	230,40

CONTROLLER S

BALL VALVES KIT FOR CONTROLLER S STEEL MANIFOLD

EN TECHNICAL DATA

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

End sleeve thread with Male fitting: UNI EN ISO 228-1

Tang and nut thread: UNI EN ISO 228-1

REDUCED BORE

Flow direction: Both ways.

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

Maximum pressure (T=120°C): 10 bar

Nominal pressure (T=20°C): 40 bar

** In absence of steam; for temperatures below 0 °C use mixes of water and glycol.

Valves must be used in fully open or fully closed position.

O-RING SEAL:

Stem upper seal O-Ring: VITON 70 Sh A (ASTM D2240)

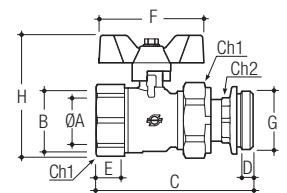
Stem lower seal O-Ring: EPDM Peroxidic 70 Sh A (ASTM D2240)

O-ring tang seal: EPDM Peroxidic 70 Sh A (ASTM D2240)

GP 2240 ACCESSORIES



Kit for steel and brass manifolds consisting of 2 nickel-plated straight ball valves with Blue/Red butterfly handles, with pipe union.
Valve with reduced bore and ISO 228/1 thread.



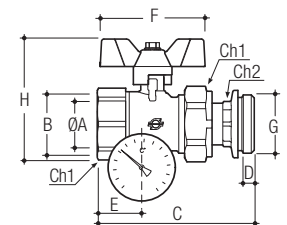
CODE	Size	DN	ØA mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	Ch.1 mm	Ch.2 mm	gr	Pack pcs/box	Price €
6289R006	1"	20	20	1"	88,5	7	14,5	60,2	1"	68,8	38	24	-	1	53,68

Use the pair of red O-Rings for valve installation on Controller S steel manifolds, and the pair of black O-Rings for valve installation on Controller brass manifolds.
Both pairs of O-Rings are supplied in the package.

GP 2240 ACCESSORIES



Kit for steel and brass manifolds consisting of 2 nickel-plated straight ball valves with Blue/Red butterfly handles, with pipe union and 2 thermometers.
Valves with reduced bore and ISO 228/1 thread - Thermometer scale 0-80 °C.



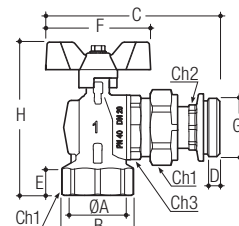
CODE	Size	DN	ØA mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	Ch.1 mm	Ch.2 mm	gr	Pack pcs/box	Price €
6290R006	1"	20	20	1"	88,5	12,3	25	60,2	1"	68,8	38	24	-	1	71,42

Use the pair of red O-Rings for valve installation on Controller S steel manifolds, and the pair of black O-Rings for valve installation on Controller brass manifolds.
Both pairs of O-Rings are supplied in the package.

GP 2240
ACCESSORIES



Kit for steel and brass manifolds consisting of 2 nickel-plated angle valves with Blue/Red butterfly handles with pipe union.
Valves with reduced bore and ISO 228/1 thread.



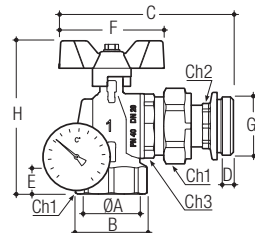
CODE	Size	DN	ØA mm	B	C	D	E	F	G	H	Ch.1/2/3 mm	gr	Pack pcs/box	Price €
6291R006	1"	20	20	1"	99	7	14,5	60,2	1"	86,9	38/24/34	-	1	64,10

Use the pair of red O-Rings for valve installation on Controller S steel manifolds, and the pair of black O-Rings for valve installation on Controller brass manifolds.
Both pairs of O-Rings are supplied in the package.

GP 2240
ACCESSORIES



Kit for steel and brass manifolds consisting of 2 nickel-plated angle valves with Blue/Red butterfly handles with pipe union and 2 thermometers.
Valves with reduced bore and ISO 228/1 thread - Thermometer scale 0-80 °C.



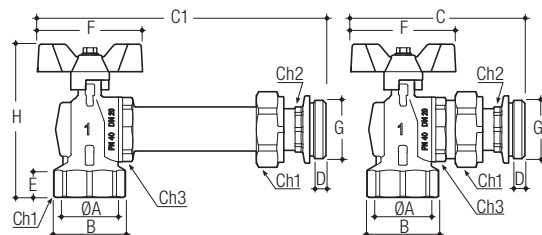
CODE	Size	DN	ØA mm	B	C	D	E	F	G	H	Ch.1/2/3 mm	gr	Pack pcs/box	Price €
6292R006	1"	20	20	1"	99	7	14,5	60,2	1"	86,9	38/24/34	-	1	80,66

Use the pair of red O-Rings for valve installation on Controller S steel manifolds, and the pair of black O-Rings for valve installation on Controller brass manifolds.
Both pairs of O-Rings are supplied in the package.

GP 2240
ACCESSORIES



Kit for steel and brass manifolds consisting of 2 nickel-plated angle valves with Blue/Red butterfly handles with pipe union.
Valves with reduced bore and ISO 228/1 thread.



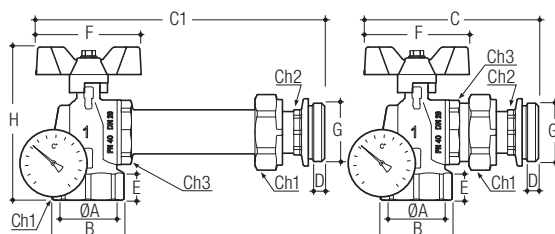
CODE	Size	DN	ØA mm	B	C	C1	D	E	F	G	H	Ch.1/2/3 mm	gr	Pack pcs/box	Price €
6293R006	1"	20	20	1"	99	164	7	14,5	60,2	1"	86,9	38/24/34	-	1	72,56

Use the pair of red O-Rings for valve installation on Controller S steel manifolds, and the pair of black O-Rings for valve installation on Controller brass manifolds.
Both pairs of O-Rings are supplied in the package.

GP 2240
ACCESSORIES



Kit for steel and brass manifolds consisting of 2 nickel-plated angle valves with Blue/Red butterfly handles with pipe union and 2 thermometers.
Valves with reduced bore and ISO 228/1 thread - Thermometer scale 0-80 °C.



CODE	Size	DN	ØA mm	B	C	C1	D	E	F	G	H	Ch.1/2/3 mm	gr	Pack pcs/box	Price €
6294R006	1"	20	20	1"	108,4	173,4	7	14,5	60,2	1"	86,9	38/24/34	-	1	93,64

Use the pair of red O-Rings for valve installation on Controller S steel manifolds, and the pair of black O-Rings for valve installation on Controller brass manifolds.
Both pairs of O-Rings are supplied in the package.



CONTROLLER S

ACCESSORIES FOR CONTROLLER S STEEL MANIFOLD

GP 2798
ACCESSORIES



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

CODE	Range	Pack pcs/box	Price €/pc
01306810	0÷4 l/min	4	10,04

GP 2798
ACCESSORIES



Lockshield / Flow meter seat.

CODE	Size	Pack pcs/box	Price €/pc
01306812	For manifolds 1" - 24x19	4	4,98
01306814	For manifolds 1" - 3/4" Eurocono	4	5,85

GP 2799
ACCESSORIES



Kit thermostatic shutter valve for steel manifold.

CODE	Size	Pack pcs/box	Price €/pc
9701R024	1" - 24x19	4	8,64
9704R005	1" - 3/4" Eurocono	4	10,97

GP 2799
ACCESSORIES



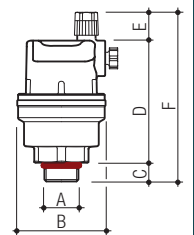
Nipple with O-Ring for steel manifold.

CODE	Size	Pack pcs/box	Price €/pc
01306820	1/2" - 24x19	30	2,85
01306822	1/2" - 3/4" Eurocono	4	3,62

GP 2070
ACCESSORIES



Wind Plus. air bleed valve with plastic cover for steel manifold.

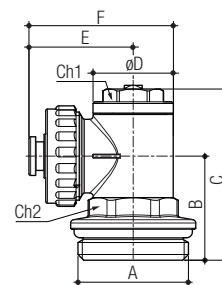


CODE	Size	A	B	C	D	E	F	PN	Pack pcs/box	Master pcs/box	Price €/pc
00400020	1/2"	G 1/2"	42	9	58,5	13,5	81	10	12	96	12,24

GP 2799
ACCESSORIES



Adjustable discharge cock of 1" with pipe-fitting M 3/4", nickel-plated, for steel manifold.

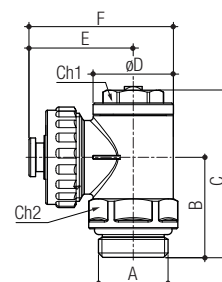


CODE	Size	A	B mm	C mm	ØD mm	E mm	F mm	Ch1 mm	Ch2 mm	Pack pcs/box	Price €/pc
6322R100	1"	1"	31	50,9	23,9	31	43	16	24	18	15,35

GP 2799
ACCESSORIES



Adjustable discharge cock of 1/2" with pipe-fitting M 3/4", nickel-plated.

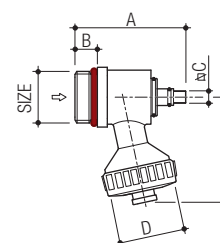


CODE	Size	A	B mm	C mm	ØD mm	E mm	F mm	Ch1 mm	Ch2 mm	Pack pcs/box	Price €/pc
6322R004	1/2"	1/2"	29,8	49,7	23,9	31	43	16	24	36	12,37

GP 2799
ACCESSORIES



Adjustable discharge cock of 1/2" with pipe-fitting M 3/4", nickel-plated, for steel manifold.



Article available while stocks last.

CODE	Size	A mm	B mm	Ch. C mm	D	E mm	Pack pcs/box	Price €/pc
01306824	1/2"	44,5	9	5	3/4"	42	18	14,81

GP 2799
ACCESSORIES



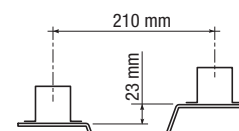
Blind plug M, nickel-plated, with O-Ring EP 851.

CODE	Size	Pack pcs/box	Price €/pc
9683R006	1" M	20	4,35

GP 2799
ACCESSORIES



Pair of double metal brackets for manifolds, zinc-plated.

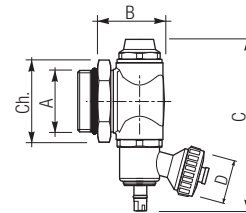


CODE	Size	Takeoff	Pack pcs/box	Price €/couple
01306826	1"	210 mm	1	15,33

GP 2799
ACCESSORIES



Couple of terminal with manual vent valve and adjustable bibcock.
Supplied with 1/2" manual vent valve and 1/2" water bibcock for water charge/drain with adjustable 3/4" connection.
For use on Controller S steel manifolds, replace the black O-Ring with the red ones supplied in the package.
Usable with Controller brass manifolds (with appropriate black o-rings in the package).



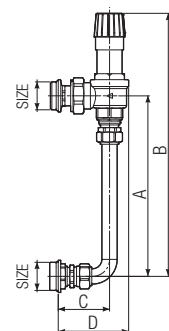
CODE	Size	A	B mm	C mm	D	Ch. mm	PN	Pack pcs/box	Price €/couple
01306158	1"	1"	36	92	3/4"	38	10	1	56,04

GP 2778
ACCESSORIES



TERMINAL kit, nickel plated, for Controller and Controller S manifolds, with By-pass valve and O-Ring seals.

Maximum operating temperature: 110 °C.
Maximum operating pressure: 6 bar.
Thread: UNI EN ISO 228-1



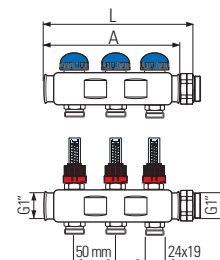
CODE	Size	A mm	B mm	C mm	D mm	Pack pcs/box	Price €
01307010	1"	210 max.	309	60	83	1	247,20

Equipped with a red O-ring on the upper union, for coupling with Controller S steel manifolds; to use the item in combination with the Controller brass manifolds, replace the red O-ring with the black one supplied in the package.

GP 2799
ACCESSORIES



Extension kit for Controller S manifolds.



CODE	Size	L mm	A mm	Pack pcs/box	Price €
6281Z022	2 WAYS, 24x19	141	124	1	129,40
6281Z023	3 WAYS, 24x19	191	174	1	157,10
6281Z024	4 WAYS, 24x19	241	224	1	185,10

Complete with 2 swivel nipples 1" M-M.

GP 2799
ACCESSORIES



Additional way kit for Controller S manifolds.

CODE	Size	Pack pcs/box	Price €
01300006	For 1" Controller S manifolds	1	49,97

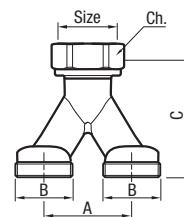
Use the 2 Tee fittings provided in the kit to install the 2 air vent valves and the 2 taps supplied as standard with the manifold.
Install the flow meter and the valve provided in the kit on the manifold way left free.

GP 2799
ACCESSORIES



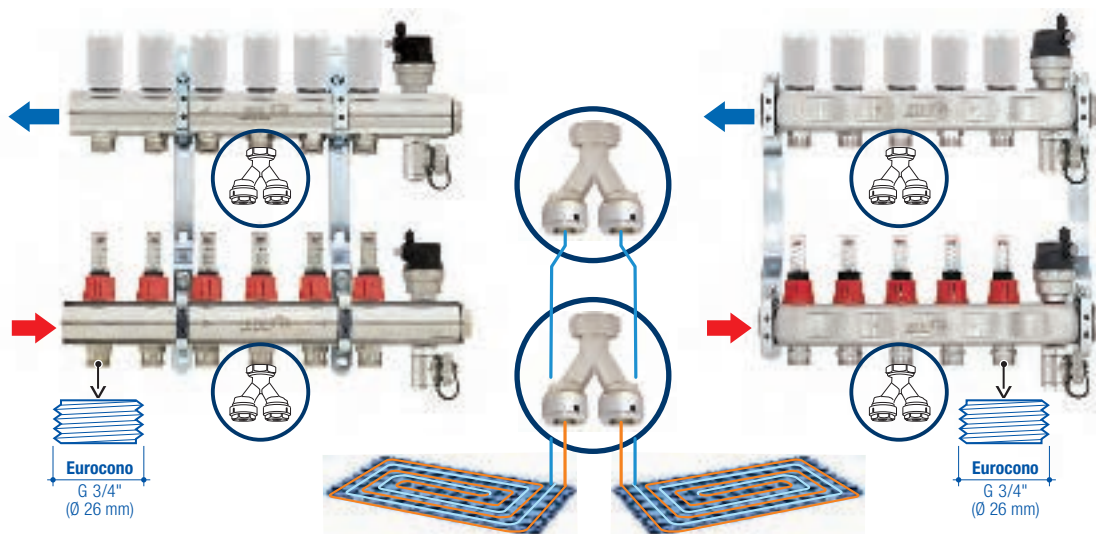
Splitter fitting with 24x19 or 3/4" Eurocone takeoffs, for CONTROLLER brass manifolds and CONTROLLER S steel manifolds, with takeoffs with 50 mm centre distance. UNI EN ISO 228-1 thread.

(*) Available only on request.



CODE	Size	A mm	B	C mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
01300000	24x19	36	24x19	58	27	130	2	80	23,97
6320R001	3/4" (*)	36	3/4"	49,5	27	122	2	90	23,50

Example of application of the splitter fitting cod. 6320R001 + 12x2, 24x19 or 3/4" EK Monoblocco seal to Controller and Controller S manifolds



GP 2799
ACCESSORIES



Fitting Female 24x19 - Male M32x1,5.

CODE	Size	Pack pcs/box	Price €/pc
01306252	24x19 - M32x1,5	10	13,08

Complete with O-Ring and adapter female side.

GP 2799
ACCESSORIES



Swivel nipple

CODE	Size	Pack pcs/box	Price €/pc
01307426	1" M x 1" M	2/30	18,04

For coupling to Controller S steel manifolds replace the two pre-assembled black O-Rings with the two red O-Rings supplied in the package.

GP 2799
ACCESSORIES



Insulating shells for CONTROLLER S manifolds in steel.
In closed cell cross-linked polyethylene foam.

CODE	Size	Pack pcs/box	Price €
5480P001	1"	1	35,52

Number of derivation holes: 13, centre distance 50 mm.
To be cut to size according to the number of ways of the manifold to be isolated.

GP 2799
ACCESSORIES



Pair of insulating shells for angle valve kits with and without thermometer holder, for CONTROLLER S manifolds in Steel.
In closed cell cross-linked polyethylene foam.

CODE	Size	Pack pcs/box	Price €
5480P002	1"	1	18,28

GP 2799
ACCESSORIES

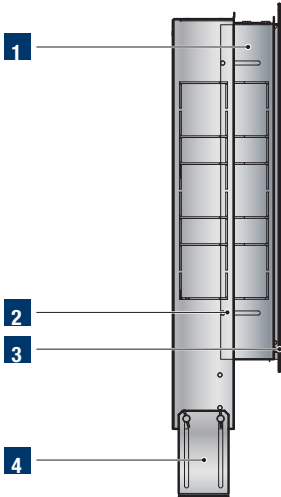


Pair of insulating shells for straight valve kits with and without thermometer holder, for CONTROLLER S manifolds in Steel.
In closed cell cross-linked polyethylene foam.

CODE	Size	Pack pcs/box	Price €
5480P003	1"	1	18,46

BOX SYSTEM PLUS

CABINET FOR MANIFOLDS



Components

	Components	Material
1	Telescopic case	EN 10346 DX51+Z140 MA
2	Telescopic base	EN 10346 DX51+Z140 MA
3	Door frame flush with the plaster	EN 10346 DX51+Z140 MA
4	Adjustable foot	EN 10346 DX51+Z140 MA

EN GENERAL FEATURES

Cabinet for manifold systems for wall installation with telescopic body, door and frame in metal sheet 8/10 in plastic, white colour RAL 9010, flush with the wall with slotted screwdriver lock installed, which can be converted to key lock.

H600 mm and up to H700 mm with extended supported, for modular built-in depth from 95 to 140 mm and up to 160 mm with the support of the door frame. Height adjustable feet from 0 to 100 mm. Frame flush with the plaster 3 mm.

It is supplied with a rubble protection cover.

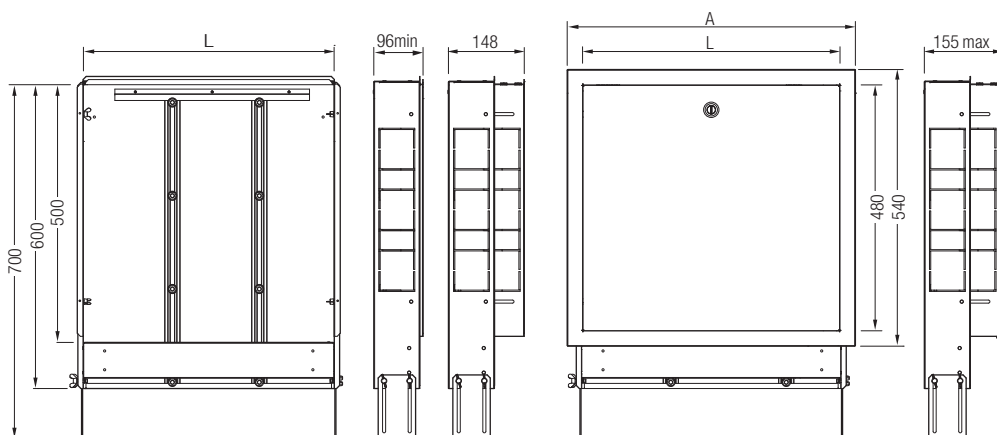
GP 2787
BOX SYSTEM PLUS



Zinc-coated metal cabinet with plastic frame and door, white colour.
Suitable for flush mounting with adjustable depth for partition from 80 to 120 mm.

CODE	Size	L mm	A mm	Pack pcs/box	Price €
01301450	500	500	560	1	139,50
01301452	600	600	660	1	157,20
01301454	700	700	760	1	174,30
01301456	850	850	910	1	216,20
01301458	1000	1000	1060	1	251,30
01301460	1200	1200	1260	1	282,80

It is supplied with a slotted screwdriver lock and with a rubble protection cover.



GP 2799
ACCESSORIES

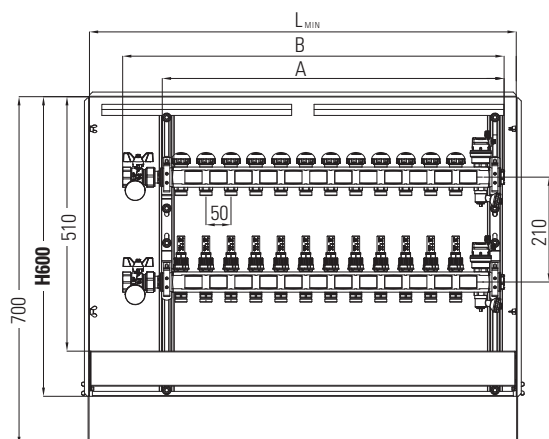
Key lock.



CODE	Pack pcs/box	Price €
90067980	1	50,90

Box System Plus

SELECTION GUIDE FOR THE INSTALLATION OF CONTROLLER S MANIFOLDS WITH EVOLUTION BALL VALVES + THERMOMETERS, IN METAL CABINET BOX SYSTEM PLUS

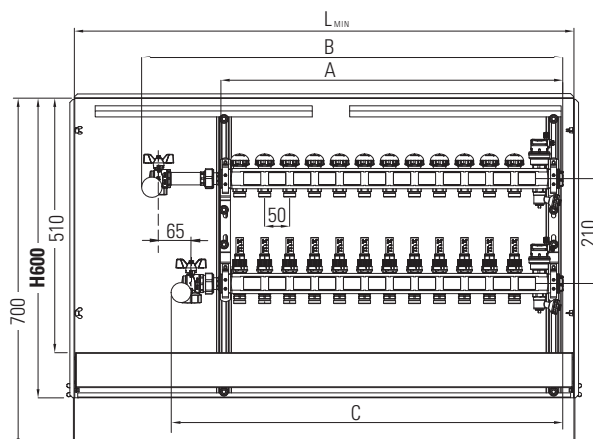


Combination of Controller S manifolds in metal cabinet

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} including fittings pressing dimensions:

- with 1" Evolution straight valve kit with pipe unions 6289R006;
- with 1" Evolution straight valve kit with thermometers and pipe unions 6290R006.



Combination of Controller S manifolds in metal cabinet

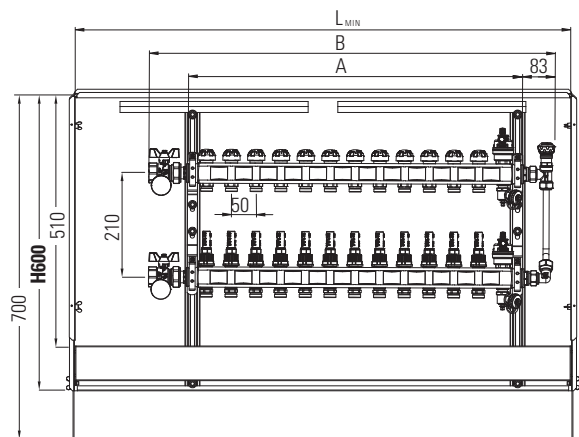
N° ways	A [mm]	B [mm]	C [mm]	L _{MIN} [mm]
2	184	344	279	500
3	234	394	329	500
4	284	444	379	500
5	334	494	429	600
6	384	544	479	600
7	434	594	529	700
8	484	644	579	700
9	534	694	629	850
10	584	744	679	850
11	634	794	729	850
12	684	844	779	1000

Note: L_{MIN} including fittings pressing dimensions:

- with 1" Evolution angle valve kit with pipe unions 6293R006-6291R006;
- with 1" Evolution angle valve kit with thermometers and pipe unions 6294R006-6292R006.

Box System Plus

SELECTION GUIDE FOR INSTALLATION OF CONTROLLER S STEEL MANIFOLDS, WITH EVOLUTION VALVES + THERMOMETERS AND TERMINAL KIT WITH BY-PASS IN METAL CABINET BOX SYSTEM PLUS

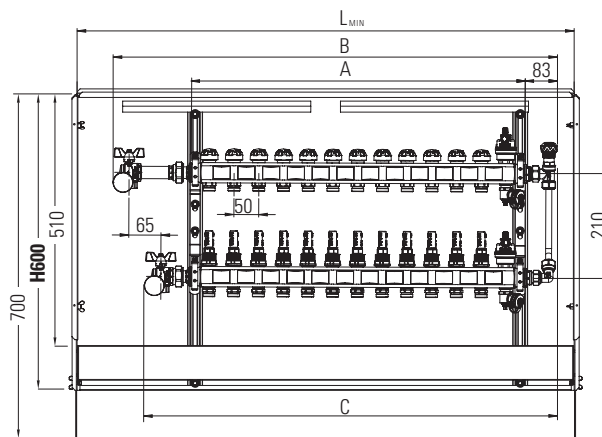


Combination of Controller S manifolds in metal cabinet

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} including fittings pressing dimensions:

- with 1" Evolution straight valve kit with pipe unions 6289R006;
- with 1" Evolution straight valve kit with thermometers and pipe unions 6290R006.



Combination of Controller S manifolds 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

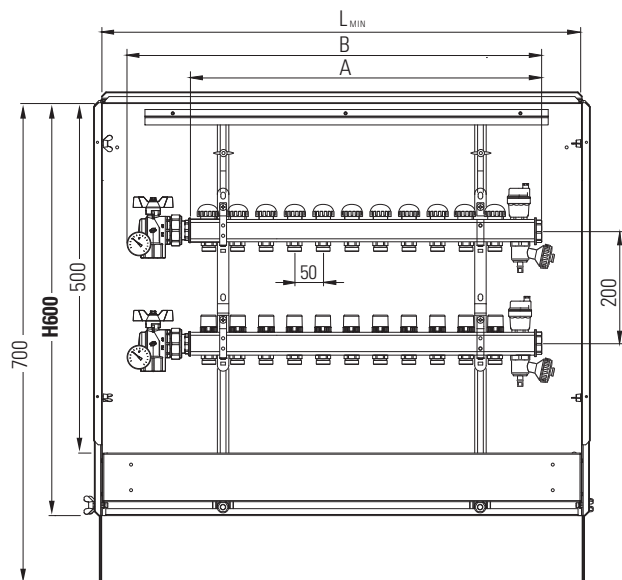
Note: L_{MIN} including fittings pressing dimensions:

- with 1" Evolution angle valve kit with pipe unions 6293R006-6291R006;
- with 1" Evolution angle valve kit with thermometers and pipe unions 6294R006-6292R006.

Box System Plus

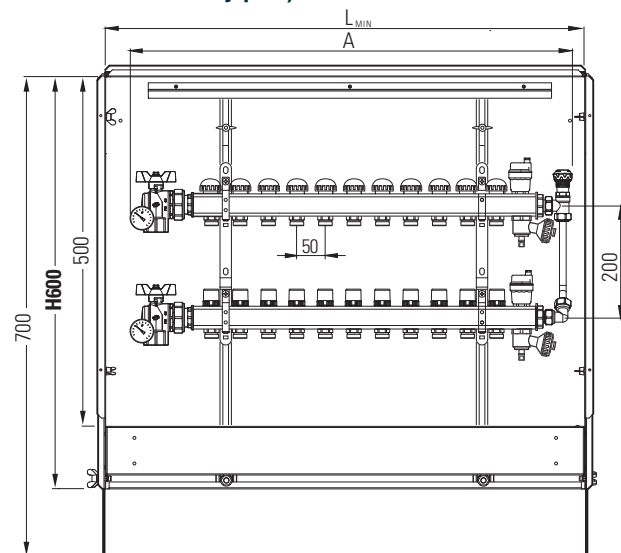
SELECTION GUIDE FOR INSTALLATION OF CONTROLLER BRASS MANIFOLDS + ACCESSORIES,
IN METAL CABINET BOX SYSTEM PLUS

Controller manifold with Evolution ball valves + thermometers



Cabinet for 80 and 120 mm brick thickness (frontal view of cabinet body).

Controller manifold with Evolution ball valves + thermometers and terminal kit with by-pass)



Cabinet for 80 and 120 mm brick thickness (frontal view of cabinet body).

Combination of Controller 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 including fittings pressing dimensions:

- 1 With 1" Evolution straight valve kit with thermometers and pipe unions;
- 2 With 1" Evolution angle valve kit with thermometers and pipe unions.

Combination of Controller 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 including fittings pressing dimensions:

- 1 With 1" Evolution straight valve kit with thermometers and pipe unions;
- 2 With 1" Evolution angle valve kit with thermometers and pipe unions.

Combination of Controller 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 including fittings pressing dimensions:

- 1 With 1"1/4 Evolution straight valve kit with thermometers and pipe unions;
- 2 With 1"1/4 Evolution angle valve kit with thermometers and pipe unions.

Combination of Controller 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 including fittings pressing dimensions:

- 1 With 1"1/4 Evolution straight valve kit with thermometers and pipe unions;
- 2 With 1"1/4 Evolution angle valve kit with thermometers and pipe unions.



Components		Material
1	Casing	Polycarbonate PC
2	Spring	Stainless steel
3	Indicator	PPA (35% FV)
4	Radial stop ring	Steel
5	Stopper support	Polycarbonate PC
6	Base	Polycarbonate PC
7	Ring nut M30x1.5	PA 66 (50% FV) UNI EN 12164 CW614N
8	Cable	PVC
9	1 A microswitch	
10	Wax electro-thermal actuator	

EN GENERAL CHARACTERISTICS

Opening takes places with controlled power supply of the thermostat (Head Normally Closed).
Closing takes places with controlled power supply of the thermostat (Head Normally Open).

Input for model 230 V: 3.45 VA - for model 24 V: 3 VA
Protection IP 40 (IP 44 vertical position, head upwards)
Auxiliary contact capacity: 1 A 250 V
Length of cable 1 m
Breakaway current 230 V: 0.25 A - for model 24 V: 0.35 A
Opening/closing time: 5-6 min
Threaded connection size: M30x1.5

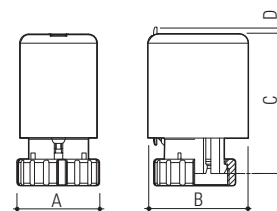
NOTE

The electro-thermal heads can be combined with:
Controller and Controller S bar manifolds with valves

GP 2790
TEF 08



Electrothermic head normally closed.

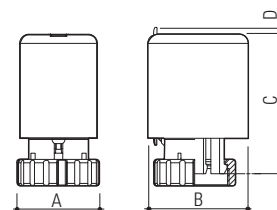


CODE	Model	Ring nut	A mm	B mm	C mm	D mm	Pack pcs/box	Price €
9665P950	24 V	Plastic	36	44	62	3	1	25,34
9665P952	230 V	Plastic	36	44	62	3	1	25,04

GP 2790
TEF 08



Electrothermic head WITH AUXILIARY MICRO normally closed.

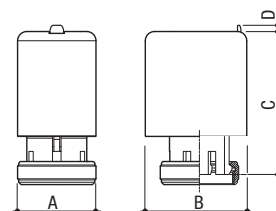


CODE	Model	Ring nut	A mm	B mm	C mm	D mm	Pack pcs/box	Price €
9666P950	24 V	Plastic	36	44	62	3	1	30,64
9666P952	230 V	Plastic	36	44	62	3	1	30,32
9656P953	230 V	Metal	36	44	62	3	1	41,94

GP 2790
TEF 08

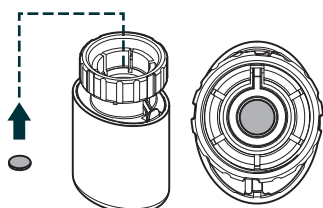


Electrothermic head normally open.



CODE	Model	Ring nut	A mm	B mm	C mm	D mm	Pack pcs/box	Price €
9657P952	230 V	Plastic	36	44	62	3	1	24,38

GP 2799
TEF 08



Adapter for Electrothermic heads TEF 08.

To be used in the event of incomplete closure on manifolds not produced by FIV S.r.l. Unipersonale.

CODE	Pack pcs/box	Price €
90039364	12	3,14

GP 2630
6T BASIC CONTROL UNIT



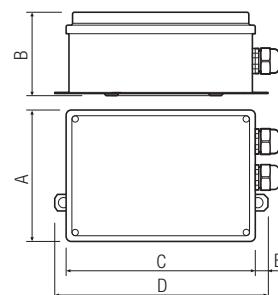
6T basic control unit - Electronic system for electrothermic heads.

TECHNICAL DATA

Optional 230 V or 24 V power supply - Direct powering of the electrothermic heads (at the same voltage supplied to the control unit) - Direct connection of the ambient thermostats (at the same voltage supplied to the control unit) - Connection of up to six electrothermic heads (configurable as high or low temperature) - Connection of up to six ambient thermostats - Connection for low-temperature circulator pump - Connection for boiler consent - Adjustable (30-60°C) safety thermostat - Contact for signalling safety thermostat intervention - Circulator pump anti-seizure function.

Application diagrams: see section on technical attachments.

Available only on request.

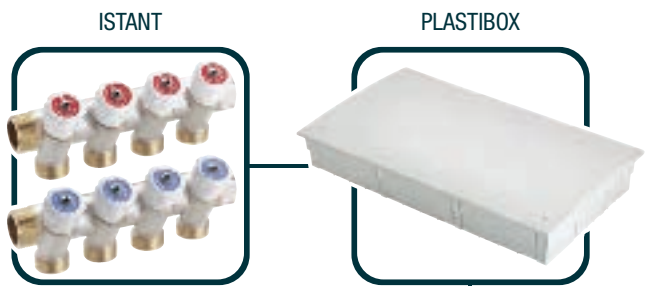


CODE	A mm	B mm	C mm	D mm	E mm	Pack pcs/box	Price €
9895X000	118	76	158	180	11	1	281,90

Electronic control system for electrothermic heads.

ISTANT

Pressed manifold with valves



ISTANT

SIMPRE PRESSED BRASS MANIFOLD
WITH ISOLATING TAPS



Components

- 1 Manifold
- 2 Knobs
- 3 Gaskets

Material

UNI EN 12165 CW617N - DW

ABS

EPDM

GENERAL CHARACTERISTICS

Outlets side threaded 24x19

Centre distance 36 mm

Knobs fitted with red and blue stickers indicating the various domestic terminals

OPERATING CONDITIONS

Maximum working temperature: 100 °C.

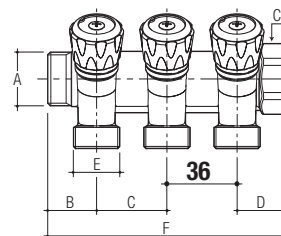
Maximum working pressure: 10 bar.

Pressure drops: See diagram on Technical Attachments.

GP 2752
ISTANT



Simple MODULAR manifold with isolating taps assembled together by bridging piece (art. 013072), made from pressed brass, for domestic hot water systems, nickel-plated, for copper, multilayer, PE-X, PP and PB pipes.



CODE	Model	A	B mm	C mm	D mm	E	F mm	Ch	Pack pcs/box	Price €/pc
9693R002	3/4" - 2 WAYS	3/4"	25	36	24,5	24x19	86	31	10	30,27
9693R003	3/4" - 3 WAYS	3/4"	25	36	24,5	24x19	122	31	6	42,77
9693R004	3/4" - 4 WAYS	3/4"	25	36	24,5	24x19	158	31	6	55,53
9694R002	1" - 2 WAYS	1"	27	36	27,5	24x19	92	37	8	31,42
9694R003	1" - 3 WAYS	1"	27	36	27,5	24x19	128	37	6	45,10
9694R004	1" - 4 WAYS	1"	27	36	27,5	24x19	164	37	4	59,81

GP 2799
ISTANT

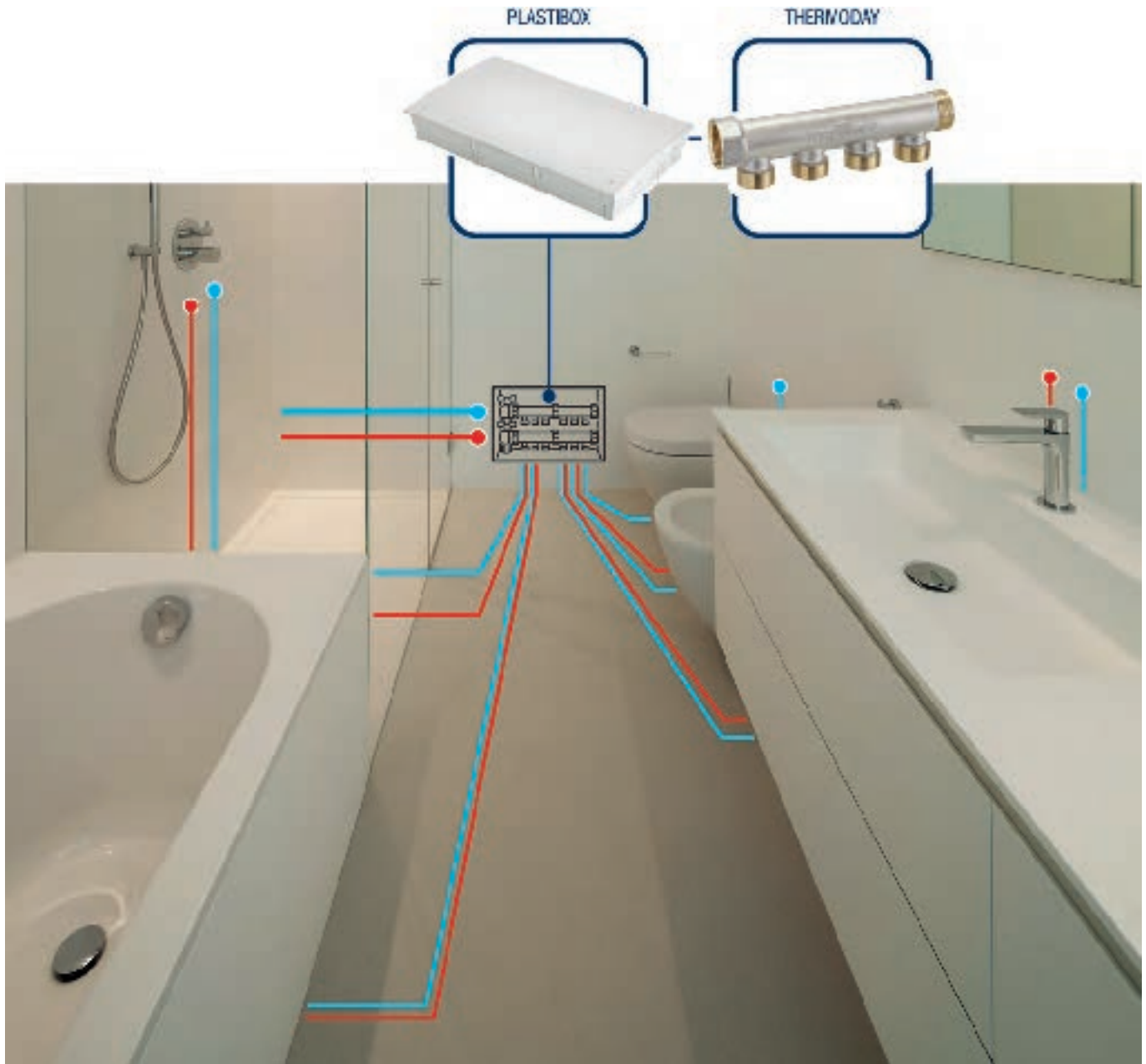


ISTANT manifold bridging piece, with O-ring.

CODE	Model	gr	Pack pcs/box	Price €/pc
01307200	3/4"	22	10	7,02
01307210	1"	35	10	6,93

THERMODAY

Pressed manifold



THERMODAY

SIMPLE PRESSED BRASS MANIFOLD



Components

Manifold

Pcs

Material

1

UNI EN 12165 CW617N - DW

EN GENERAL CHARACTERISTICS

Outlets side threaded 24x19

Centre distance 36 mm

Ways' bore $\varnothing$ 14 mm

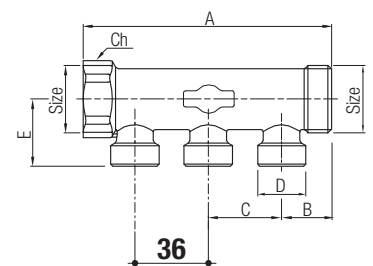
OPERATING CONDITIONS

Maximum working temperature: 110 °C

Maximum working pressure: 10 bar

GP 2754
THERMODAY

Simple pressed brass manifold 24x19 Male derivations, nickel-plated, for monoblocco seals, copper, multilayer, PE-X, PP and PB pipes (see section monoblocco seals).



Takeoffs at **36 mm** centres

CODE	Model	DN	A mm	B mm	C mm	D	E mm	Ch mm	gr	PN	Pack pcs/box	Price €/pc
0165K102	3/4" - 2 WAYS	20	85	24,5	36	24x19	29	31	185	10	10	11,77
0165K103	3/4" - 3 WAYS	20	121	24,5	36	24x19	29	31	230	10	6	16,71
0165K104	3/4" - 4 WAYS	20	157	24,5	36	24x19	29	31	330	10	10	23,80
0166K102	1" - 2 WAYS	25	86	24,5	36	24x19	33	38	240	10	6	15,37
0166K103	1" - 3 WAYS	25	122	24,5	36	24x19	33	38	325	10	10	23,05
0166K104	1" - 4 WAYS	25	158	24,5	36	24x19	33	38	410	10	8	28,23

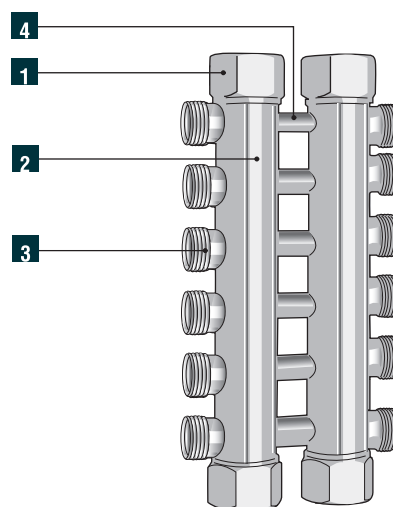
INTERSET

Steel complanar manifold



INTERSET

STEEL COMPLANAR MANIFOLD



Components

Material

1	Flange	Steel AVP
2	Pipes	Steel Fe 360 B
3	Side fitting	Steel AVP
4	Outlets	Steel Fe 360 B

GENERAL CHARACTERISTICS

Flange: 3/4"

Columns: $\varnothing 35 \times 2$, End connection ISO 7/1

Fittings: 24 x 19 showing Inlet/Outlet

Takeoffs: $\varnothing 14 \times 1,5$

Tested: 100%

RANGE INTERSET

3/4" 2x2 4x4 6x6 8x8

OPERATING CONDITIONS

Maximum working temperature: +110 °C.

Maximum working pressure: 10 bar.

Continuous furnace brazing at 1080 °C with 99.9% copper filler wire.

Immersion surface treatment by nickel-plating followed by chroming.

Used to connect radiators and fan coils with FIV Systems

and inserted in a Plastibox.

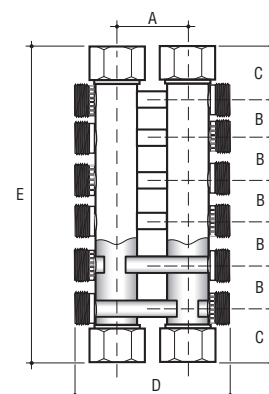
Pressure drops: See diagrams in the Technical Attachments.

GP 2760

INTERSET

Steel brazing-welded complanar manifold
with chromium and nickel-plated treatment.

Articles available while stocks last.



CODE	Model	A mm	B mm	C mm	D mm	E mm	Pack pcs/box	Price €
9695X002	3/4" 2x2	55	36	39	122	110	1	65,89
9695X014	3/4" 4x4	55	36	37	125	182	1	139,10
9695X016	3/4" 6x6	55	36	37	125	254	1	173,50
9695X018	3/4" 8x8	55	36	37	125	326	1	216,10

Diagrams of use of the Interaset manifold in the Technical Attachments.

PLASTIBOX

PLASTIC BOX FOR MANIFOLDS

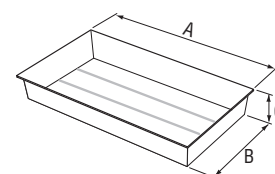


Components

Components	Material
Box	ABS
Cover	PS rigid shock-resistant
Supports for manifold	PA6

GP 2785
PLASTIBOX

Plastibox, white plastic box for manifolds.
It is provided complete with rear plaster base synthetic mesh
and worksite cardboard protection.



CODE	A mm	B mm	C mm	Pack pcs/box	Price €/pc
9707P533	310	310	90	5	29,63
9707P548	460	310	90	3	38,08
9707P563	610	310	90	2	45,42

GP 2799
PLASTIBOX

Support KIT with 10 pairs in each pack, for CONTROLLER manifold.

CODE	Size	Pack pcs/box	Price €/kit
9738P006	1"	1	16,00

GP 2799
PLASTIBOX

Support KIT including 10 pair pack, for THERMODAY / Istant manifold.

CODE	Size	Pack pcs/box	Price €/kit
9739P005	3/4"	1	13,91
9739P006	1"	1	13,91

GP 2799
PLASTIBOX

Support KIT including 10 pieces per pack, for INTERSET manifold.

CODE	Size	Pack pcs/box	Price €/kit
9740P005	3/4" - 1"	1	13,91

GP 2799
PLASTIBOX

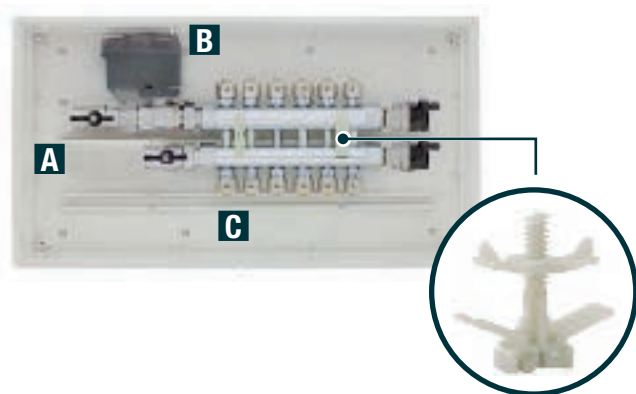
Aluminium profile for supports manifolds, complete with screws and plugs.



CODE	Size	Pack pcs/box	Price €
01306400	400 mm	1	20,06

Guide to selecting the Plastibox cassette

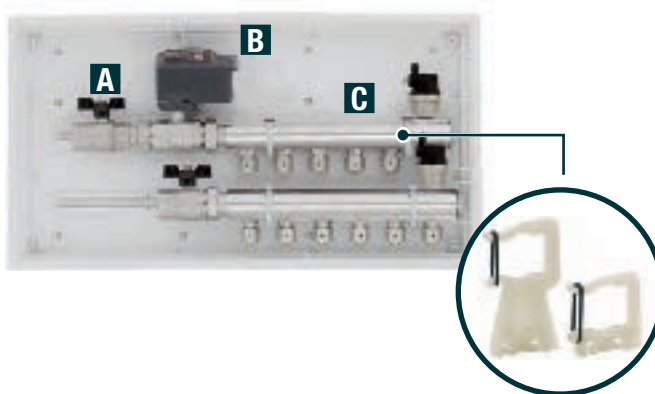
Plastibox with INTERSET manifold



Recommended number of ways for Plastibox with INTERSET manifold

PLASTIBOX	3/4"	3/4"	3/4"
Size	A+C	B+C	A+B+C
310x310	-	-	-
460x310	4 ways	4 ways	2 ways
610x310	8 ways	8 ways	6 ways

Plastibox with CONTROLLER manifold

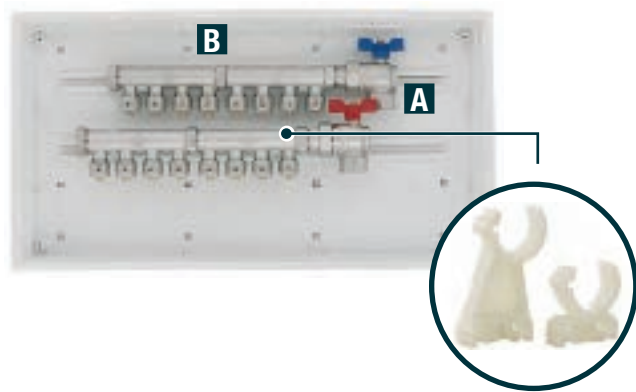


Recommended number of ways for Plastibox with CONTROLLER manifold

PLASTIBOX	1"	3/4"	3/4"	1"	3/4"	3/4"	1"	3/4"	3/4"
Size	A+C	A+C (*)	A+C (**)	B+C	B+C (*)	B+C (**)	A+B+C	A+B+C (*)	A+B+C (**)
310x310	2 ways	3 ways	4 ways	-	2 ways	2 ways	-	-	-
460x310	5 ways	6 ways	8 ways	4 ways	5 ways	6 ways	3 ways	4 ways	5 ways
610x310	8 ways	9 ways	12 ways	7 ways	8 ways	11 ways	6 ways	7 ways	9 ways

(*) Takeoffs 50 mm / (**) Takeoffs 36 mm

Plastibox with THERMODAY manifold

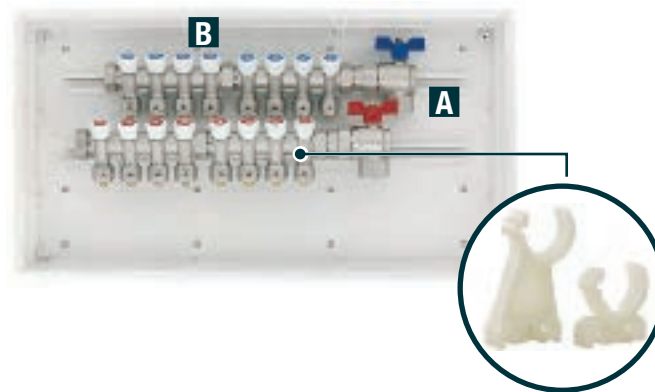


Recommended number of ways for Plastibox with THERMODAY manifold

PLASTIBOX	1"	3/4"
Size	A+B (**)	A+B (**)
310x310	3 ways	4 ways
460x310	7 ways	8 ways
610x310	12 ways	12 ways

(**) Takeoffs 36 mm

Plastibox with INSTANT manifold

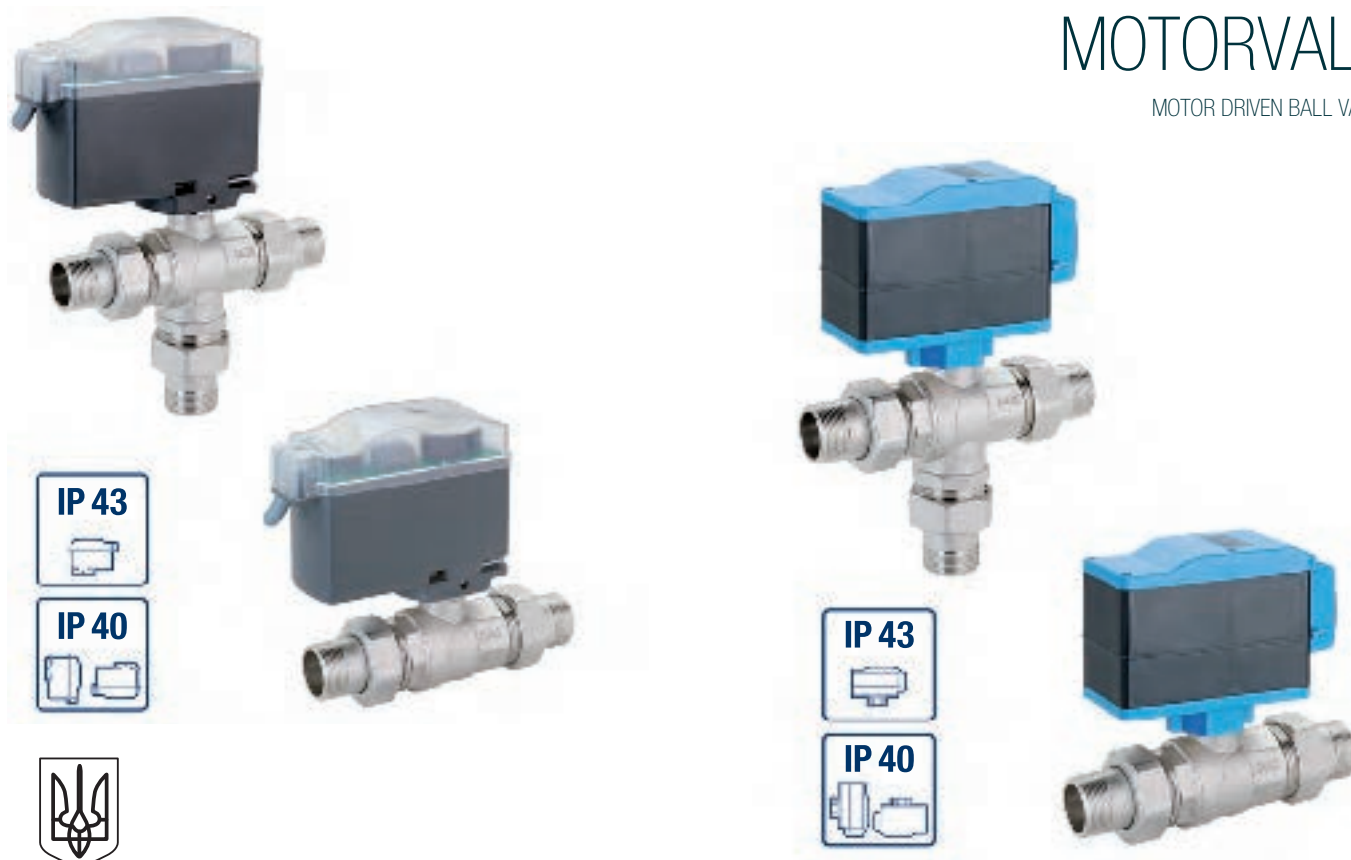


Recommended number of ways for Plastibox with INSTANT manifold

PLASTIBOX	1"	3/4"
Size	A+B	A+B
310x310	3 ways	4 ways
460x310	7 ways	8 ways
610x310	12 ways	12 ways

MOTORVALV

MOTOR DRIVEN BALL VALVE



The MOTORVALV motorised ball valve can be used:

- For heating systems with different zones to control the room temperature. The Presidential Decree 412/93 prescribes the subdivision into zones "if parts of the building are limited to different occupant factors, such as separate flats and offices..." intended to separate the heat supply according to the different uses of these premises (art. 5 clause 12);
- For sanitary hot water production systems for controlling the temperature of the hot water tank;
- For other public and industrial systems (automatic irrigation, etc.) using non-aggressive fluids.

Thanks to its high torque, the servomotor is suitable for the ball valve up to a measurement of 2". The connection between the valve and the servomotor is extremely strong and accurate. The MOTORVALV valve is equipped with an auxiliary micro and SPST contact, for use with a thermostat with two contacts.

WIRING DIAGRAMS: See on Technical Attachments.

For the overpressure valve, adjustable from 0.1 to 0.6 bar from 3/4 or 1"1/4 see accessories for Controller manifolds.

EN

TECHNICAL DATA AND MATERIALS VALVE

Body in brass: UNI EN 12165 CW617N nickel-plated
 Ball in brass: UNI EN 12165 CW617N chromed
 Working temperature: from -40 to 100 °C (Circulating fluid)
 Working pressure: 40 bar
 Thread UNI EN 10226 (ISO 7/1 Rp) (DIN 2999)
 Male end: Thread ISO 228/1 (DIN 259)
 Maximum pressure differential: 6 bar
 Ball valve seals: PTFE with anti-seizure device
 Functioning arm grip: O-Ring in HNBR
 Electric connection cable:
 servomotor Gray (size 1/2" - 3/4" - 1"): Length 70 cm
 servomotor Blue (size 1"1/4 - 1"1/2 - 2"): Not provided.

SERVOMOTOR TECHNICAL FEATURES

Power supply: 230 V / 50 Hz
 Consumption: 4 VA
 Angle of rotation: 90° (2 ways) - 180° (3 ways) - 90°/270° (4 ways)
 Rotation time: 60" (2 ways) - 120" (3 ways) - 60"/180" (4 ways)
 Torque: 1/2" - 3/4" - 1": 8 Nm / 1"1/4 - 1"1/2 - 2": 28 Nm
 Auxiliary contact: volt-free 3A (gray) / volt-free 3A (blue) / 230 V (on-off)
 Indicator: valve open (2 ways) diverted flow c-left c-right (3 ways)
 Protection rating: IP 43 - IP 40
 Insulation class: II

NOTE:

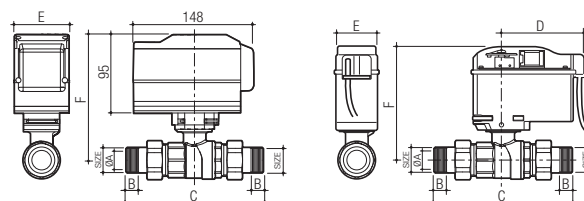
In the 3-way model the passage of the fluid during manoeuvring is guaranteed.

Suitable for hot and cold water domestic distribution plants (Ref. Directive 2014/68/EU Art. 13) for special uses (in accordance with the pressures set out for these items and the compatibility of the different fluids with the materials making up the specific item) see chemical compatibility chart in the technical annexes.

GP 2262
MOTORVALV



Two-way ball valve, with threaded union attachments, nickel-plated, complete with electric servo-motor.

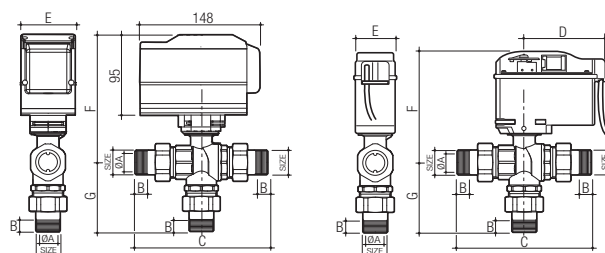


CODE	Size	DN	A mm	B mm	C mm	D mm	E mm	F mm	Pack pcs/box	Price €
GREY VERSION (8 Nm)										
8940R004	1/2"	15	15	10,5	119	90	46	113	1	184,70
8940R005	3/4"	20	20	12	141	90	46	116	1	224,70
8940R006	1"	25	25	13,5	162	90	46	120	1	257,00
BLUE VERSION (28 Nm)										
8940R007	1"1/4	32	32	16	183	75	65	150	1	419,10
8940R008	1"1/2	40	40	18	204	75	65	164	1	507,50
8940R009	2"	50	50	20	244	75	65	171	1	604,50

GP 2262
MOTORVALV



Three-way ball valve, with threaded union attachments, nickel-plated, complete with electric servo-motor.

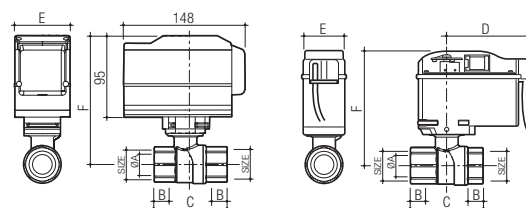


CODE	Size	DN	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Pack pcs/box	Price €
GREY VERSION (8 Nm)											
8941R004	1/2"	15	15	10,5	119	90	46	113	63,5	1	198,90
8941R005	3/4"	20	20	12	141	90	46	116	73,5	1	238,10
8941R006	1"	25	25	13,5	162	90	46	120	85	1	245,20
BLUE VERSION (28 Nm)											
8941R007	1"1/4	32	32	16	183	75	65	150	102	1	507,50
8941R008	1"1/2	40	40	18	204	75	65	164	114	1	604,50
8941R009	2"	50	50	20	244	75	65	171	137	1	779,40

GP 2262
MOTORVALV



Two-way female ball valve, nickel-plated, complete with electric servomotor.

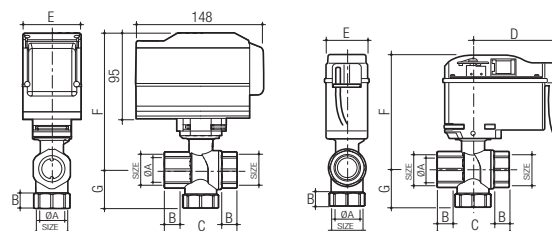


CODE	Size	DN	A mm	B mm	C mm	D mm	E mm	F mm	Pack pcs/box	Price €
GREY VERSION (8 Nm)										
8946R104	1/2"	15	15	15	64	90	46	113	1	179,30
8946R105	3/4"	20	20	16,3	73	90	46	116	1	188,00
8946R106	1"	25	25	19,1	88	90	46	120	1	206,60
BLUE VERSION (28 Nm)										
8946R107	1"1/4	32	32	21,4	101	75	65	150	1	378,40
8946R108	1"1/2	40	40	21,4	112	75	65	164	1	419,10
8946R109	2"	50	50	25,6	132	75	65	171	1	507,40

GP 2262
MOTORVALV



Three-way female ball valve, nickel-plated, complete with electric servomotor.

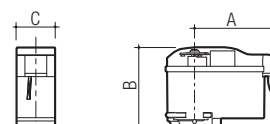


CODE	Size	DN	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Pack pcs/box	Price €
GREY VERSION (8 Nm)											
8947R104	1/2"	15	15	15	64	90	46	113	36	1	188,00
8947R105	3/4"	20	20	16,3	73	90	46	116	38	1	231,70
8947R106	1"	25	25	19,1	88	90	46	120	47	1	238,00
BLUE VERSION (28 Nm)											
8947R107	1"1/4	32	32	21,4	101	75	65	150	59	1	419,10
8947R108	1"1/2	40	40	21,4	112	75	65	164	65	1	507,40
8947R109	2"	50	50	25,6	132	75	65	171	82	1	604,40

GP 2262
MOTORVALV



Electric servomotor 230 Vac for motor-driven valve.

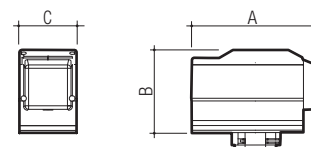


CODE	Application	A mm	B mm	C mm	Angle rotation	Time rotation	Pack pcs/box	Price €
01425880	for 2-way valves 8 Nm	90	86	46	90°	60"	1	138,60
01425882	for 3-way valves 8 Nm	90	86	46	180°	120"	1	143,70
01425884	for 4-way valves 8 Nm	90	86	46	90° / 270°	60" / 180"	1	143,70

GP 2262
MOTORVALV



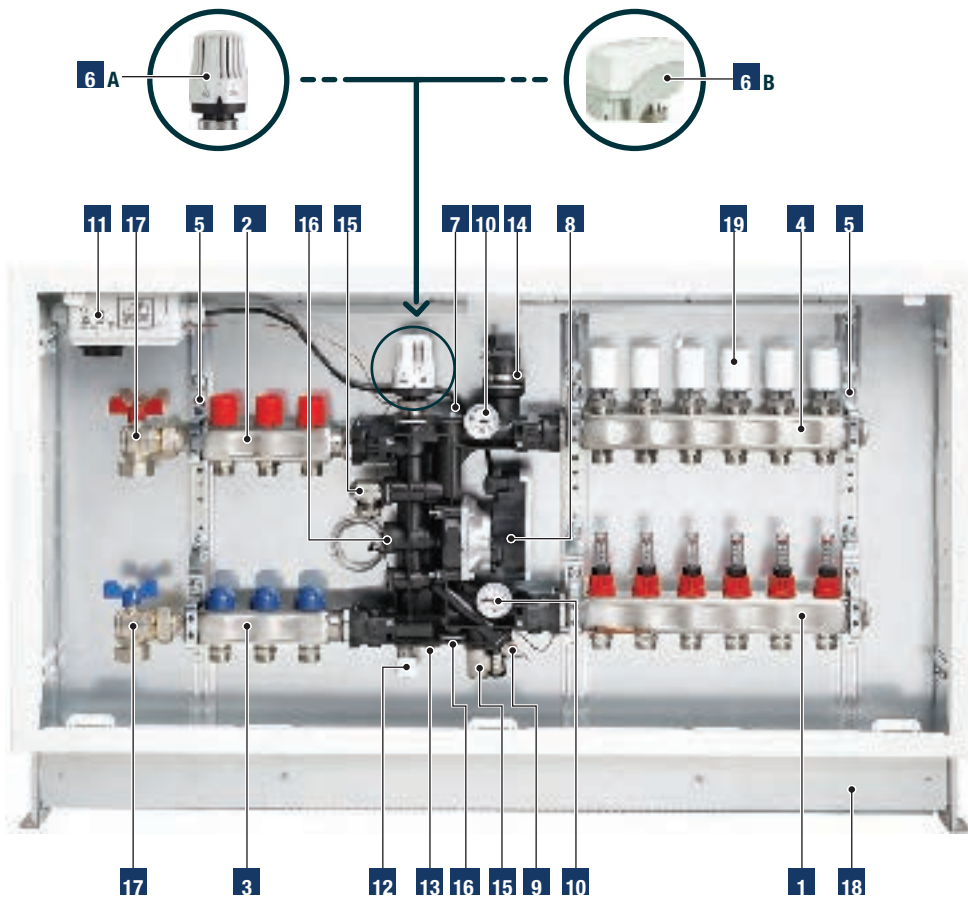
Electric servomotor 230 Vac for motor-driven valve.



CODE	Application	A mm	B mm	C mm	Angle rotation	Time rotation	Pack pcs/box	Price €
01420180	for 2-way valves 28 Nm	148	95	64	90°	60"	1	271,70
01420182	for 3-way valves 28 Nm	148	95	64	180°	120"	1	239,70

FLOOR MIXING CONTROLLER S

PREASSEMBLED REGULATION GROUP
(FIXED-POINT OR CLIMATIC ELECTRONIC)



Components

- | | |
|------------|--|
| 1 | Flow bar for underfloor heating system with flow meters |
| 2 | Flow bar for radiator heating system with regulation lockshields |
| 3 | Return bar for radiator heating system set up for assembly of electrothermic heads |
| 4 | Return bar for underfloor heating system set up for assembly of electrothermic heads |
| 5 | Bar fixing brackets |
| 6 A | Regulation valve with thermostatic head and immersion probe from 20 to 65 °C (fixed-point regulation, not supplied as standard) |
| 6 B | Mixing valve with 3-point motorised valves or 0-10 Vdc (climatic regulation, not supplied as standard) |
| 7 | Calibration valve and by-pass |
| 8 | Circulation pump Wilo Para HU 15/7 cable (tripolar cable L=1000mm) |
| 9 | Remote sensing probe pocket |
| 10 | Control thermometers from 0 to 80 °C |
| 11 | Box with safety thermostat for low-temperature circulation pump wiring (not supplied as standard) or 6T basic control unit for electrothermic heads (not supplied as standard) |
| 12 | Overpressure valve (between 0.1 and 0.6 bar) for High Temperature zone |
| 13 | Shut-off and balancing lockshield, for servicing |
| 14 | 1/2" Automatic air vent |
| 15 | Drain/fill valves with swivel connection and safety cap |
| 16 | Circulator isolating valve, for servicing pump |
| 17 | Valve Kit (not supplied as standard) |
| 18 | Box System Plus metal cabinet (not supplied as standard) |
| 19 | Electrothermic heads (not supplied as standard) |

EN MIXER KIT MATERIALS

Brass UNI EN 12164 CW614N
PPA resin (35% glass reinforced)
EPDM 70 Sh O-Rings gaskets
AISI 304 Stainless steel elements

MANIFOLD MATERIALS

Manifolds in AISI 304 stainless steel
O-Ring seals in peroxide EPDM

CONTROLLER S MANIFOLDS

Size 1"
Head threads UNI EN ISO 228-1 G 1"
Takeoffs: 24x19 Male, centre distance 50 mm

REGULATION UNIT

Max temperature on the primary circuit: 90 °C
Maximum operating pressure: 6 bar
Connections to the primary circuit: G 1" Male
(also G 1 1/4 Male for units sold without manifolds)
Thermostatic head range of adjustment (low temp.):
20÷65 °C
Overpressure valve range of adjustment: 0.1÷0.6 bar
Thermometer scale: 0÷80 °C
Mixing valve pressure drops in Technical attachments

CIRCULATION PUMP WILO PARA HU 15/7

Max static pressure: 7 m
Max delivery capacity: 2,0 m³/h
Power supply 1~230V +10% / -15%, 50/60 Hz
Protection class: IPX4D
Insulation class: F
Energy consumption from 1-230 V: 8.2 ÷ 50 W
Current consumption at 1-230 V: 0.07 ÷ 0.44 A
EEI<=0,20

USABLE FLUIDS

Cooling and heating water
Water and glycol: max 1:1

CONFORMITY

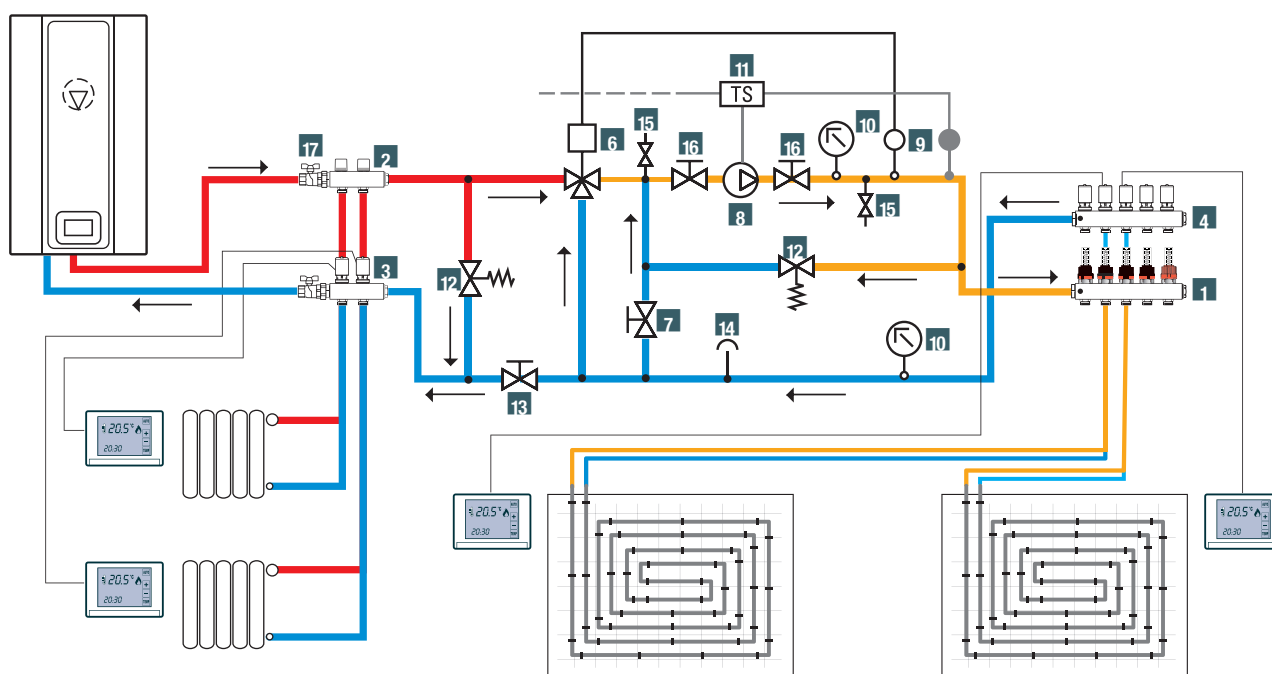
ErP directive
EN 61800-3
EN 61000-6-1
EN 61000-6-2
EN 61000-6-3
EN 61000-6-4
2014/35/UE (Low voltage)
2014/30/UE (electromagnetic compatibility)

Performance diagram in Technical attachments

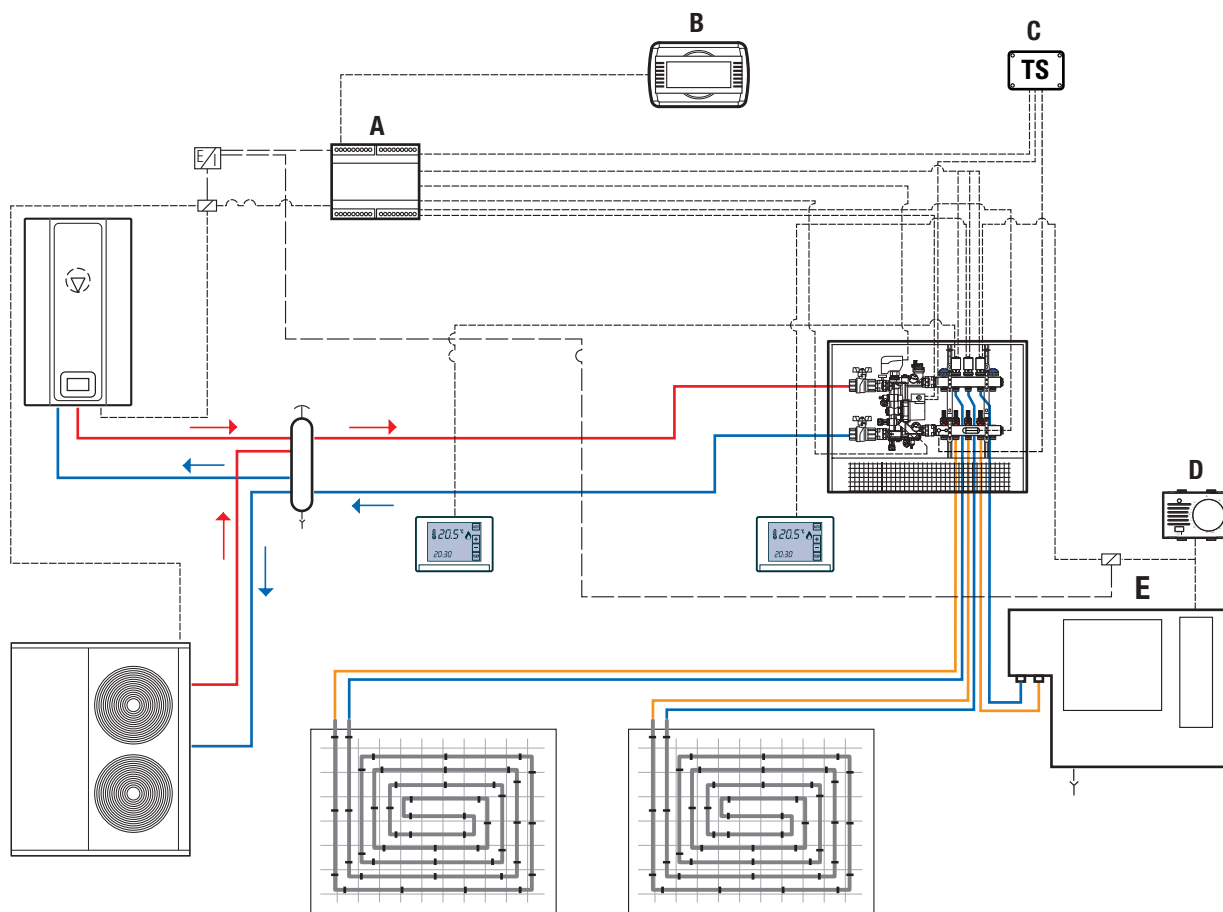
THE RANGE

- Floor Mixing Controller S L:
Low-temperature regulation
and distribution group (from 3 to 13 ways)
and electronic circulator
- Floor Mixing Controller S 2H + L:
High-temperature 2-way +
Low-temperature (from 3 to 13 ways)
regulation and distribution group and
electronic circulator
- Floor Mixing Controller S 3H + L:
High-temperature 3-way +
Low-temperature (from 3 to 12 ways)
regulation and distribution group and
electronic circulator
- Floor Mixing Controller S
without manifolds:
Mixing Low-temperature group with
electronic circulator, G 1" M
or G 1 1/4 M threaded connections

Hydraulic diagram for fixed-point group



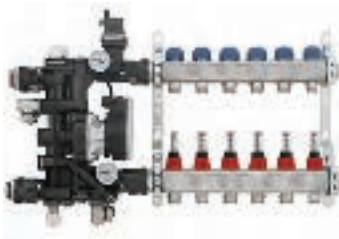
Hydraulic diagram for climatic regulation group - heating and cooling



A RCE climatic regulator **B** Remote display with wall plate **C** Box with safety thermostat **D** Humidistat **E** Dehumidifier

* In this installation example, the heat pump operates only in cooling mode.

Note: the volume of the open manifold/storage tank must be defined according to the capacity of the heat pump.



Preassembled regulation (fixed point or climatic electronic) and distribution group, for low temperature radiant systems, with ErP compliant electronic circulator.

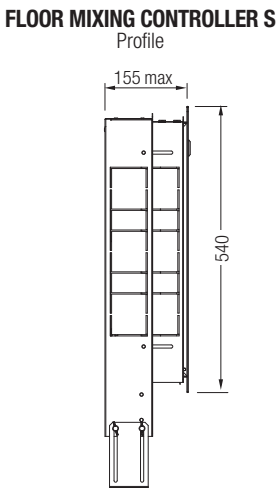
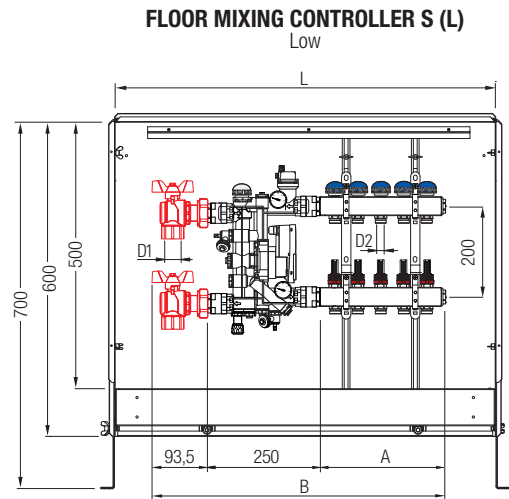
Available only on request.

Complete with:
- Thermostatic head with immersion probe code 90046760
or
- 3-point electric servomotor code 28157212
or
- 0-10 Vdc electric servomotor code 28157222

In case of installation of an electric servomotor, combine the RCE climatic regulation kit.

CODE	Model	No. Ways HIGH temp.	No. Ways LOW temp.	A mm	B mm	L mm	D1	D2	Pack pcs/box	Price €
6318Z003	3L	—	3	184	528	600	G 1"	24x19 M	1	1.232,00
6318Z004	4L	—	4	234	578	700 (*)	G 1"	24x19 M	1	1.228,00
6318Z005	5L	—	5	284	628	850	G 1"	24x19 M	1	1.281,00
6318Z006	6L	—	6	334	678	850	G 1"	24x19 M	1	1.325,00
6318Z007	7L	—	7	384	728	850	G 1"	24x19 M	1	1.368,00
6318Z008	8L	—	8	434	778	1000	G 1"	24x19 M	1	1.414,00
6318Z009	9L	—	9	484	828	1000	G 1"	24x19 M	1	1.455,00
6318R010	10L (**)	—	10	524	848	1000	G 1"	24x19 M	1	1.490,00
6318Z010	10L	—	10	534	878	1000 (*)	G 1"	24x19 M	1	1.522,00
6318Z011	11L	—	11	584	928	1200	G 1"	24x19 M	1	1.565,00
6318Z012	12L	—	12	634	978	1200	G 1"	24x19 M	1	1.615,00
6318Z013	13L	—	13	684	1028	1200	G 1"	24x19 M	1	1.657,00

(*) Compatible only with 1" ball angle valve kits.
(**) Article with brass manifolds, available while stocks last.



GP 2626
FLOOR MIXING CONTROLLER S



Preassembled regulation (fixed point or climatic electronic) and distribution group, for mixed systems with two temperature levels, high and low, with ErP compliant electronic circulator.

Available only on request.

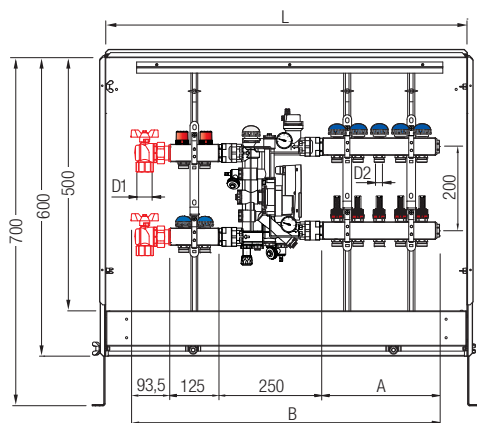
Complete with:
- Thermostatic head with immersion probe code 90046760
or
- 3-point electric servomotor code 28157212
or
- 0-10 Vdc electric servomotor code 28157222

In case of installation of an electric servomotor, combine the RCE climatic regulation kit.

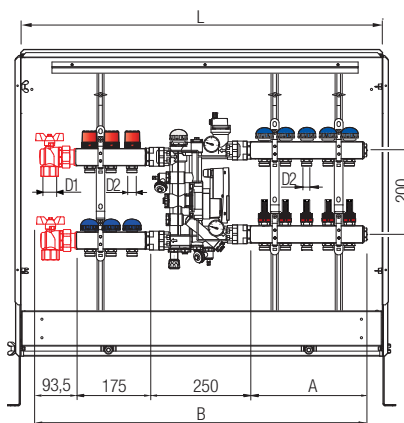
CODE	Model	No. Ways HIGH temp.	No. Ways LOW temp.	A mm	B mm	L mm	D1	D2	Pack pcs/box	Price €
6319Z003	2H + 3L	2	3	184	653	850	G 1"	24x19 M	1	1.349,00
6319Z004	2H + 4L	2	4	234	703	850	G 1"	24x19 M	1	1.392,00
6319Z005	2H + 5L	2	5	284	753	850	G 1"	24x19 M	1	1.438,00
6319Z006	2H + 6L	2	6	334	803	1000	G 1"	24x19 M	1	1.487,00
6319Z007	2H + 7L	2	7	384	853	1000 (*)	G 1"	24x19 M	1	1.530,00
6319Z008	2H + 8L	2	8	434	903	1200	G 1"	24x19 M	1	1.577,00
6319Z009	2H + 9L	2	9	484	953	1200	G 1"	24x19 M	1	1.618,00
6319Z010	2H + 10L	2	10	534	1003	1200	G 1"	24x19 M	1	1.684,00
6319Z011	2H + 11L	2	11	584	1053	1200	G 1"	24x19 M	1	1.728,00
6319Z012	2H + 12L	2	12	634	1103	1200	G 1"	24x19 M	1	1.773,00
6319Z013	2H + 13L	2	13	684	1153	1200 (*)	G 1"	24x19 M	1	1.817,00
6320Z003	3H + 3L	3	3	184	703	850	G 1"	24x19 M	1	1.386,00
6320Z004	3H + 4L	3	4	234	753	850	G 1"	24x19 M	1	1.431,00
6320Z005	3H + 5L	3	5	284	803	1000	G 1"	24x19 M	1	1.481,00
6320Z006	3H + 6L	3	6	334	853	1000 (*)	G 1"	24x19 M	1	1.525,00
6320Z007	3H + 7L	3	7	384	903	1200	G 1"	24x19 M	1	1.574,00
6320Z008	3H + 8L	3	8	434	953	1200	G 1"	24x19 M	1	1.616,00
6320Z009	3H + 9L	3	9	484	1003	1200	G 1"	24x19 M	1	1.664,00
6320Z010	3H + 10L	3	10	534	1053	1200	G 1"	24x19 M	1	1.726,00
6320Z011	3H + 11L	3	11	584	1103	1200	G 1"	24x19 M	1	1.771,00
6320Z012	3H + 12L	3	12	634	1153	1200 (*)	G 1"	24x19 M	1	1.815,00

(*) Compatible only with 1" ball angle valve kits.

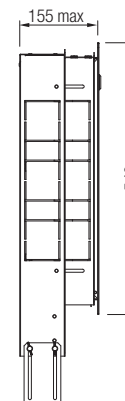
FLOOR MIXING CONTROLLER S (2H + L)
High+Low



FLOOR MIXING CONTROLLER S (3H + L)
High+Low



FLOOR MIXING CONTROLLER S
Profile



GP 2624
FLOOR MIXING CONTROLLER S



Floor Mixing Controller S without manifolds, with Wilo Para HU 15/7 electronic circulator. Male threaded connections G 1" or G 1" 1/4.

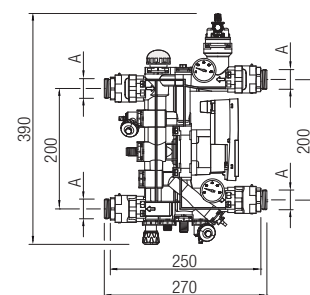
Available only on request.

Complete with:
- Thermostatic head with immersion probe code 90046760
or
- 3-point electric servomotor code 28157212
or
- 0-10 Vdc electric servomotor code 28157222

In case of installation of an electric servomotor, combine the RCE climatic regulation kit.

CODE	Model	A mm	Pack pcs/box	Price €
6316Z001	1" (*)	G 1"	1	739,20
6316R202	1"1/4	G 1"1/4	1	753,10

(*) Article also compatible with Controller brass manifolds by replacing the 4 red O-Rings mounted as standard with the 4 black O-Rings supplied in the package.



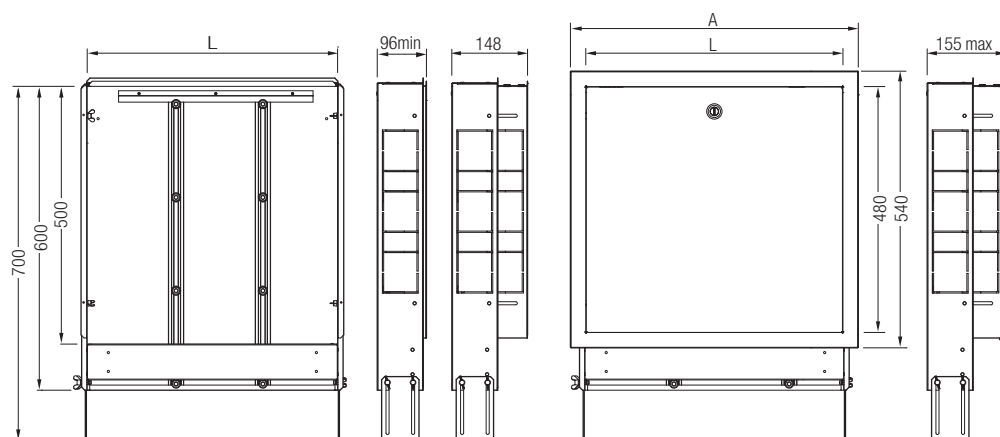
GP 2787
BOX SYSTEM PLUS

Zinc-coated metal cabinet with plastic frame and door, white colour.
Suitable for flush mounting with adjustable depth for partition from 80 to 120 mm.



CODE	Size	L mm	A mm	Pack pcs/box	Price €
01301450	500	500	560	1	139,50
01301452	600	600	660	1	157,20
01301454	700	700	760	1	174,30
01301456	850	850	910	1	216,20
01301458	1000	1000	1060	1	251,30
01301460	1200	1200	1260	1	282,80

It is supplied with a slotted screwdriver lock and with a rubble protection cover.



Guidelines for choosing the Box System Plus metal cabinet to combine with the Floor Mixing Controller S groups

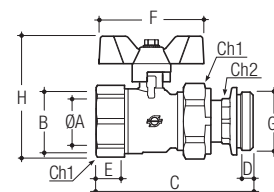
FLOOR MIXING CONTROLLER S	
SIZE	CODE
3L	6318Z003
4L	6318Z004
5L	6318Z005
6L	6318Z006
7L	6318Z007
8L	6318Z008
9L	6318Z009
10L	6318Z010
11L	6318Z011
12L	6318Z012
13L	6318Z013
2H+3L	6319Z003
2H+4L	6319Z004
2H+5L	6319Z005
2H+6L	6319Z006
2H+7L	6319Z007
2H+8L	6319Z008
2H+9L	6319Z009
2H+10L	6319Z010
2H+11L	6319Z011
2H+12L	6319Z012
2H+13L	6319Z013
3H+3L	6320Z003
3H+4L	6320Z004
3H+5L	6320Z005
3H+6L	6320Z006
3H+7L	6320Z007
3H+8L	6320Z008
3H+9L	6320Z009
3H+10L	6320Z010
3H+11L	6320Z011
3H+12L	6320Z012

BOX SYSTEM PLUS	
SIZE	CODE
L600	01301452
L700 (*)	01301454
L850	01301456
L850	01301456
L850	01301456
L1000	01301458
L1000	01301458
L1000 (*)	01301458
L1200	01301460
L1200	01301460
L1200	01301460
L850	01301456
L850	01301456
L850	01301456
L1000	01301458
L1000 (*)	01301458
L1200	01301460
L1200	01301460
L1200	01301460
L1200	01301460
L1200	01301460
L1200	01301460
L1200 (*)	01301460
L850	01301456
L850	01301456
L1000	01301458
L1000 (*)	01301458
L1200	01301460
L1200	01301460
L1200	01301460
L1200	01301460
L1200	01301460
L1200 (*)	01301460

GP 2240
KIT VALVES



Kit for steel and brass manifolds
consisting of 2 nickel-plated straight ball valves with Blue/Red butterfly
handles, with pipe union.
Valve with reduced bore and ISO 228/1 thread.
To be used in groups equipped with high temperature manifolds.



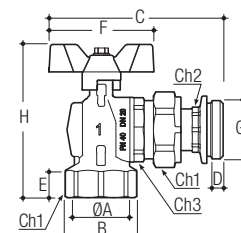
CODE	Size	DN	ØA mm	B	C mm	D mm	E mm	F mm	G	H mm	Ch.1 mm	Ch.2 mm	gr	Pack pcs/box	Price €
6289R006	1"	20	20	1"	88,5	7	14,5	60,2	1"	68,8	38	24	-	1	53,68

Use the pair of red O-Rings for valve installation on Controller S steel manifolds, and the pair of black O-Rings for valve installation on Controller brass manifolds. Both pairs of O-Rings are supplied in the package.

GP 2240
KIT VALVES



Kit for steel and brass manifolds
consisting of 2 nickel-plated angle valves with Blue/Red butterfly handles
with pipe union.
Valves with reduced bore and ISO 228/1 thread.
To be used in groups equipped with high temperature manifolds.



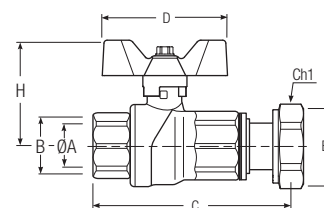
CODE	Size	DN	ØA mm	B	C mm	D mm	E mm	F mm	G	H mm	Ch.1/2/3 mm	gr	Pack pcs/box	Price €
6291R006	1"	20	20	1"	99	7	14,5	60,2	1"	86,9	38/24/34	-	1	64,10

Use the pair of red O-Rings for valve installation on Controller S steel manifolds, and the pair of black O-Rings for valve installation on Controller brass manifolds. Both pairs of O-Rings are supplied in the package.

GP 2258
KIT VALVES



Kit consisting of 2 nickel-plated Evolution straight Female-Pipe union valves
with Blue/Red butterfly handles, nickel-plated.
To be used in groups without high-temperature manifolds.



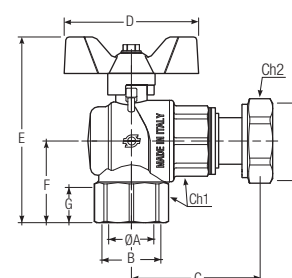
CODE	Size	ØA mm	B	C mm	D mm	E	H mm	Ch.1 mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
6056R106	1" x 1"	25	1"	97	65	1"	56	38	1290	12	48	86,86

Complete with n. 2 gaskets.

GP 2258
KIT VALVES



Kit consisting of 2 nickel-plated Evolution angle Female-Pipe union valves
with Blue/Red butterfly handles.
To be used in groups without high-temperature manifolds.



CODE	Size	ØA mm	B	C mm	D mm	E mm	F mm	G mm	H	gr	Ch.1 mm	Ch.2 mm	Pack pcs/box	Master pcs/box	Price €/pc
6055R106	1" x 1"	25	1"	58,5	65	99,5	45	22	1"	1260	38	38	12	48	99,00

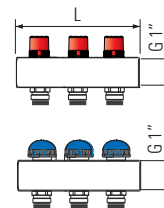
Complete with n. 2 gaskets.

GP 2755
ACCESSORIES



High temperature accessory kit.

Available only on request.



CODE	Size	L mm	Takeoff	Pack pcs/box	Price €
01285502	(2+2)H	125	24x19	1	150,10
01285503	(3+3)H	175	24x19	1	181,00
01285504	(4+4)H	225	24x19	1	214,40

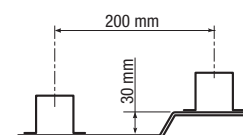
Complete with bracket for fixing the manifolds in the metal box.

GP 2799
ACCESSORIES



Bracket kit for steel manifolds.

Available only on request.



CODE	Size	Takeoff	Pack pcs/box	Price €
01307176	1"	200 mm	1	10,12

To be provided ONLY when combining the Controller S steel manifolds with the 1" mixing unit code 6316Z001.

GP 2630
ACCESSORIES



Vent valve kit, spare part for Floor Mixing Controller S group.

CODE	Pack pcs/box	Price €
00400028	1	15,02

GP 2799
ACCESSORIES



Insulating shell for Floor Mixing Controller S regulation group in closed cell crosslinked expanded polyethylene.

For the installation of the insulating shell, it is first necessary to remove the hydraulic assembly from the box (therefore do not make the hydraulic and electrical connections before installing the insulating shell).

If the shell is installed on a unit inside a metal box, it is advisable to install the unit while maintaining a distance between the back of the box and the flush mounting of 135 mm.

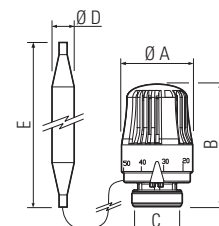
CODE	Size	Pack pcs/box	Price €
01306510	-	1	98,48

GP 2700
THERMOSTATIC HEAD



Thermostatic head with immersion probe for fixed-point adjustment.

Adjustment range: 20-65 °C / threaded connection size: M30x1.5.



CODE	ØA mm	B mm	C	ØD mm	E mm	Pack pcs/box	Price €
90046760	48	87	M30x1,5	11	111	1	39,11

GP 2630
ELECTRIC SERVOMOTOR



Floating electric 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: 150 s (at 50/60 Hz, regarding a stroke of 2.5 mm)
Nominal force: 100 N / Degree of protection: IP40 according to EN 60529
Insulation class: II according to EN 60730 / Threaded fitting size: M30x1.5

Available only on request.

CODE	Pack pcs/box	Price €
28157212	1	301,00

GP 2630
ELECTRIC SERVOMOTOR



Floating electric 0-10 V DC 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 stroke: 5.5 mm
Stroke time: 150 s (at 50/60 Hz, regarding a stroke of 2.5 mm)
Nominal force: 100 N / Degree of protection: IP40 according to EN 60529
Insulation class: III according to EN 60730 / Threaded fitting size: M30x1.5

Available only on request.

CODE	Pack pcs/box	Price €
28157222	1	380,70

GP 2630
6T BASIC CONTROL UNIT



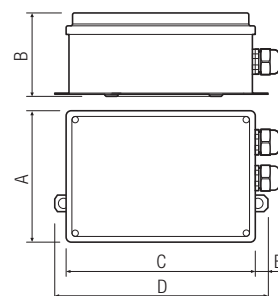
6T basic control unit - Electronic system for electrothermic heads.

TECHNICAL DATA

Optional 230 V or 24 V power supply - Direct powering of the electrothermic heads (at the same voltage supplied to the control unit) - Direct connection of the ambient thermostats (at the same voltage supplied to the control unit) - Connection of up to six electrothermic heads (configurable as high or low temperature) - Connection of up to six ambient thermostats - Connection for low-temperature circulator pump - Connection for boiler consent - Adjustable (30-60°C) safety thermostat - Contact for signalling safety thermostat intervention - Circulator pump anti-seizure function.

Application diagrams: see section on technical attachments.

Available only on request.



CODE	A mm	B mm	C mm	D mm	E mm	Pack pcs/box	Price €
9895X000	118	76	158	180	11	1	281,90

Electronic control system for electro-thermal heads.

GP 2630
ELECTRICAL BOX

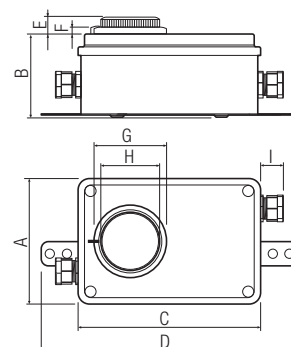


Electrical box with safety thermostat for wiring of low temperature circulation pump.

TECHNICAL DATA

Bulb length: 65 mm - Bulb diameter: 7 mm
Range of adjustment: 30+60 °C ± 3
Contacts capacity: 400 V 16(4) A - Differential: 4 °C

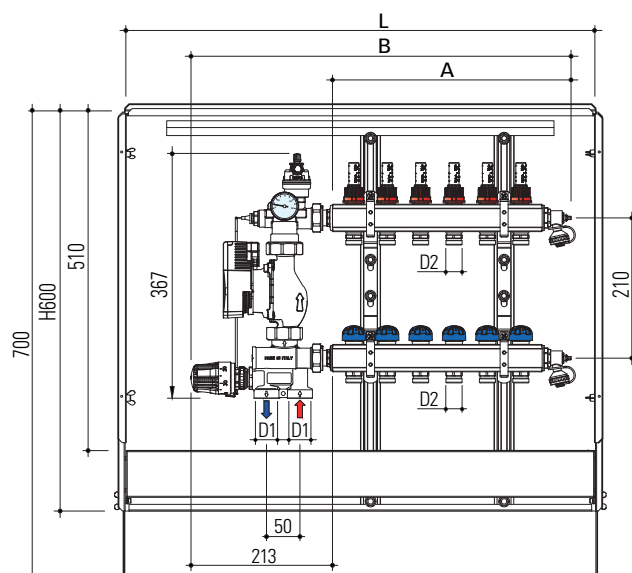
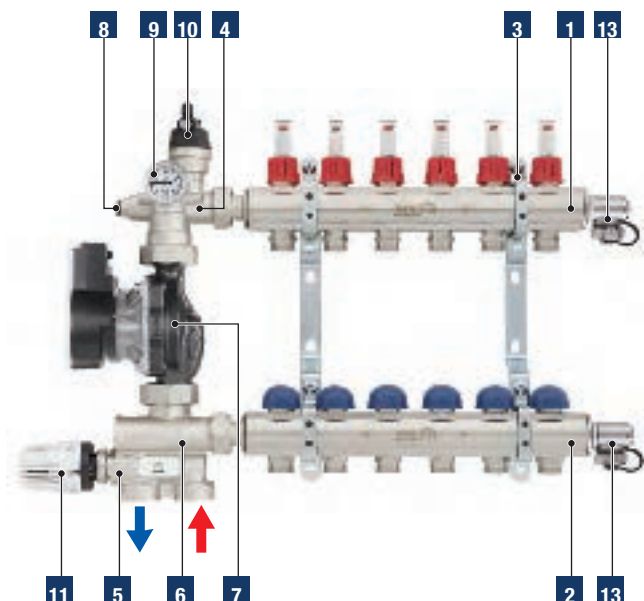
Application diagrams: see section on technical attachments.



CODE	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Pack pcs/box	Price €
9892X000	88	58	128	180	17	7	51	43	22	1	87,93

UFH MIXING CONTROLLER

PRE-ASSEMBLED REGULATION GROUP



Components

- | | |
|-----------|--|
| 1 | Flow bar for floor heating system with flow meters |
| 2 | Return bar for floor heating system set up to take electrothermic heads |
| 3 | Brackets for fixing manifolds |
| 4 | Housing for thermostat probe of security |
| 5 | Mixing valve thread M30x1,5 set up to thermostatic head (adjustment range 20 + 65 °C) with immersion probe |
| 6 | Adjusting valve and by-pass |
| 7 | Circulator pump (not supplied as standard) |
| 8 | Housing for temperature flow probe |
| 9 | Control thermometer from 0 to 80 °C |
| 10 | 1/2" Automatic bleed valve |
| 11 | Thermostatic head with immersion probe from 20 to 65 °C (fixed-point adjustment) |
| 12 | Non-return valve integrated (not shown in the figure) |
| 13 | Fill and discharge adjustable bibcocks with safety plug |

EN GENERAL CHARACTERISTICS

Max temperature for primary circuit: 90 °C

Max operating pressure: 6 bar

ΔP max for primary circuit: 1 bar

Secondary temperature range:

20÷65 °C (fixed-point regulation)

Thermal power exchangeable $\Delta T=7$ °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

Mixing group head threads: G 1" Female

Controller manifolds head threads: G 1" Female

Controller distribution manifolds takeoffs threads:

24x19 Male - centre distance 50 mm

Circulation pump connections:

pipe union 1"1/2 - centre distance 130 mm

USABLE FLUIDS

Cooling and heating water

Water and glycol: max 1:1

CONFORMITY

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)

Performance diagrams in Technical attachments

RANGE

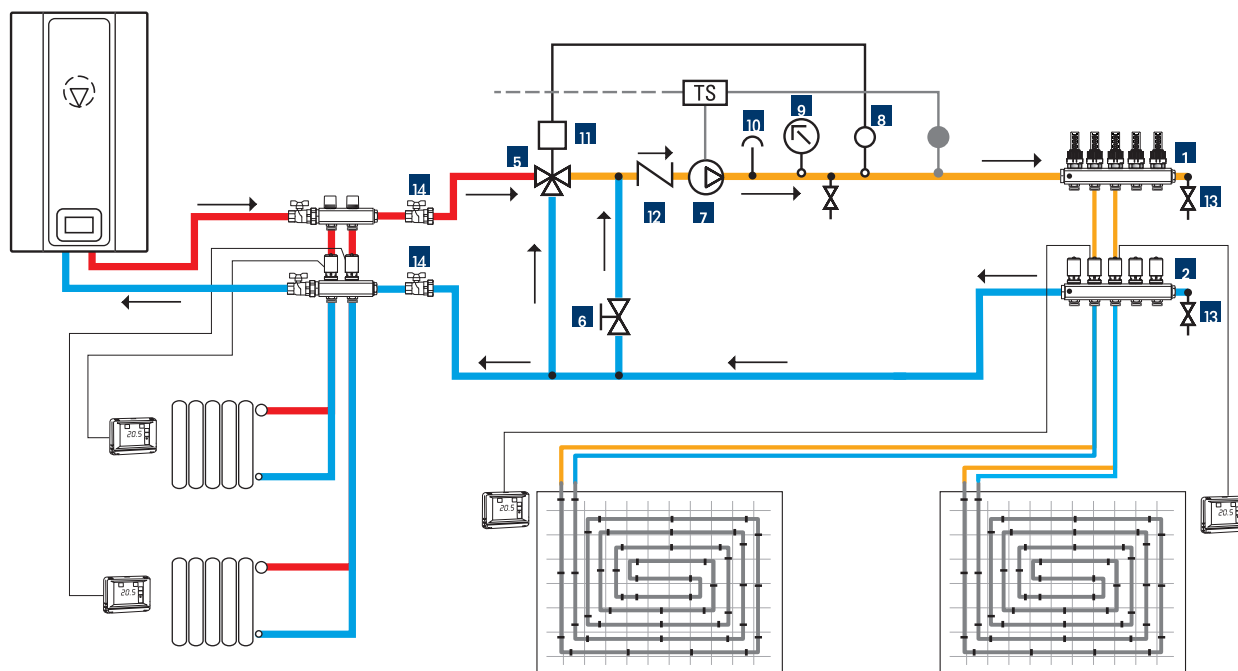
- UFH Mixing Controller:

Pre-assembled low temperature adjustment group (from 2 to 12 ways) with flow meter, without circulator pump

- UFH Mixing Controller:

Pre-assembled thermostatic group without circulator pump

Example of plumbing diagram



GP 2627
UFH MIXING CONTROLLER



Pre-assembled thermostatic regulation group with manifolds fitted with flow meters (4 l/min), low temperature, complete with thermostatic head with immersion probe.

Available only on request.

CODE	Size	No. Ways LOW temp.	A mm	D1	D2	Pack pcs/box	Price €
6284R002	2L	2	157	G 1"	M 24x19	1	462,00
6284R003	3L	3	207	G 1"	M 24x19	1	496,90
6284R004	4L	4	257	G 1"	M 24x19	1	531,60
6284R005	5L	5	307	G 1"	M 24x19	1	570,40
6284R006	6L	6	357	G 1"	M 24x19	1	603,00
6284R007	7L	7	407	G 1"	M 24x19	1	637,10
6284R008	8L	8	457	G 1"	M 24x19	1	673,50
6284R009	9L	9	507	G 1"	M 24x19	1	708,10
6284R010	10L	10	557	G 1"	M 24x19	1	758,20
6284R011	11L	11	607	G 1"	M 24x19	1	807,90
6284R012	12L	12	657	G 1"	M 24x19	1	844,20

GP 2627
UFH MIXING CONTROLLER



Pre-assembled thermostatic regulation group, complete with thermostatic head with immersion probe.

Available only on request.

CODE	D1	Pack pcs/box	Price €
6285R000	G 1"	1	266,40

GP 2799
ACCESSORIES



UFH Mixing Controller mixing valve

CODE	Size	Pack pcs/box	Price €
90055552		1	33,37

GP 2799
ACCESSORIES



Kit of security thermostat for mixing group.

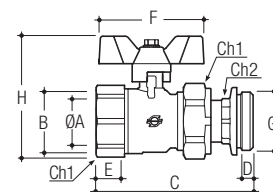
Available only on request.

CODE	Pack pcs/box	Price €
6288R000	1	113,90

GP 2240
ACCESSORIES



Kit for steel and brass manifolds consisting of 2 nickel-plated straight ball valves with Blue/Red butterfly handles, with pipe union.
Valve with reduced bore and ISO 228/1 thread.



CODE	Size	DN	ØA mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	Ch.1 mm	Ch.2 mm	gr	Pack pcs/box	Price €
6289R006	1"	20	20	1"	88,5	7	14,5	60,2	1"	68,8	38	24	-	1	53,68

Use the pair of red O-Rings for valve installation on Controller S steel manifolds, and the pair of black O-Rings for valve installation on Controller brass manifolds. Both pairs of O-Rings are supplied in the package.

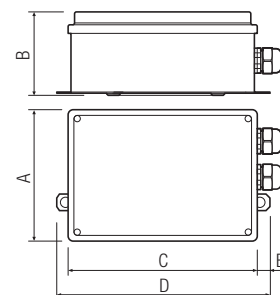
GP 2630
6T BASIC CONTROL UNIT



6T basic control unit - Electronic system for electrothermic heads.

TECHNICAL DATA

Optional 230 V or 24 V power supply - Direct powering of the electrothermic heads (at the same voltage supplied to the control unit) - Direct connection of the ambient thermostats (at the same voltage supplied to the control unit) - Connection of up to six electrothermic heads (configurable as high or low temperature) - Connection of up to six ambient thermostats - Connection for low-temperature circulator pump - Connection for boiler consent - Adjustable (30-60°C) safety thermostat - Contact for signalling safety thermostat intervention - Circulator pump anti-seizure function.



Application diagrams: see section on technical attachments.

Available only on request.

CODE	A mm	B mm	C mm	D mm	E mm	Pack pcs/box	Price €
9895X000	118	76	158	180	11	1	281,90

Electronic control system for electro-thermal heads.

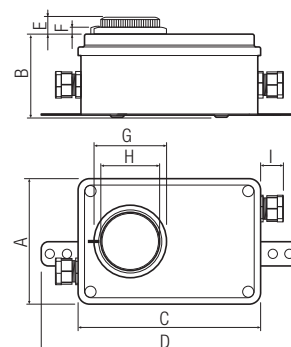
GP 2630
ELECTRICAL BOX



Electrical box with safety thermostat for wiring of low temperature circulation pump.

TECHNICAL DATA

Bulb length: 65 mm - Bulb diameter: 7 mm
Range of adjustment: 30÷60 °C ±3
Contacts capacity: 400 V 16(4) A - Differential: 4 °C

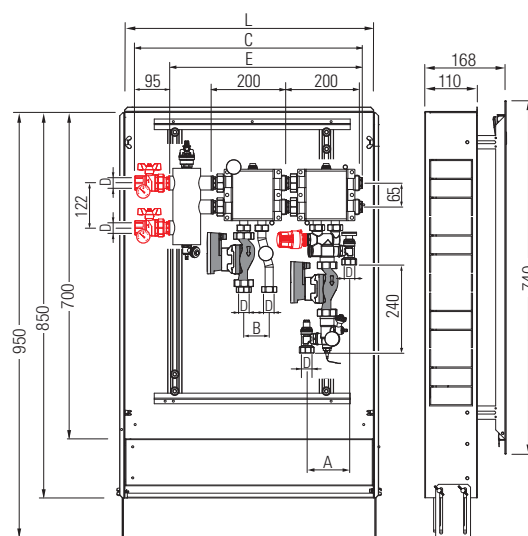
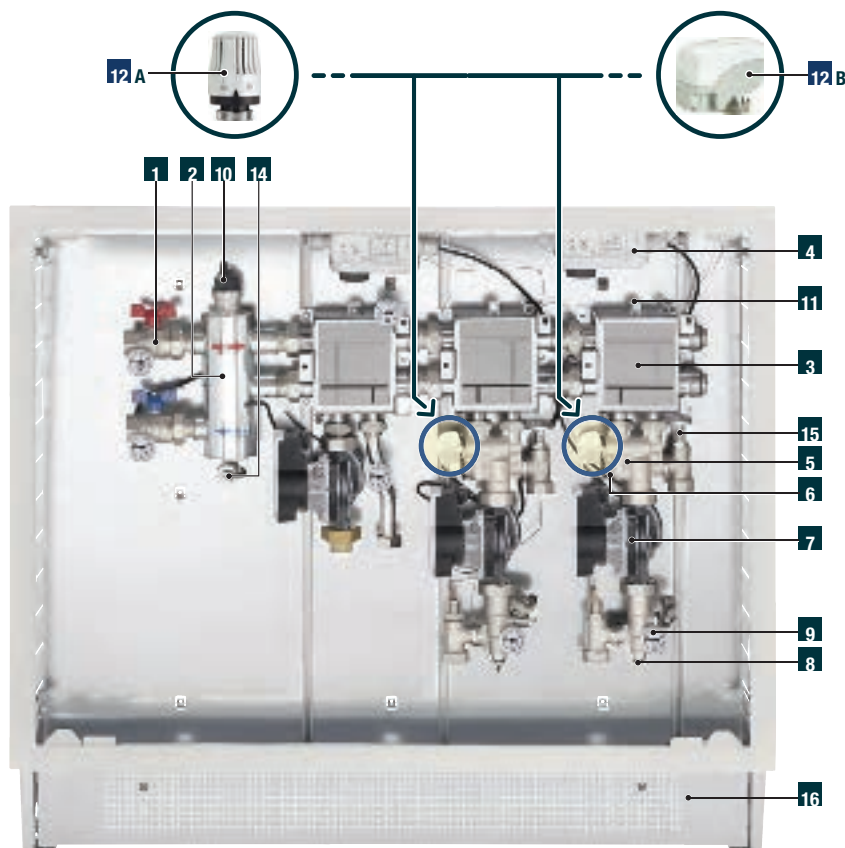


Application diagrams: see section on technical attachments.

CODE	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Pack pcs/box	Price €
9892X000	88	58	128	180	17	7	51	43	22	1	87,93

MODULAR MIXING GROUP

DISTRIBUTION MODULES FOR HIGH AND LOW TEMPERATURE SYSTEMS
(WITH FIXED POINT OR CLIMATIC ELECTRONIC)



Components

- | | |
|------|--|
| 1 | Ball valve kit (not supplied as standard) |
| 2 | Open manifold (where provided) |
| 3 | Distribution manifold |
| 4 | Electrical box with safety thermostat for wiring the low temperature circulation pump (not supplied as standard) |
| 5 | Mixing valve with thread M30x1.5 for installing a thermostatic head with immersion probe from 20 to 65 °C or an electric servomotor (not supplied as standard) |
| 6 | Calibration and by-pass valve |
| 7 | Electronic circulation pump Wilo Para 25/7 wired with tripolar cable L=1000 mm |
| 8 | Compartment for delivery 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 A | Regulation valve with thermostatic head with immersion probe from 20 to 65 °C (fixed-point regulation, not supplied as standard) |
| 12 B | Mixing valve with 3-point motorised valves or 0-10 Vdc (climatic regulation, not supplied as standard) |
| 13 | Non-return valve (not shown in the figure) |
| 14 | Drain/fill valves with swivel connection and safety cap (where provided) |
| 15 | Shutoff lockshield for thermometer compartment or return probe (climatic version) |
| 16 | Manifold cabinet (where provided) |

EN GENERAL CHARACTERISTICS

Threads UNI EN ISO 228/1

Distribution manifold head threads: 1"1/4 M - 1" F

Distribution manifold takeoffs threads: nut 1" F

Single zone takeoffs threads: 1" F

Maximum temperature of manifold: 110 °C

Maximum pressure: 10 bar

Circulation pump connections: pipe union 1"1/2
centre distance 130 mm

LOW TEMPERATURE MIXING GROUP

Maximum temperature of primary circuit: 90 °C

Maximum pressure: 6 bar

Max Δp of primary circuit: 1 bar

Mixing group adjustment field: 20÷65 °C (fixed point regul.)

Exchangeable thermal capacity (ΔT 7 °C, Δp usable 0.25 bar)

Fixed point regulation: 10 kW by-pass pos. 0

Fixed point regulation: 12.5 kW by-pass pos. 5

Pressure drops Mixing valve (fixed point regul.) Kv 3

Pressure drops with by-pass valve open

(fixed point regul.) Kvmax 4.8

Mixing group head threads: 1" Male

MATERIALS

Brass UNI EN 12168 CW614N

Brass UNI EN 12165 CW617N

Annealed copper

O-rings gaskets EPDM 70 Sh

CIRCULATION PUMP WILO PARA 25/7

Threads UNI EN ISO 228/1 G1"1/2

Centre distance: 130 mm

Max static pressure: 7 m

Max delivery capacity: 3.5 m³/h

Electrical connection 1~230 V, +10% / -15%, 50/60 Hz

Protection class IPX4D

Insulation class F

Rated motor power : 37 W

Energy consumption from 1~230 V: 8.2 ÷ 50 W

Current consumption at 1~230 V: 0.44 A

EEL<=0,2

USABLE FLUIDS

Cooling and heating water.

Water and glycol: max 1:1

CONFORMITY

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)

Performance diagrams in Technical attachments

THE RANGE

- Modular Mixing Group H:
distribution modules for high
temperature zones

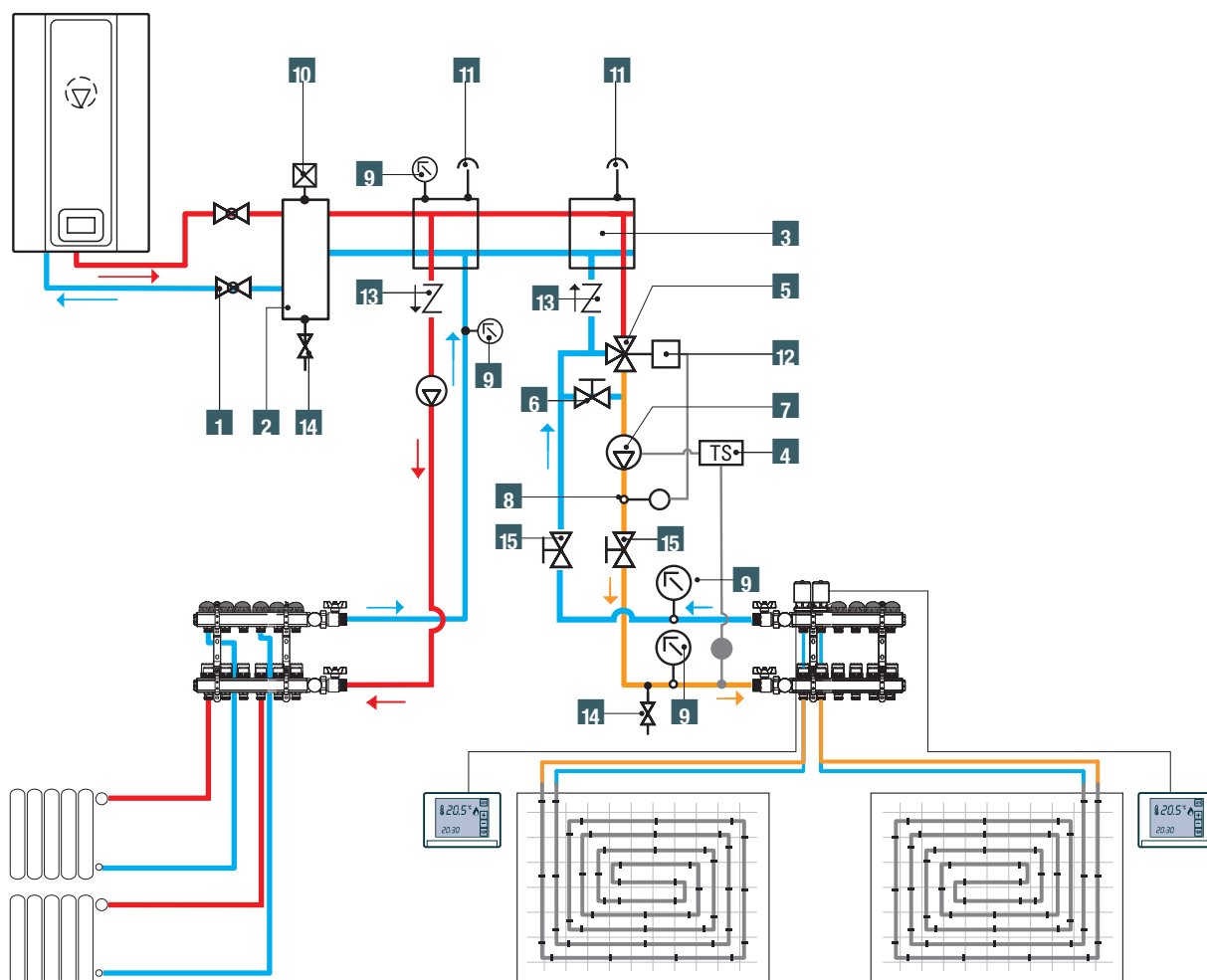
- Modular Mixing Group L:
distribution modules for low
temperature zones

- Modular Mixing Group H+L:
distribution modules for high
and low temperature zones

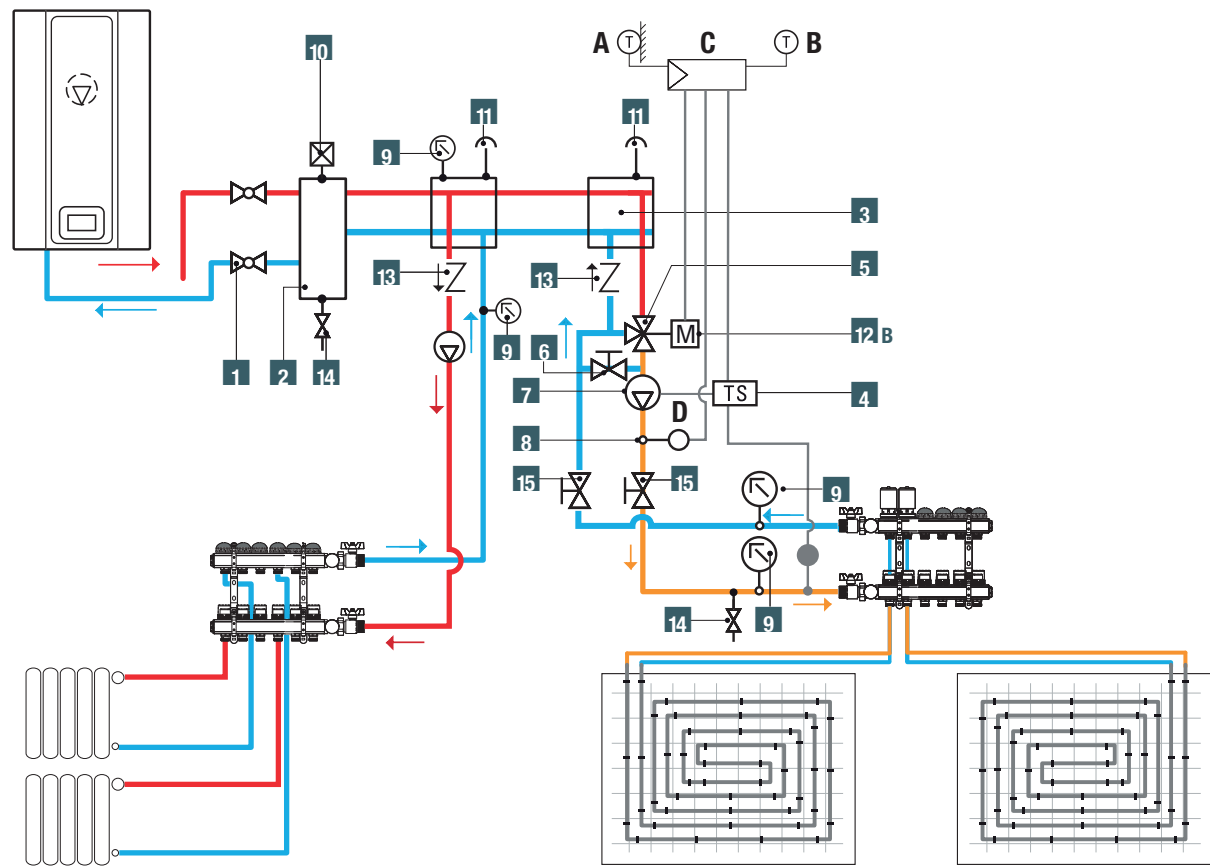
- Recessed distribution modules for
high/low temperature systems,
provided pre-assembled in metallic
box complete with door and frame
and coated doors

- Individual distribution modules,
to be assembled using joint nipples
M 1" - F 1"1/4

Hydraulic scheme for fixed-point group



Hydraulic diagram for climatic regulation group



A external probe B room probe C climatic regulator D flow probe

GP 2751
MODULAR MIXING GROUP

Distribution modules for High temperature heating systems with electronic circulation pumps and open manifold.

Available only on request.

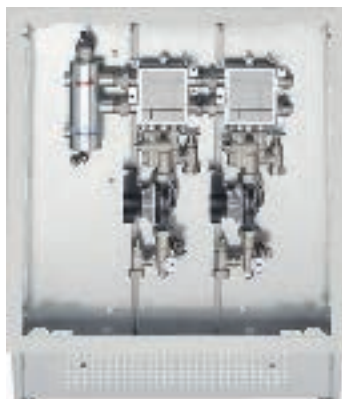


CODE	Size	L mm	A mm	B mm	C mm	D mm	E mm	Pack pcs/box	Price €
6313R001	1H	500	min 110 - max 120	min 60 - max 70	420	G 1" F	325	1	1.127,00
6313R002	2H	700	min 110 - max 120	min 60 - max 70	620	G 1" F	525	1	1.862,00
6313R003	3H	1000	min 110 - max 120	min 60 - max 70	820	G 1" F	725	1	2.721,00

Note: for proper built-in mounting we recommend you install the module at a distance of 135 mm between the back side of the box and wall wire.

Dimensions: See page 156 (introduction page Modular Mixing Group).

GP 2751
MODULAR MIXING GROUP



Distribution modules for low temperature heating systems with mixing valve, electronic circulation pumps and open manifold.

Available only on request.

Complete with:
- Thermostatic head with immersion probe code 90046760
or
- 3-point electric servomotor code 28157212
or
- 0-10 Vdc electric servomotor code 28157222

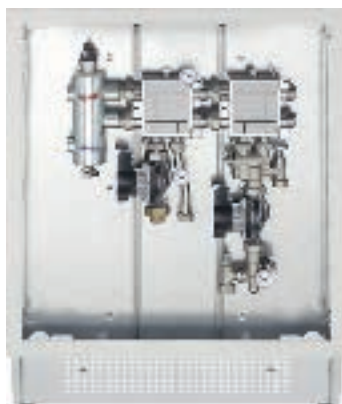
In case of installation of an electric servomotor, combine the RCE climatic regulation kit.

CODE	Size	L mm	A mm	B mm	C mm	D mm	E mm	Pack pcs/box	Price €
6313R004	1L	500	min 110 - max 120	min 60 - max 70	420	G 1" F	325	1	1.281,00
6313R005	2L	700	min 110 - max 120	min 60 - max 70	620	G 1" F	525	1	2.178,00
6313R006	3L	1000	min 110 - max 120	min 60 - max 70	820	G 1" F	725	1	3.168,00

Note: for proper built-in mounting we recommend you install the module at a distance of 135 mm between the back side of the box and wall wire.

Dimensions: See page 156 (introduction page Modular Mixing Group).

GP 2751
MODULAR MIXING GROUP



Distribution modules for combined (High + Low temperature) heating systems with mixing valve, electronic circulation pumps and open manifold.

Available only on request.

Complete with:
- Thermostatic head with immersion probe code 90046760
or
- 3-point electric servomotor code 28157212
or
- 0-10 Vdc electric servomotor code 28157222

In case of installation of an electric servomotor, combine the RCE climatic regulation kit.

CODE	Size	L mm	A mm	B mm	C mm	D mm	E mm	Pack pcs/box	Price €
6313R007	1H + 1L	700	min 110 - max 120	min 60 - max 70	620	G 1" F	525	1	2.049,00
6313R008	1H + 2L	1000	min 110 - max 120	min 60 - max 70	820	G 1" F	725	1	2.944,00
6313R009	2H + 1L	1000	min 110 - max 120	min 60 - max 70	820	G 1" F	725	1	2.821,00

Note: for proper built-in mounting we recommend you install the module at a distance of 135 mm between the back side of the box and wall wire.

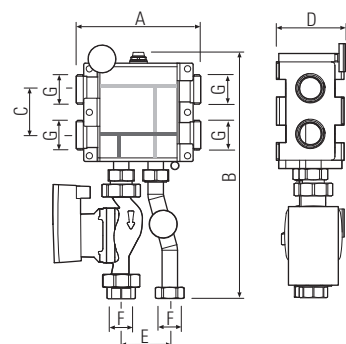
Dimensions: See page 156 (introduction page Modular Mixing Group).

GP 2751
MODULAR MIXING GROUP



Individual distribution module with electronic circulation pump, High temperature.

Available only on request.



CODE	Size	A mm	B mm	C mm	D mm	E mm	F	G	Pack pcs/box	Price €
6312R001	1H	178	351	65	96	min 60 - max 70	G 1" F	G 1" 1/4 M - G 1" F	1	678,60

Can be facing upwards or downwards. Delivered pre-assembled and facing downwards.

GP 2751
MODULAR MIXING GROUP

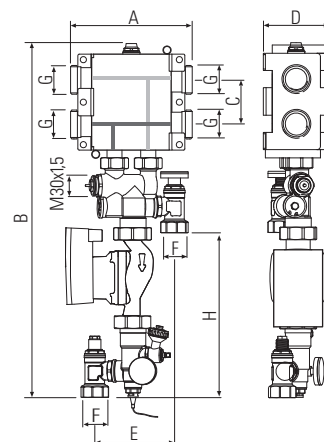


Individual distribution module with electronic circulation pump, Low temperature.

Available only on request.

Complete with:
- Thermostatic head with immersion probe code 90046760
or
- 3-point electric servomotor code 28157212
or
- 0-10 Vdc electric servomotor code 28157222

In case of installation of an electric servomotor, combine the RCE climatic regulation kit.



CODE	Size	A mm	B mm	C mm	D mm	E mm	F	G	H mm	Pack pcs/box	Price €
6312R002	1L	178	516	65	96	min 110 - max 120	G 1" F	G 1 1/4" M - G 1" F	240	1	842,50

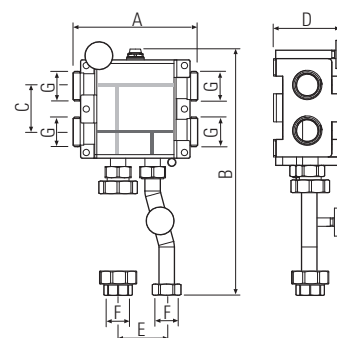
Can be facing upwards or downwards. Delivered pre-assembled and facing downwards.

GP 2751
MODULAR MIXING GROUP



Individual distribution module preset for circulation pump, High temperature.

Available only on request.



CODE	Size	A mm	B mm	C mm	D mm	E mm	F	G	Pack pcs/box	Price €
6199R100	1H	178	351	65	96	min 60 - max 70	G 1" F	G 1 1/4" M - G 1" F	1	334,60

Supplied with coupling to be installed downline of the circulator.

Connections for circulators: 1 1/2" F flat seal. Can be facing upwards or downwards.

GP 2751
MODULAR MIXING GROUP

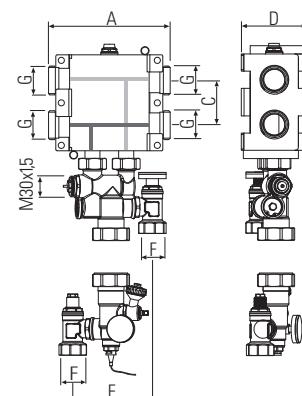


Individual distribution module preset for circulation pump, Low temperature.

Available only on request.

Complete with:
- Thermostatic head with immersion probe code 90046760
or
- 3-point electric servomotor code 28157212
or
- 0-10 Vdc electric servomotor code 28157222

In case of installation of an electric servomotor, combine the RCE climatic regulation kit.



CODE	Size	A mm	B mm	C mm	D mm	E mm	F	G	Pack pcs/box	Price €
6200R001	1L	178	-	65	96	min 110 - max 120	G 1" F	G 1 1/4" M - G 1" F	1	466,60

Supplied with coupling to be installed downline of the circulator. Connections for circulators: 1 1/2" F flat seal.

Can be facing upwards or downwards. Supplied pre-assembled facing downwards.

GP 2799
BLIND



Blind plug M, nickel-plated, with O-Ring EP 851.

CODE	Size	Pack pcs/box	Price €/pc
9683R006	1" M	20	4,35

GP 2799
INSULATING SHELL



Insulating shell for 1 High zone distribution modules.

CODE	Size	Pack pcs/box	Price €
01306566	1A	1	38,42

GP 2799
INSULATING SHELL



Insulating shell for 1 Low zone distribution modules.

CODE	Size	Pack pcs/box	Price €
01306568	1B	1	56,02

GP 2799
INSULATING SHELL



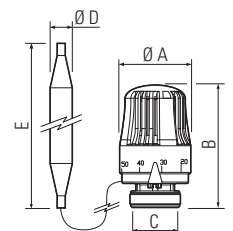
Insulating shell for open manifold.

CODE	Size	Pack pcs/box	Price €
01306564	-	1	29,08

GP 2700
THERMOSTATIC HEAD



Thermostatic head with immersion probe for fixed-point adjustment.
Adjustment range: 20-65 °C / threaded connection size: M30x1.5.



CODE	ØA mm	B mm	C	ØD mm	E mm	Pack pcs/box	Price €
90046760	48	87	M30x1,5	11	111	1	39,11

GP 2630
ELECTRIC SERVOMOTOR



Floating electric 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: 150 s (at 50/60 Hz, regarding a stroke of 2.5 mm)
Nominal force: 100 N / Degree of protection: IP40 according to EN 60529
Insulation class: II according to EN 60730 / Threaded fitting size: M30x1.5

Available only on request.

CODE

	Pack pcs/box	Price €
28157212	1	301,00

GP 2630
ELECTRIC SERVOMOTOR



Floating electric 0-10 V DC 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 stroke: 5.5 mm
Stroke time: 150 s (at 50/60 Hz, regarding a stroke of 2.5 mm)
Nominal force: 100 N / Degree of protection: IP40 according to EN 60529
Insulation class: III according to EN 60730 / Threaded fitting size: M30x1.5

Available only on request.

CODE

	Pack pcs/box	Price €
28157222	1	380,70

GP 2630
6T BASIC CONTROL UNIT



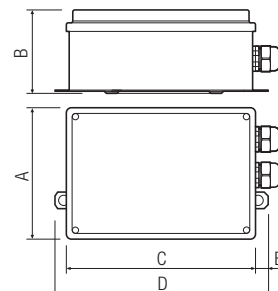
6T basic control unit - Electronic system for electrothermic heads.

TECHNICAL DATA

Optional 230 V or 24 V power supply - Direct powering of the electrothermic heads (at the same voltage supplied to the control unit) - Direct connection of the ambient thermostats (at the same voltage supplied to the control unit) - Connection of up to six electrothermic heads (configurable as high or low temperature) - Connection of up to six ambient thermostats - Connection for low-temperature circulator pump - Connection for boiler consent - Adjustable (30-60°C) safety thermostat - Contact for signalling safety thermostat intervention - Circulator pump anti-seizure function.

Application diagrams: see section on technical attachments.

Available only on request.



CODE	A mm	B mm	C mm	D mm	E mm	Pack pcs/box	Price €
9895X000	118	76	158	180	11	1	281,90

Electronic control system for electro-thermal heads.

GP 2630
ELECTRICAL BOX

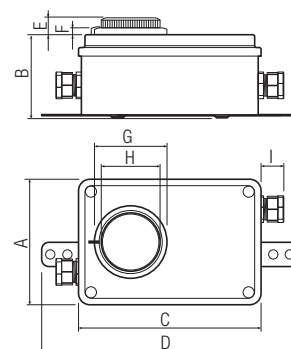


Electrical box with safety thermostat for wiring of low temperature circulation pump.

TECHNICAL DATA

Bulb length: 65 mm - Bulb diameter: 7 mm
Range of adjustment: 30+60 °C ± 3
Contacts capacity: 400 V 16(4) A - Differential: 4 °C

Application diagrams: see section on technical attachments.



CODE	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Pack pcs/box	Price €
9892X000	88	58	128	180	17	7	51	43	22	1	87,93



Regulation and control 4



pages 166

**FIV Touch Wi-Fi
chronothermostat**



page 169

**Regolo Evo
mechanical
thermostat**



page 167

**FIV Touch Evo
chronothermostat**



page 170

**Recessed
electronic humidistat**



page 168

**FIV Touch Evo
thermostat**



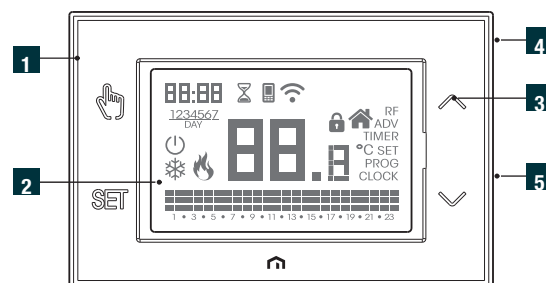
page 171

**RCE
climatic regulator kit**


TOUCH SCREEN

FIV TOUCH Wi-Fi with battery

BATTERY-POWERED WI-FI WEEKLY CHRONOTHERMOSTAT



Components

- 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

GENERAL CHARACTERISTICS

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 mode: summer / winter / off
 Type of regulation: ON / OFF or proportional
 Differential: $0.1 \pm 1^\circ\text{C}$
 Programming: weekly, minimum interval 1 hour
 Settable temperatures: 3 + manual + antifreeze
 Settable setpoint: $2 \pm 50^\circ\text{C}$ - Resolution of measured temperature: 0.1°C
 Measurement accuracy: 0.5°C
 Antifreeze temperature (excludable): $1 \pm 50^\circ\text{C}$
 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
 Blue backlit touch screen
 Operating temperature: $0 \pm 50^\circ\text{C}$
 Storage temperature: $-10 \pm 65^\circ\text{C}$
 Operating humidity: $20\% \pm 90\%$ 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 seasonal energy efficiency of environment heating in%: 2%

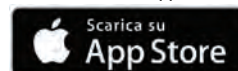
FIV TOUCH APP

The FIV TOUCH 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 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

Free FIV TOUCH App available for iOS and Android systems



Compatible with Google Home and Amazon Echo



FIV TOUCH

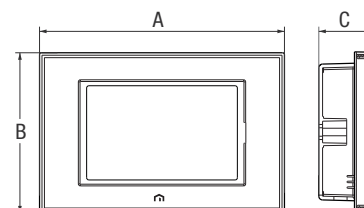


GP 2512
FIV TOUCH Wi-Fi with battery



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.

Article available while stocks last.

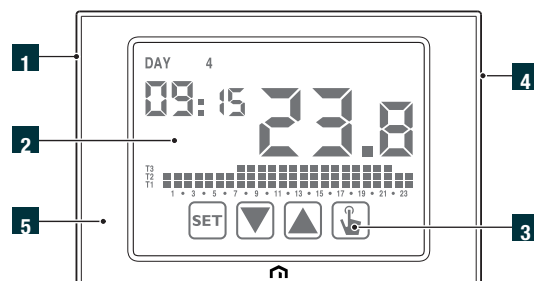


CODE	Model	A mm	B mm	C mm	Pack pcs/box	Price €
6104R008	FIV TOUCH Wi-Fi, battery-powered	130	85	28	1	242,50



FIV TOUCH EVO

WEEKLY CHRONOTHERMOSTAT WITH BACKLIT TOUCH SCREEN



Components

- 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 Touch-screen keyboard in the lower part of the display
- 4 Terminal block on the back of the device for charging and power connection
- 5 Frame

GENERAL CHARACTERISTICS

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: $0,1^\circ\text{C}$
 Measurement accuracy: $0,5^\circ\text{C}$ - 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 Vac POWER SUPPLY

Power supply: 230 Vac ($-15\% \div +10\%$) 50/60Hz,
 maximum consumption: 6 VA / 230 Vac
 Touch screen with multi-colour backlighting (can be deactivated)
 Relay capacity at 250 Vac: 5 A

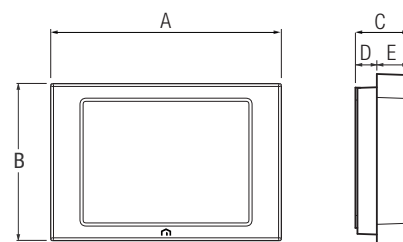
Wiring diagrams: see in the Technical Attachments section.

GP 2512
FIV TOUCH EVO



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.

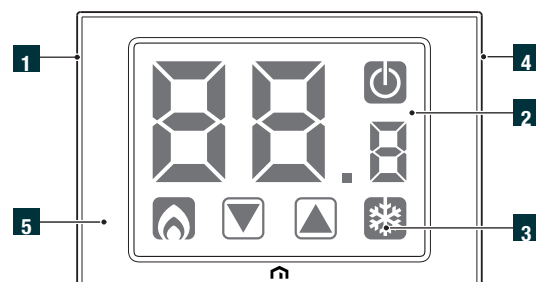
Article available while stocks last.



CODE	Model	A mm	B mm	C mm	Pack pcs/box	Price €
6104R003	FIV TOUCH EVO Chronothermostat, 230 Vac power supply	125	85	26	1	199,30

FIV TOUCH EVO

ELECTRONIC THERMOSTAT WITH BACKLIT TOUCH SCREEN



Components

- | | |
|---|--|
| 1 | Plastic base for wall installation or to cover the 3-module recessed box |
| 2 | Large backlit display for viewing the measured temperature |
| 3 | Touch-screen keys 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 |

GENERAL CHARACTERISTICS

Installation: wall or cover on standard 503 type box
Operating mode: summer/winter/off
Control type: ON/OFF or proportional
Differential: $0.1 \div 1 \text{ }^{\circ}\text{C}$ - Settable setpoint: $2 \div 50 \text{ }^{\circ}\text{C}$
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: $0 \div 50 \text{ }^{\circ}\text{C}$
Storage temperature: $-10 \div 65 \text{ }^{\circ}\text{C}$
Operating humidity: $20\% \div 90\%$ 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 Vac POWER SUPPLY

Power supply: 230 Vac ($-15\% \div +10\%$) 50/60Hz,
 maximum consumption: 6 VA / 230 Vac
 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 $3 \text{ }^{\circ}\text{C}$.

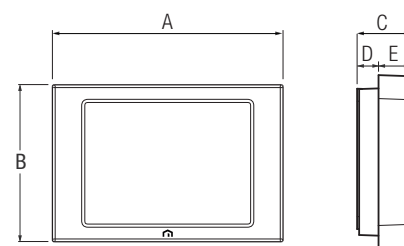
Wiring diagrams: see in the Technical Attachments section.

GP 2512
FIV TOUCH EVO



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 in mains or battery powered versions.

Article available while stocks last.



CODE	Model	A mm	B mm	C mm	Pack pcs/box	Price €
6104R006	FIV TOUCH EVO Thermostat, 230 Vac power supply	125	85	26	1	156,20
6104R005	FIV TOUCH EVO Thermostat, battery-powered	125	85	26	1	156,20

REGOLO EVO

MECHANICAL THERMOSTAT



EN GENERAL CHARACTERISTICS

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: $\Delta T \leq 1^\circ\text{C}$

Thermal gradient: 1 °C/15 min

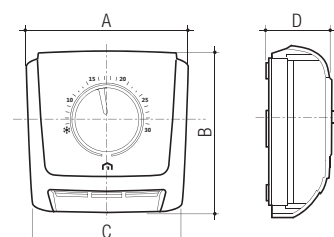
Delegated Regulation (EU) n. 811/2013; annex IV-3:

- 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%

GP 2792
REGOLO EVO

Mechanical ambient thermostat.



CODE	A mm	B mm	C mm	D mm	Type	Pack pcs/box	Price €
6323R001	83,7	82,9	76,5	30,9	3 contacts without signal light	1	24,83
6323R002	83,7	82,9	76,5	30,9	3 contacts with signal light	1	26,67
6323R003	83,7	82,9	76,5	30,9	3 contacts with signal light and on/off switch	1	31,53
6323R004	83,7	82,9	76,5	30,9	2 contacts with signal light and winter/summer switch	1	33,06

RECESSED ELECTRONIC HUMIDISTAT



EN GENERAL CHARACTERISTICS

- Power supply:
- 230 Vac (-15% + +10%) 50/60Hz
 - absorption: 4VA (0.7 W)
- Installation on 3 modules box (503 type)
- Terminals:
- 3 terminals for 1.5 mm cables for bistable output relay 5A / 250 Vac
 - 2 terminals for 1.5 mm cables for power supply
- Output: bistable relay 5(3)A / 250 Vac
- Minimum time between a switching and the next one: 1 minute
- Regulation type: on/off with fixed differential of $\pm 2,5\%$ RH
- Adjustment range: 30% - 90% RH
- 2-position selector switch: always off or automatic
- Storage temperature: -10 °C + +60 °C
- Operating humidity: 20+90% non condensing
- Protection degree: IP40 front
- Provided with LEDs to indicate operation status and error

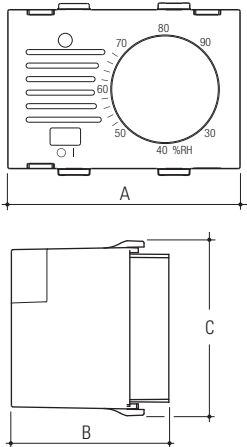
ADAPTABLE PLATES

- The adapters inside the box allow assembly 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

GP 2630
ELECTRONIC HUMIDISTAT



230 Vac 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).



CODE	A mm	B mm	C mm	Pack pcs/box	Price €
ARTICLE WITH GROUP PERSONALISATION					
28154581	69	51	50	1	216,50

RCE CLIMATIC REGULATOR

CLIMATIC REGULATOR KIT FOR MIXING UNITS



Components	Pcs
1 RCE climatic regulator	1
2 NTC temperature probes (*)	2
3 Probe-holder kit	1
4 Wall plug for display	1
5 Male/Female connector kit for display extension cable (connectors for 4-pin MSTB printed circuit boards)	1

(*) Use one of the two probes as flow temperature probe;
the other probe is to be used as a return probe (when used in "modulating" operation mode) or as outdoor probe
(when operating in "climatic" operation mode) in conjunction with the case provided separately.

CLIMATIC REGULATOR RCE

The RCE climatic regulator is an intelligent and automatic control system of all heating and air conditioning functions of small and medium-sized, both floor-assembled and/or radiant ceiling, and high temperature installations (radiators, fan coils), such as houses, apartments, offices, shops, etc., managing all the functions necessary for the climate control of the mixing system.

The regulator is also able to handle centralised systems in two different modes:

- with a single mixing valve in a thermal power plant;
- with a regulator and a mixing valve (mixing unit) in every apartment.

MAIN FUNCTIONS

- Only heating / Only cooling / Both
- High temperature (radiators)/ Low temperature (radiant panels)
- Flow temperature: Fixed point / Modulating / Temperature control
- Security function condensation in cooling mode
- Safety thermostat function
- System on/off via thermostats or home automation systems
- On/Off by remote command
- Season change from remote control

EN

GENERAL FEATURES

- Power supply: 110-230 Vac $\pm 10\%$, 50/60 Hz
- Double insulation
- Contacts capacity: 5A / 230 Vac
- Protection degree: IP20
- It can be fastened on DIN (EN 60715) rail according to DIN 43880 standard
- Regulator material: Self-extinguishing PPO
- Regulator colour: grey RAL 7035
- Size: 6 DIN modules (95 x 105 x 82 mm)
- Display material: PC/ABS
- Display colour: white
- Supplementing regulation (EU) n. 811/2013; annex IV-3 (only for EU countries):
 - Class of the temperature control device: Class 3; Class III
 - Contribution of the temperature control device to 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 output to a floating servomotor 3 points (the RCE regulator can manage only one servomotor)
- 1 analogic output to a modulating servomotor 0-10 V (the RCE regulator can manage only one servomotor)

TECHNICAL DATA OF TEMPERATURE PROBES

- Type: NTC, 10K Ω at 25 $^{\circ}\text{C}$; IP68
- Cable length: 3 m / probe length 50 mm / probe diameter 6 mm

TECHNICAL DATA OF THE WALL PLUG FOR DISPLAY

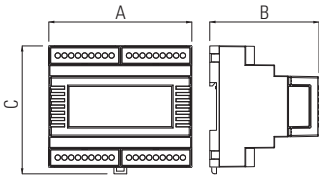
- Fixing on 503 standard box

GP 2518
CLIMATIC REGULATOR



RCE Climatic regulator kit.

Available only on request.



CODE	A mm	B mm	C mm	Pack pcs/box	Price €
9951R503	105	82	95	1	429,90

GP 2730
HOUSING



Housing equipped with cable gland for external probe in white colour, self-extinguishing ABS.
Dimensions: 80x80x25 mm

Available only on request.

CODE	Pack pcs/box	Price €
9954R001	1	23,68

GP 2630
DEW SENSOR



Dew sensor.

To be used in the event that the climatic regulator RCE for mixing units operates also in cooling mode.
Order one dew sensor for each system delivery manifold.

TECHNICAL DATA

Power supply: 15 Vdc $\pm$ 10%

RH% of intervention: 90-95%

Probe length: 1,5 m

Dimensions (LxHxP) 50x10x15 mm.

Available only on request.

CODE

	Pack pcs/box	Price €
28139078	1	119,50

GP 2630
TRANSFORMER



Transformer 230/24 Vac 10 VA

To be used to power maximum two converters per dew sensor or to power 0-10V / 24 Vac servomotors
(the number of servomotors that can be powered depends on the load required).

TECHNICAL DATA:

230/24 V / P = 10 VA / F = 50/60 Hz

Dimensions: Depth 64,8 mm / Width 35 mm

Available only on request.

CODE

	Pack pcs/box	Price €
9953R900	1	44,50



Connection and control

OF HEATING UNITS

5



page 178

Ghibli
manual radiator
valve



page 189

Oasi
thermostatic
radiator valve



page 180

Ghibli
thermostatic
radiator valve



page 191

Oasi
thermostatic
radiator valve



page 182

Ghibli
thermostatic
radiator valve



page 193

Lockshields
for Oasi and
Ghibli valves



page 184

Ghibli-D
kit dynamic
thermostatic and
lockshield valve



page 196

ClimaticEVO
thermostatic
head



page 185

Oasi Plus
thermostatic
radiator valve



page 198

**Climatic and
Climatic Eco**
thermostatic
heads



page 187

Oasi
manual radiator
valve



page 201

Stand alone
chronothermostatic
actuator

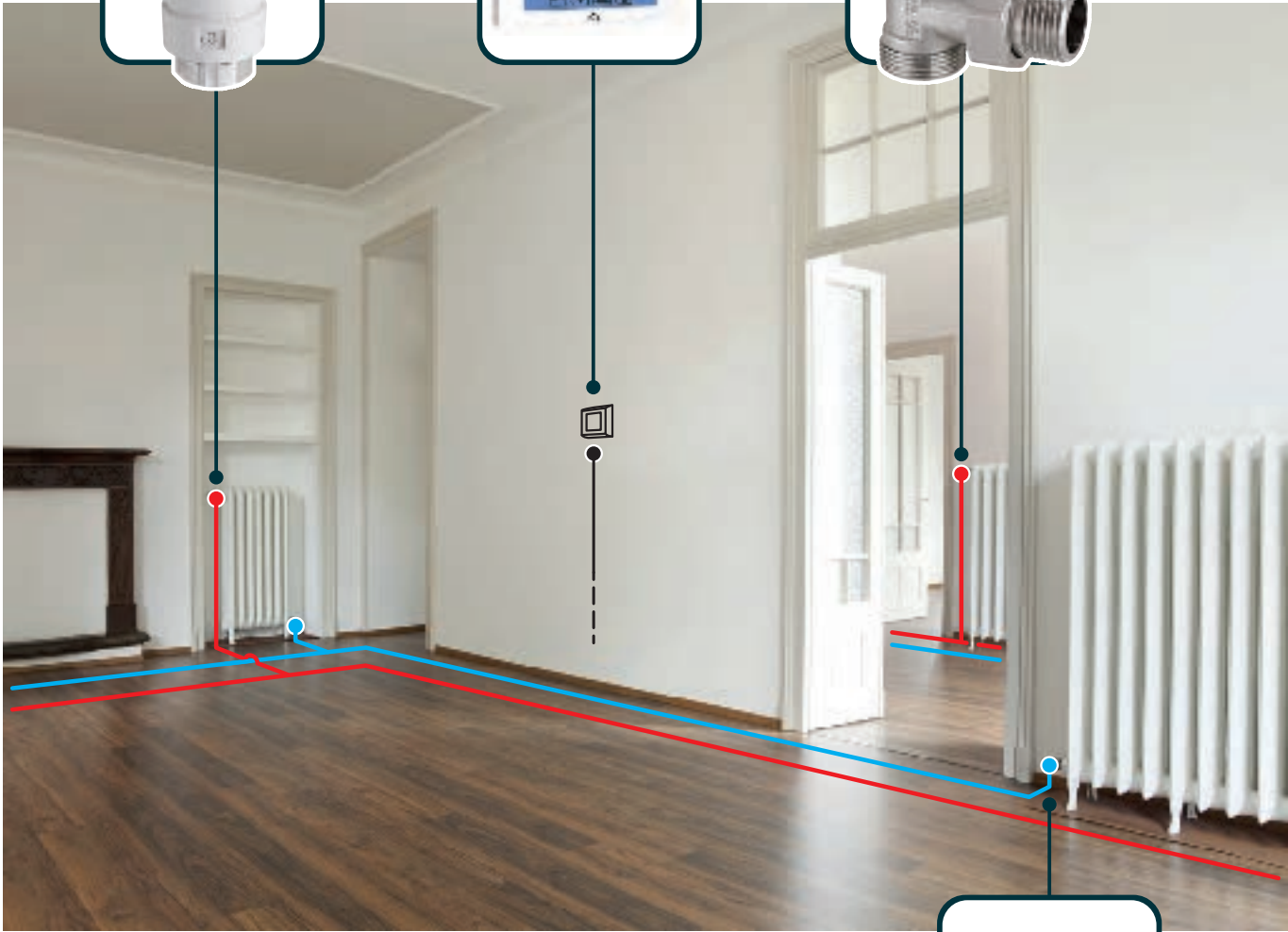
ClimaticEVO



FIV TOUCH EVO



OASI PLUS valve



Lockshields

Comfort and efficiency with the FIV heating system

To complete the heating system, FIV offers a wide range of valves and lockshields for radiators, which can be used for the connection and interception of radiators, thermal convectors and fan coil units which can be installed on any kind of pipe: copper, galvanized steel, plastic or multi-layer tubes, using the relative seal systems.

OASI AND GHIBLI VALVES AND LOCKSHIELDS

Oasi and Ghibli valves are available in the following versions: manually, thermostatable, thermostatic with or without radiator seal O-ring.

OASI AND GHIBLI THERMOSTATABLE AND THERMOSTATIC

Oasi and Ghibli thermostatable or thermostatic valves are standard equipped with a thermostatic shutter. Therefore, it is suitable for installation on a thermostatic head so as to make the heating component fully autonomous, with independent and automatic ambient temperature adjustment. This makes for rational comfort control and energy savings.

Production quality guarantee

The highly automated production system of the valves and lockshields allows for a high quality standard to be achieved, ensuring the constancy of the construction and fluid-dynamic characteristics of an entire production batch.

The leak test is conducted during the automatic assembly phase on each component, using a special electro-pneumatic station. Additional tests are carried out at the hydraulic workbench to check the performance in critical operating conditions.

Simple and intuitive use aimed at saving

To control the temperature in each room, FIV provides precision thermostats and chronothermostats for domestic use, sensitive to the climatic variations of the environment where they are located.

The sensitivity of the thermostat is essential: it must react well and promptly to temperature changes, such as, for example, those produced by human heat (many people in one room), by the fire of a fireplace, the kitchen oven or the gas stove.

Or by the heat of the sun. It must be able to maintain the set temperature permanently and precisely, without causing sudden changes.

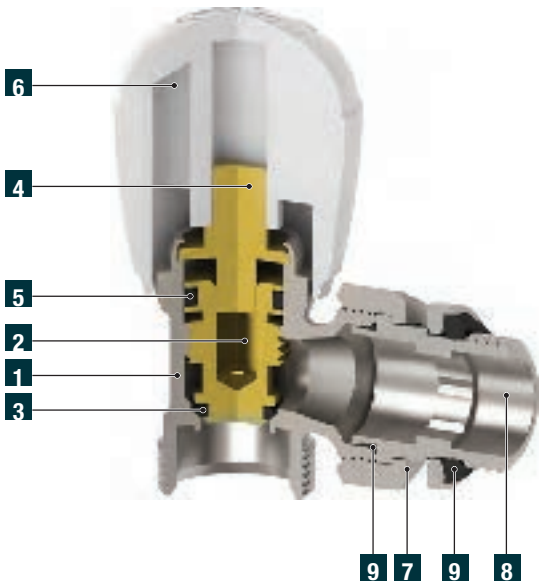
THERMOSTATS AND CHRONOTHERMOSTATS

The operation of the thermostat consists in turning the boiler on and off only in function of the temperature, thus keeping the house at a certain temperature.

The mechanical thermostat Regolo Evo is a device used on a large scale and in different contexts, which is used to measure and adjust the temperature with the aim of keeping the temperature constant in the room where it is installed.

The function of the chronothermostat also takes into account the time period set, that is to keep the house at that temperature for a certain time.

The chronothermostat FIV Touch Evo, with weekly programming, is simple and intuitive, and represents the ideal solution to avoid heat and energy waste and therefore money.



Components		Pcs	Material
1	Body	1	UNI EN 12165 CW617N
2	Shutter	1	UNI EN 12164 CW617N
3	O-ring for shutter seal	1	EPDM
4	Rod	1	UNI EN 12164 CW617N
5	Upper O-ring for shutter seal	1	EPDM
6	Knob	1	ABS white RAL 9003
7	Nut	1	UNI EN 12165 CW617N
8	Tang	1	UNI EN 12164 CW617N
9	O-ring for tang seal	1	NBR

EN GENERAL CHARACTERISTICS
Nut and tang thread: UNI EN ISO 228-1
Male valve body thread: gas 24x19
(24 mm diameter and 19 threads per inch)
Female valve body thread: UNI EN ISO 228-1
Large capacity

The tang with radiator seal is also available with NBR O-ring.

OPERATING CONDITIONS
Max working pressure: 10 bar.
Max differential pressure: 1 bar.
Max working temperature: +100 °C.
Pressure drops: see diagram on Technical Attachments.

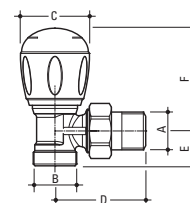
For single-piece seals, threaded 24x19 and 1/2", see chapter 6 "Seals and screw fittings".

For accessories, see section "Accessories for Oasi and Ghibli valves".

GP 2712
GHIBLI



Manual right-angle valve for copper, multi-layer, PE-X, PP, PB pipes.



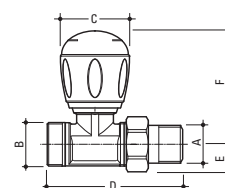
CODE	A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
24x19 CONNECTION									
6251R004	3/8"	24x19	37,5	46	19	55	10	25	10,15
6124R004	1/2"	24x19	37,5	44	19	55	10	25	10,33
6251R104	with O-R	3/8"	24x19	37,5	52	19	55	10	11,67
6124R104	with O-R	1/2"	24x19	37,5	48	19	55	10	11,79
1/2" CONNECTION									
6163R004	3/8"	1/2"	37,5	44	19	55	10	25	10,96
6167R004	1/2"	1/2"	37,5	44	19	55	10	25	10,70
6163R104	with O-R	3/8"	37,5	44	19	55	10	25	11,00
6167R104	with O-R	1/2"	37,5	48	19	55	10	25	11,87
3/4" CONNECTION									
6263R104	with O-R	3/4"	37,5	60	22	54,5	10	20	20,85

GP 2712
GHIBLI



Manual straight valve for copper, multi-layer, PE-X, PP, PB pipes.

(*) Articles available while stocks last.

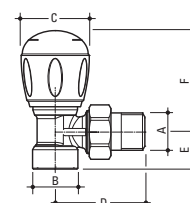


CODE	A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
24x19 CONNECTION									
6257R004	3/8"	24x19	37,5	65	14	62		25	13,14
6204R004	1/2"	24x19	37,5	70	15	62	10	25	14,19
6257R104	3/8"	24x19	37,5	70	14	62		25	14,04
6204R104	with O-R	1/2"	24x19	37,5	75	15	62	10	15,89
1/2" CONNECTION									
6208R004 (*)	1/2"	1/2"	37,5	69	15	62	10	25	15,11
6208R104 (*)	with O-R	1/2"	37,5	74	15	62	10	25	16,36

GP 2712
GHIBLI



Manual right-angle valve for steel pipe.

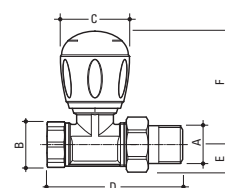


CODE	A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
6253R004	3/8"	3/8"	37,5	46	23	54	10	25	10,32
6126R004	1/2"	1/2"	37,5	44	20,5	54,5	10	25	10,74
6253R104	with O-R	3/8"	37,5	52	23	54	10	25	11,44
6126R104	with O-R	1/2"	37,5	49	20,5	54,5	10	25	12,02
6265R104	with O-R	3/4"	37,5	60	25,5	54,5	10	20	21,17

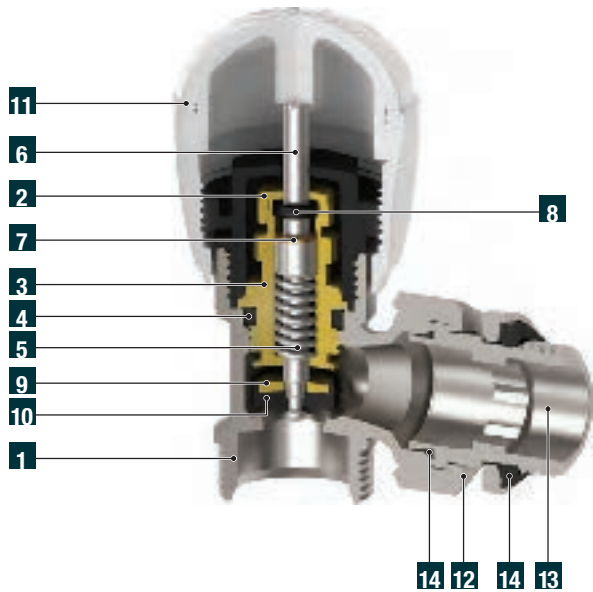
GP 2712
GHIBLI



Manual straight valve for steel pipe.



CODE	A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
6206R004	1/2"	1/2"	37,5	70	15	62	10	25	14,21
6206R104	with O-R	1/2"	37,5	75	15	62	10	25	16,85



Components	Pcs	Material
1 Body	1	UNI EN 12165 CW617N
2 Ring nut	1	PA6 (30% FV)
3 Shutter	1	UNI EN 12164 CW617N
4 O-ring for shutter seal	1	NBR
5 Spring	1	AISI 302 stainless steel
6 Rod	1	AISI 304 stainless steel
7 Shutter ring	1	UNI EN 12164 CW617N
8 O-Ring for rod seal	1	EPDM
9 Washer for gasket	1	UNI EN 12164 CW617N
10 Shutter gasket	1	NBR
11 Knob	1	ABS white RAL 9003
12 Nut	1	UNI EN 12165 CW617N
13 Tang	1	UNI EN 12164 CW617N
14 O-ring for tang seal	1	NBR

EN

GENERAL CHARACTERISTICS

Nut and tang thread: UNI EN ISO 228-1
Male valve body thread: gas 24x19
(24 mm diameter and 19 threads per inch)
Female valve body thread: UNI EN ISO 228-1
Large capacity

The tang with radiator seal is also available with NBR O-ring.

OPERATING CONDITIONS

Max working pressure: 10 bar.
Max differential pressure: 1 bar.
Max working temperature: +100 °C.

Pressure drops: see diagram on Technical Attachments.

Note: can be combined with Climatic thermostatic heads and electrothermic heads.

To transform the thermostatic Ghibli valves into thermostatic ones (3/8" and 1/2" models only, not applicable to 3/4" models), see in the Technical Attachments.

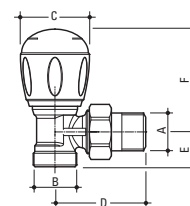
For single-piece seals, threaded 24x19 and 1/2", see chapter 6 "Seals and screw fittings".

For accessories, see section "Accessories for Oasi and Ghibli valves".

GP 2714
GHIBLI



Thermostatic right-angle valve for copper, multi-layer, PE-X, PP, PB pipes.

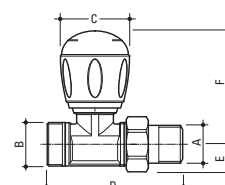


CODE		A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
24x19 CONNECTION										
6255R004		3/8"	24x19	37,5	46	19	59	10	25	13,74
6157R004		1/2"	24x19	37,5	44	19	59	10	25	14,19
6255R104	with O-R	3/8"	24x19	37,5	52	19	59	10	25	13,78
6157R104	with O-R	1/2"	24x19	37,5	48	19	59	10	25	15,60
1/2" CONNECTION										
6164R004		3/8"	1/2"	37,5	44	19	59	10	25	13,03
6168R004		1/2"	1/2"	37,5	44	19	59	10	25	12,30
6164R104	with O-R	3/8"	1/2"	37,5	44	19	59	10	25	13,05
6168R104	with O-R	1/2"	1/2"	37,5	48	19	59	10	25	13,58
3/4" CONNECTION										
6267R104	with O-R	3/4"	3/4"	37,5	60	22	59	10	20	27,36

GP 2714
GHIBLI



Thermostatic straight valve for copper, multi-layer, PE-X, PP, PB pipes.



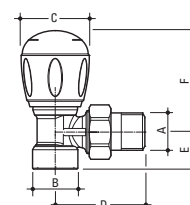
(*) Articles available while stocks last.

CODE		A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
24x19 CONNECTION										
6262R004		3/8"	24x19	37,5	65	14	67	10	25	16,35
6210R004		1/2"	24x19	37,5	70	15	67	10	25	17,79
6262R104	with O-R	3/8"	24x19	37,5	70	14	67	10	25	17,39
6210R104	with O-R	1/2"	24x19	37,5	75	15	67	10	25	19,05
1/2" CONNECTION										
6212R004	(*)	1/2"	1/2"	37,5	69	15	67	10	25	19,74
6212R104	(*) with O-R	1/2"	1/2"	37,5	74	15	67	10	25	21,02

GP 2714
GHIBLI



Thermostatic right-angle valve for steel pipe.

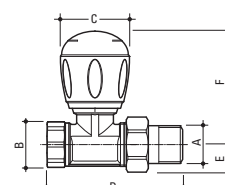


CODE		A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
6256R004		3/8"	3/8"	37,5	46	23	55	10	25	13,56
6158R004		1/2"	1/2"	37,5	44	20,5	59,5	10	25	13,93
6256R104	with O-R	3/8"	3/8"	37,5	52	23	55	10	25	13,58
6158R104	with O-R	1/2"	1/2"	37,5	49	20,5	59,5	10	25	15,30
6268R104	with O-R	3/4"	3/4"	37,5	60	25,5	59,5	10	20	27,70

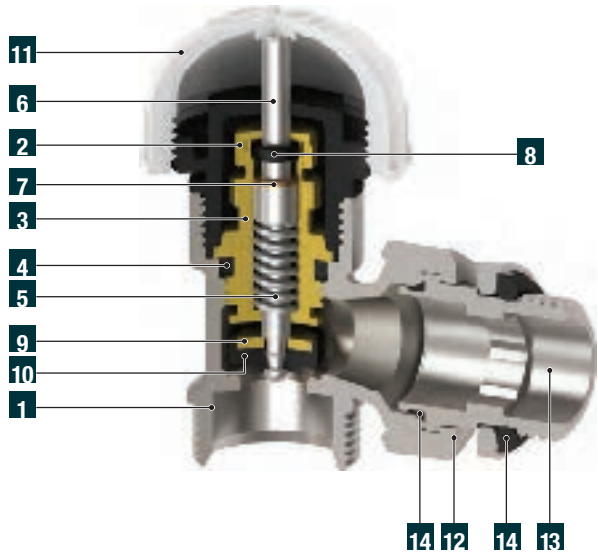
GP 2714
GHIBLI



Thermostatic straight valve for steel pipe.



CODE		A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
6211R004		1/2"	1/2"	37,5	70	15	67	10	25	18,64
6211R104	with O-R	1/2"	1/2"	37,5	75	15	67	10	25	19,95



Components	Pcs	Material
1 Body	1	UNI EN 12165 CW617N
2 Ring nut	1	PA6 (30% FV)
3 Shutter	1	UNI EN 12164 CW617N
4 O-ring for shutter seal	1	EPDM
5 Spring	1	AISI 302 stainless steel
6 Rod	1	AISI 304 stainless steel
7 Shutter ring	1	UNI EN 12164 CW617N
8 O-Ring for rod seal	1	EPDM
9 Washer for gasket	1	UNI EN 12164 CW617N
10 Shutter gasket	1	NBR
11 Cap	1	ABS white RAL 9003
12 Nut	1	UNI EN 12165 CW617N
13 Tang	1	UNI EN 12164 CW617N
14 O-ring for tang seal	1	NBR

EN GENERAL CHARACTERISTICS

Nut and tang thread: UNI EN ISO 228-1
Male valve body thread: gas 24x19
(24 mm diameter and 19 threads per inch)
Female valve body thread: UNI EN ISO 228-1
Large capacity

The tang with radiator seal is also available with NBR O-ring.

OPERATING CONDITIONS

Max working pressure: 10 bar.
Max differential pressure: 1 bar.
Max working temperature: +100 °C.

Pressure drops: see diagram on Technical Attachments.

Note: can be combined with Climatic thermostatic heads and electrothermic heads.

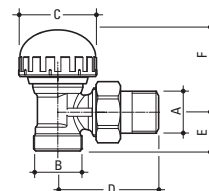
For single-piece seals, threaded 24x19 and 1/2", see chapter 6 "Seals and screw fittings".

For accessories, see section "Accessories for Oasi and Ghibli valves".

GP 2713
GHIBLI



Thermostatic right-angle valve for copper, multi-layer, PE-X, PP, PB pipes.

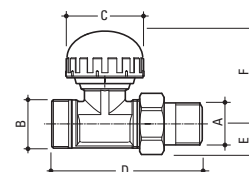


CODE		A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
24x19 CONNECTION										
6259R004		3/8"	24x19	37,5	46	19	45	10	25	13,48
6161R004		1/2"	24x19	37,5	44	19	45	10	25	13,61
6259R104	with O-R	3/8"	24x19	37,5	52	19	45	10	25	13,53
6161R104	with O-R	1/2"	24x19	37,5	48	19	45	10	25	15,03
1/2" CONNECTION										
6165R004		3/8"	1/2"	37,5	44	19	45	10	25	12,73
6169R004		1/2"	1/2"	37,5	44	19	45	10	25	12,06
6165R104	with O-R	3/8"	1/2"	37,5	44	19	45	10	25	12,76
6169R104	with O-R	1/2"	1/2"	37,5	48	19	45	10	25	13,39
3/4" CONNECTION										
6269R104	with O-R	3/4"	3/4"	37,5	60	22	42	10	20	23,67

GP 2713
GHIBLI



Thermostatic straight valve for copper, multi-layer, PE-X, PP, PB pipes.



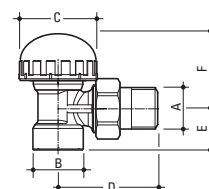
(*) Articles available while stocks last.

CODE		A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
24x19 CONNECTION										
6261R004		3/8"	24x19	37,5	65	14	53	10	25	14,71
6213R004		1/2"	24x19	37,5	70	15	53	10	25	14,96
6261R104	with O-R	3/8"	24x19	37,5	70	14	53	10	25	15,81
6213R104	with O-R	1/2"	24x19	37,5	75	15	53	10	25	16,09
1/2" CONNECTION										
6215R004	(*)	1/2"	1/2"	37,5	69	15	53	10	25	17,83
6215R104	(*) with O-R	1/2"	1/2"	37,5	74	15	53	10	25	15,61

GP 2713
GHIBLI



Thermostatic right-angle valve for steel pipe.

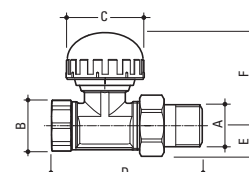


CODE		A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
6260R004		3/8"	3/8"	37,5	46	23	45	10	25	13,31
6162R004		1/2"	1/2"	37,5	44	20,5	45,5	10	25	13,36
6260R104	with O-R	3/8"	3/8"	37,5	52	23	45	10	25	13,37
6162R104	with O-R	1/2"	1/2"	37,5	49	20,5	45,5	10	25	14,77
6270R104	with O-R	3/4"	3/4"	37,5	60	22	41,5	10	20	24,01

GP 2713
GHIBLI



Thermostatic straight valve for steel pipe.



CODE		A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
6214R004		1/2"	1/2"	37,5	70	15	53	10	25	17,27
6214R104	with O-R	1/2"	1/2"	37,5	75	15	53	10	25	18,47



Operation

Ghibli-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.

EN GENERAL CHARACTERISTICS 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.

DYNAMIC THERMOSTATIC VALVE ADJUSTMENT RANGE

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

 $\Delta p \text{ min } (>130 \div 170 \text{ l/h}): 0.15 \text{ bar}$

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.

Regulation curves: see Technical Attachments section.

Note: can be combined with Climatic, Climatic Eco, ClimaticEVO thermostatic heads.

For single-piece seals, threaded 24x19, see chapter 6 “Seals and screw fittings”.

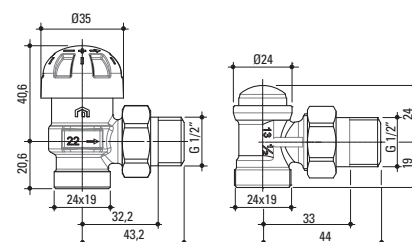
GP 2713

GHIBLI-D

Dynamic thermostatic valve and right-angle lockshield valve kit,
for copper, PE-X, multilayer, PP, PB pipe.

**CODE**

6326R001



PN

Pack	Price
pcs/box	€

Price

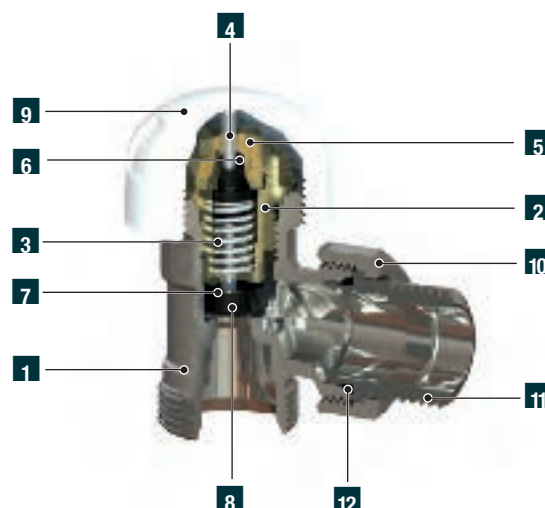
10

1

92.66

OASI PLUS

THERMOSTATIC VALVE FOR RADIATORS



Components	Pz.	Material
1 Body	1	UNI EN 12165 CW617N
2 Shutter body	1	UNI EN 12164 CW617N
3 Spring	1	AISI 301 stainless steel
4 Push rod	1	AISI 304 stainless steel
5 Shutter ring	1	UNI EN 12164 CW617N
6 O-Ring for rod seal	1	EPDM
7 Gasket block washer	1	UNI EN 12164 CW614N
8 Shutter seal	1	NBR
9 Cap	1	ABS white RAL 9003
10 Nut	1	UNI EN 12165 CW617N
11 Tang	1	UNI EN 12164 CW617N
12 O-Ring for tang seal	1	NBR

EN GENERAL CHARACTERISTICS

Nut and tang thread: UNI EN ISO 228-1

Male valve body thread: gas 24x19

(24 mm diameter and 19 threads per inch)

OPERATING CONDITIONS

Max working pressure: 10 bar

Max differential pressure: 0,6 bar

Max working temperature: +95 °C

Pressure drops: see diagram on Technical Attachments.

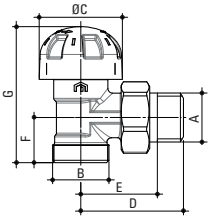
Note: can be combined with ClimaticEVO thermostatic heads
(NOT combinable with Climatic, Climatic Eco thermostatic heads).

For single-piece seals, threaded 24x19, see chapter 6 “Seals and screw fittings”.

GP 2710
OASI PLUS



Thermostatic right-angle valve for copper, PE-X, multilayer, PP, PB pipe.

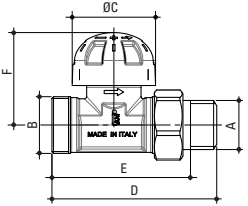


CODE	A	B	ØC mm	D mm	E mm	F mm	G mm	PN	Pack pcs/box	Price €/pc
6325R002	1/2"	24x19	35	43,2	32,2	19	57,2	10	10	15,20

GP 2710
OASI PLUS



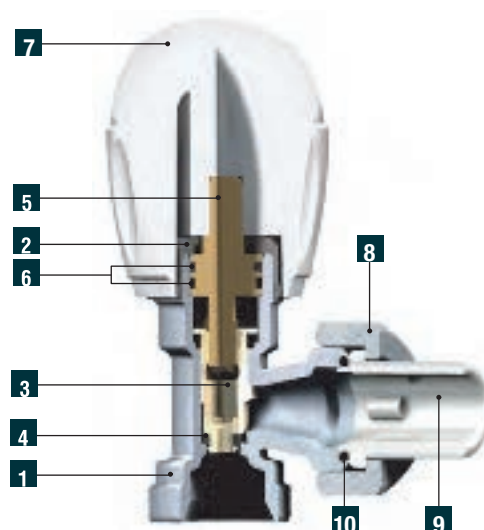
Thermostatic straight valve for copper, multi-layer, PE-X, PP, PB pipe.



CODE	A	B	ØC mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
6325R001	1/2"	24x19	35	69,2	58,2	38,8	10	10	15,36

CEN certified product according to UNI EN 215 standard in the following configurations

Valve	Code		Thermostatic head	Code
Oasi Plus	6325R002	+	ClimaticEVO	9645P001
Oasi Plus	6325R001	+	ClimaticEVO	9645P001



Components		Pcs	Material
1	Body	1	UNI EN 12165 CW617N
2	Ring nut	1	UNI EN 12164 CW617N
3	Shutter	1	UNI EN 12164 CW617N
4	O-Ring for shutter seal	1	NBR
5	Rod	1	UNI EN 12164 CW617N
6	O-Ring for rod seal	1	EPDM
7	Knob	1	ABS white RAL 9003
8	Nut	1	UNI EN 12165 CW617N
9	Tang	1	UNI EN 12164 CW617N
10	O-Ring for tang seal	1	NBR

EN

GENERAL CHARACTERISTICS

Nut and tang thread: UNI EN ISO 228-1

Male valve body thread: gas 24x19

(24 mm diameter and 19 threads per inch)

Female valve body thread: UNI EN ISO 228-1

The tang with radiator seal is also available with NBR O-ring.

OPERATING CONDITIONS

Max working pressure: 10 bar.

Max differential pressure: 1 bar.

Max working temperature: +100 °C.

Pressure drops: see diagram on Technical Attachments.

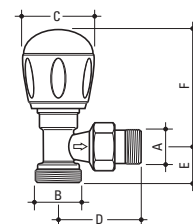
For single-piece seals, threaded 24x19 and 1/2", see chapter 6 "Seals and screw fittings".

For accessories, see section "Accessories for Oasi and Ghibli valves".

GP 2710
OASI

Manual right-angle valve for copper, multi-layer, PE-X, PP, PB pipes.

Article available while stocks last.

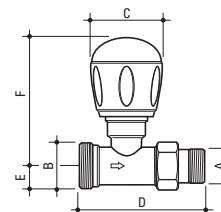


CODE	A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
9600R003	3/8"	24x19	37,5	46	19	61,5	10	25	13,14

GP 2710
OASI

Manual straight valve for copper, multi-layer, PE-X, PP, PB pipes.

Articles available while stocks last.

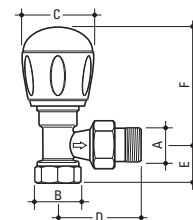


CODE		A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
9602R003		3/8"	24x19	37,5	65	14	67,5	10	25	12,68
9577R003	with O-R	3/8"	24x19	37,5	70	14	67,5	10	25	13,48
9577R004	with O-R	1/2"	24x19	37,5	70	15	67,5	10	25	14,45

GP 2710
OASI

Manual right-angle valve for steel pipe.

Articles available while stocks last.

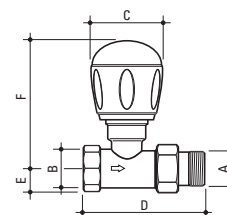


CODE		A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
9604R003		3/8"	3/8"	37,5	46	23	61,5	10	25	13,44
9579R004	with O-R	1/2"	1/2"	37,5	51	23	61,5	10	25	13,96

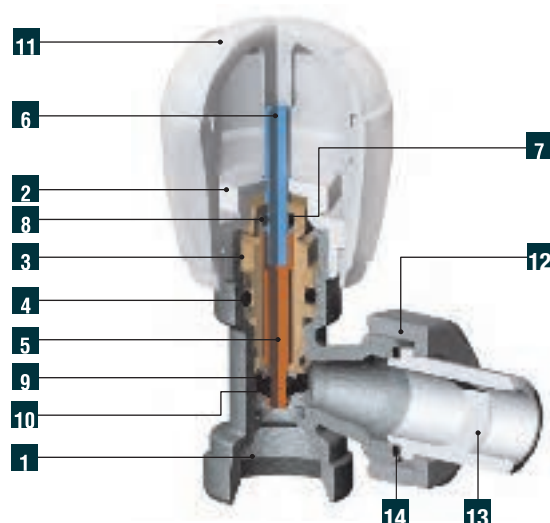
GP 2710
OASI

Manual straight valve for steel pipe.

Article available while stocks last.



CODE		A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
9581R004	with O-R	1/2"	1/2"	37,5	70	15	67,5	10	25	14,88



Components	Pcs	Material
1 Body	1	UNI EN 12165 CW617N
2 Ring nut	1	UNI EN 12164 CW617N
3 Shutter body	1	UNI EN 12164 CW617N
4 O-ring for shutter seal	1	NBR
5 Shutter stem	1	UNI EN 12164 CW617N
6 Push rod	1	AISI 304 stainless steel
7 Shutter ring	1	UNI EN 12164 CW617N
8 O-ring for rod seal	1	EPDM
9 Locking washer	1	UNI EN 12164 CW617N
10 Shutter gasket	1	NBR
11 Knob	1	ABS white RAL 9003
12 Nut	1	UNI EN 12165 CW617N
13 Tang	1	UNI EN 12164 CW617N
14 O-ring for tang seal	1	NBR

EN GENERAL CHARACTERISTICS

Nut and tang thread: UNI EN ISO 228-1

Male valve body thread: gas 24x19

(24 mm diameter and 19 threads per inch)

Female valve body thread: UNI EN ISO 228-1

The tang with radiator seal is also available with NBR O-ring.

OPERATING CONDITIONS

Max working pressure: 10 bar.

Max differential pressure: 1 bar.

Max working temperature: +100 °C.

Pressure drops: see diagram on Technical Attachments.

Note: can be combined with Climatic thermostatic heads and electrothermic heads.

To transform the thermostatic Oasi valves into thermostatic ones (3/8" and 1/2" models only, not applicable to 3/4" models), see in the Technical Attachments.

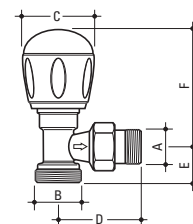
For single-piece seals, threaded 24x19 and 1/2", see chapter 6 "Seals and screw fittings".

For accessories, see section "Accessories for Oasi and Ghibli valves".

GP 2710
OASI

Thermostatable right-angle valve for copper, multi-layer, PE-X, PP, PB pipes.

Articles available while stocks last.

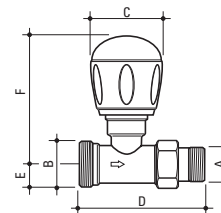


CODE	A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
9616R003	3/8"	24x19	37,5	46	19	61	10	25	15,11
9616R004	1/2"	24x19	37,5	46	19	61	10	25	15,54

GP 2710
OASI

Thermostatable straight valve for copper, multi-layer, PE-X, PP, PB pipes.

Articles available while stocks last.

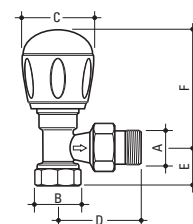


CODE	A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
9617R003	3/8"	24x19	37,5	65	14	65	10	25	16,46
9617R004	1/2"	24x19	37,5	70	15	65	10	25	20,51
9588R003	with O-R	3/8"	24x19	37,5	70	14	10	25	17,02
9588R004	with O-R	1/2"	24x19	37,5	70	15	10	25	21,25

GP 2710
OASI

Thermostatable right-angle valve for steel pipe.

Articles available while stocks last.

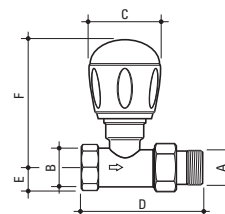


CODE	A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
9618R003	3/8"	3/8"	37,5	46	23	60	10	25	15,10
9618R004	1/2"	1/2"	37,5	46	23	60	10	25	16,42
9589R004	with O-R	1/2"	37,5	51	23	60	10	25	17,67

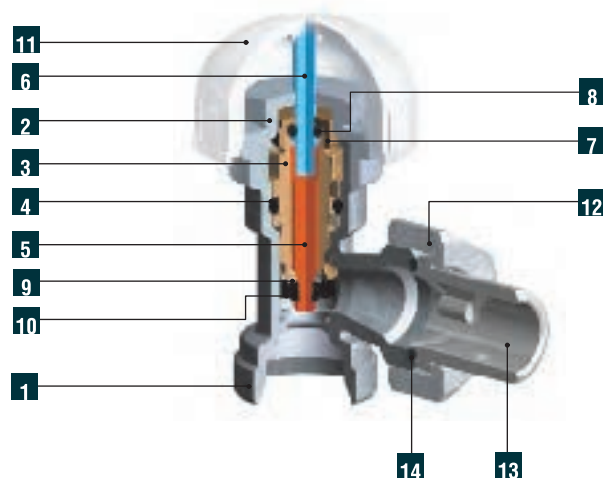
GP 2710
OASI

Thermostatable straight valve for steel pipe.

Article available while stocks last.



CODE	A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
9619R004	1/2"	1/2"	37,5	70	15	65	10	25	21,56



Components	Pcs	Material
1 Body	1	UNI EN 12165 CW617N
2 Ring nut	1	UNI EN 12164 CW617N
3 Shutter body	1	UNI EN 12164 CW617N
4 O-ring for shutter seal	1	NBR
5 Shutter stem	1	UNI EN 12164 CW617N
6 Push rod	1	AISI 304 stainless steel
7 Shutter ring	1	UNI EN 12164 CW617N
8 O-ring for rod seal	1	EPDM
9 Locking washer	1	UNI EN 12164 CW617N
10 Shutter gasket	1	NBR
11 Cap	1	ABS white RAL 9003
12 Nut	1	UNI EN 12165 CW617N
13 Tang	1	UNI EN 12164 CW617N
14 O-ring for tang seal	1	NBR

EN GENERAL CHARACTERISTICS

Nut and tang thread: UNI EN ISO 228-1

Male valve body thread: gas 24x19

(24 mm diameter and 19 threads per inch)

Female valve body thread: UNI EN ISO 228-1

The tang with radiator seal is also available with NBR O-ring.

OPERATING CONDITIONS

Max working pressure: 10 bar.

Max differential pressure: 1 bar.

Max working temperature: +100 °C.

Pressure drops: see diagram on Technical Attachments.

Note: can be combined with Climatic thermostatic heads and electrothermic heads.

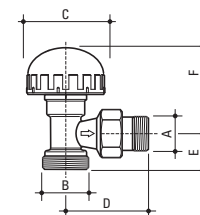
For single-piece seals, threaded 24x19 and 1/2", see chapter 6 "Seals and screw fittings".

For accessories, see section "Accessories for Oasi and Ghibli valves".

GP 2710
OASI

Thermostatic right-angle valve for copper, multi-layer, PE-X, PP, PB pipes.

Article available while stocks last.

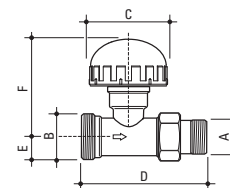


CODE	A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
9612R003	3/8"	24x19	37,5	46	19	46	10	25	13,98

GP 2710
OASI

Thermostatic straight valve for copper, multi-layer, PE-X, PP, PB pipes.

Articles available while stocks last.

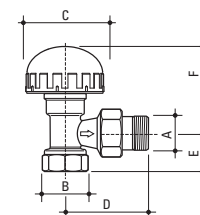


CODE		A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
9614R003		3/8"	24x19	37,5	65	14	53	10	25	14,56
9614R004		1/2"	24x19	37,5	70	15	53	10	25	15,43
9593R003	with O-R	3/8"	24x19	37,5	70	14	53	10	25	15,43
9593R004	with O-R	1/2"	24x19	37,5	70	15	53	10	25	19,36

GP 2710
OASI

Thermostatic right-angle valve for steel pipe.

Articles available while stocks last.

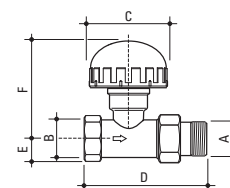


CODE		A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
9613R003		3/8"	3/8"	37,5	46	23	47	10	25	13,71
9592R004	with O-R	1/2"	1/2"	37,5	51	23	47	10	25	16,10

GP 2710
OASI

Thermostatic straight valve for steel pipe.

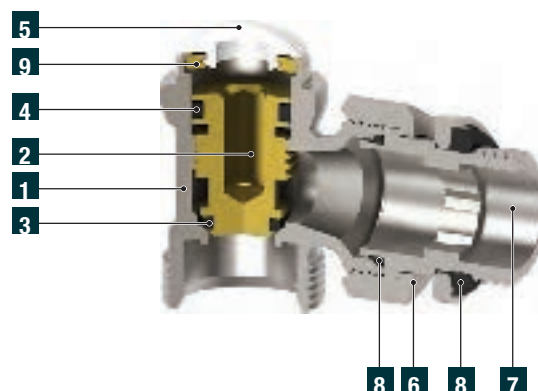
Articles available while stocks last.



CODE		A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
9615R004		1/2"	1/2"	37,5	70	15	53	10	25	16,28
9594R004	with O-R	1/2"	1/2"	37,5	70	15	53	10	25	17,24

LOCKSHIELDS

LOCKSHIELDS FOR OASI AND GHIBLI VALVES



Components	Pcs	Material
1 Body	1	UNI EN 12165 CW617N
2 Shutter	1	UNI EN 12164 CW617N
3 O-ring for shutter seal	1	NBR
4 Upper O-ring for shutter seal	1	EPDM
5 Cap	1	ABS white RAL 9003
6 Nut	1	UNI EN 12165 CW617N
7 Tang	1	UNI EN 12164 CW617N
8 O-ring for tang seal	1	NBR
9 Ring nut	1	UNI EN 12164 CW617N

EN GENERAL CHARACTERISTICS

Nut and tang thread: UNI EN ISO 228-1

Male valve body thread: gas 24x19

(24 mm diameter and 19 threads per inch)

Female valve body thread: UNI EN ISO 228-1

The tang with radiator seal is also available with NBR O-ring.

OPERATING CONDITIONS

Max working pressure: 10 bar.

Max differential pressure: 1 bar.

Max working temperature: +100 °C.

Pressure drops: see diagram on Technical Attachments.

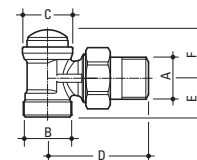
For single-piece seals, threaded 24x19 and 1/2", see chapter 6 "Seals and screw fittings".

For accessories, see section "Accessories for Oasi and Ghibli valves".

GP 2712
LOCKSHIELDS



Right-angle lockshield for copper, multi-layer, PE-X, PP, PB pipes.



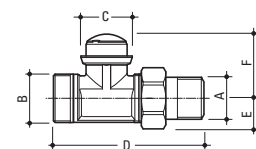
CODE		A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
24x19 CONNECTION										
6252R004		3/8"	24x19	25	46	19	24	10	25	9,65
6125R004		1/2"	24x19	25	44	19	24	10	25	9,68
6252R104	with O-R	3/8"	24x19	25	52	19	24	10	25	10,37
6125R104	with O-R	1/2"	24x19	25	48	19	24	10	25	11,27
1/2" CONNECTION										
6166R004		3/8"	1/2"	25	44	19	24	10	25	10,14
6170R004		1/2"	1/2"	25	44	19	24	10	25	9,87
6166R104	with O-R	3/8"	1/2"	25	44	19	24	10	25	10,16
6170R104	with O-R	1/2"	1/2"	25	48	19	24	10	25	11,09
3/4" CONNECTION										
6264R104	with O-R	3/4"	3/4"	25	60	22	24	10	20	19,71

GP 2710 - 2712
LOCKSHIELDS



Straight lockshield for copper, multi-layer, PE-X, PP, PB pipes.

(*) Articles available while stocks last.

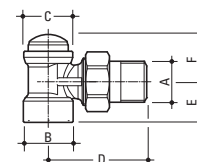


CODE		A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
24x19 CONNECTION										
6258R004		3/8"	24x19	25	65	14	32	10	25	11,25
6205R004		1/2"	24x19	25	70	15	32	10	25	13,05
6258R104	with O-R	3/8"	24x19	25	70	14	32	10	25	13,19
6205R104	with O-R	1/2"	24x19	25	75	15	32	10	25	14,39
1/2" CONNECTION										
6209R004 (*)		1/2"	1/2"	25	69	15	32	10	25	14,06
6209R104 (*)	with O-R	1/2"	1/2"	25	74	15	32	10	25	15,34

GP 2712
LOCKSHIELDS



Right-angle lockshield for steel pipe.

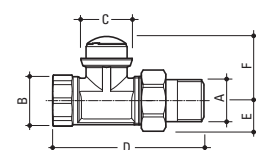


CODE		A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
6254R004		3/8"	3/8"	25	46	23	24	10	25	9,49
6127R004		1/2"	1/2"	25	44	20,5	23,5	10	25	9,83
6254R104	with O-R	3/8"	3/8"	25	52	23	24	10	25	10,22
6127R104	with O-R	1/2"	1/2"	25	49	20,5	23,5	10	25	10,87
6266R104	with O-R	3/4"	3/4"	25	60	25,5	24	10	20	20,05

GP 2710 - 2712
LOCKSHIELDS



Straight lockshield for steel pipe.



CODE		A	B	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Price €/pc
6207R004		1/2"	1/2"	25	70	15	32	10	25	12,98
6207R104	with O-R	1/2"	1/2"	25	75	15	32	10	25	14,19



GP 2799 ACCESSORIES



Kit consisting of Nut and Tail with conical seal for Oasi valve.

CODE	Size	Model	Connection	Pack pcs/box	Price €/pc
7589R103	3/8"	Straight and Right-angle	1/2"	20	2,62
7591R004	1/2"	Straight and Right-angle	24x19	20	3,03

GP 2799 ACCESSORIES



Kit consisting of Nut and Tail with conical seal and O-Ring for Oasi valve.

CODE	Size	Model	Connection	Pack pcs/box	Price €/pc
7590R003	3/8"	Straight and Right-angle	1/2"	20	3,65
7590R004	1/2"	Straight and Right-angle	24x19	20	4,35

GP 2799 ACCESSORIES



Kit consisting of Nut and Tail with conical seal for Ghibli valve.

CODE	Size	Model	Connection	Pack pcs/box	Price €/pc
7589R103	3/8"	Straight and Right-angle	1/2"	20	2,62
7591R004	1/2"	Right-angle	24x19	20	3,03
7590R004	1/2"	Straight	24x19	20	4,35

GP 2799 ACCESSORIES



Kit consisting of Nut and Tail with conical seal and O-Ring for Ghibli valve.

CODE	Size	Model	Connection	Pack pcs/box	Price €/pc
7590R003	3/8"	Straight and Right-angle	1/2"	20	3,65
7590R004	1/2"	Straight and Right-angle	24x19	20	4,35
7590R005	3/4"	Right-angle	3/4"	20	9,09

GP 2799 ACCESSORIES



Shutter for thermostatic valve. Only for Oasi valve.

CODE	Pack pcs/box	Price €/pc
9637L004	20	6,93

GP 2000 ACCESSORIES



Manual bleed valve.

CODE	Size	t max °C	P max bar	Pack pcs/box	Price €/pc
9717R002	1/4"	100	10	10/100	1,76
9717R003	3/8"	100	10	10/100	1,85
9717R004	1/2"	100	10	10/100	1,61
9717R900	Bleed valve wrench			1	0,38



EN TECHNICAL DATA OF CONNECTION BETWEEN CLIMATICEVO THERMOSTATIC HEAD AND OASI PLUS THERMOSTATIC VALVES

Max working pressure: 10 bar
Max differential pressure: 0,6 bar
Influence of differential pressure: 0,7 K
Max ambient temperature: 30 °C
Max system water temperature: 95 °C
Storage temperature: -40 ÷ +50 °C
Range of adjustment: 8 ÷ 28 °C
Nominal climb: 0,22 mm/K
Hysteresis: 0,3 K

Antifrost action: 8 °C
Nominal flow rate Oasi Plus right-angle and straight valves: 160 l/h
Valve 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 Oasi Plus thermostatic valves and Ghibli thermostatic and thermostatzable valves.

UNI EN 215

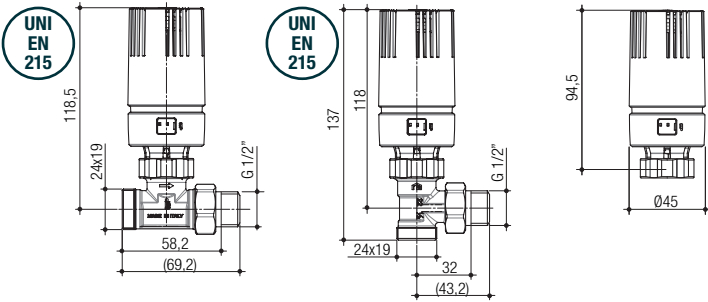
GP 2700
ClimaticEVO



Thermostatic regulation head.

CODE	Pack pcs/box	Price €/pc
9645P001	10	19,68

ClimaticEVO + Oasi Plus valves



CEN certified product according to UNI EN 215 standard in the following configurations

Valve	Code		Thermostatic head	Code
Oasi Plus	6325R002	+	ClimaticEVO	9645P001
Oasi Plus	6325R001	+	ClimaticEVO	9645P001

ADJUSTMENT SCALE

On the knob there is a scale with values from 0 to •. Each number matches a set temperature.

The distances between each number correspond to intermediate temperatures.

The table indicates the approximate equivalence between the scale on the knob and the relevant temperatures.

0		1	2	3	4	•
Closed	8 °C (*)	12 °C	16 °C	20 °C	24 °C	28 °C

(*) Antifreeze

GP 2011
ClimaticEVO



Key for temperature limitation.

CODE

6321R003

Pack
pcs/box

5

Price
€/pc

1,20

Kit ClimaticEVO with Oasi Plus

Kit consisting of: ClimaticEVO thermostatic head, Oasi Plus 1/2" thermostatic valve for 24x19 connection; 1/2" lockshield for 24x19 connection; n.2 Monoblocco seals for 16x2 multilayer pipe, 24x19 connection; instructions.

The high-quality liquid expansion thermostatic radiator valve can be set to the desired room temperature.

As the room temperature increases or decreases, the valve will close or open, interrupting or increasing the flow of hot water into the radiator.

Contained in special packaging.

GP 2700
Kit ClimaticEVO



Kit consisting of: ClimaticEVO thermostatic head, Oasi Plus 1/2" thermostatic valve for 24x19 connection; 1/2" lockshield for 24x19 connection; n.2 Monoblocco seals for 16x2 multilayer pipe, 24x19 connection.

CODE

6218R001

Size

1/2"

Pack
pcs/box

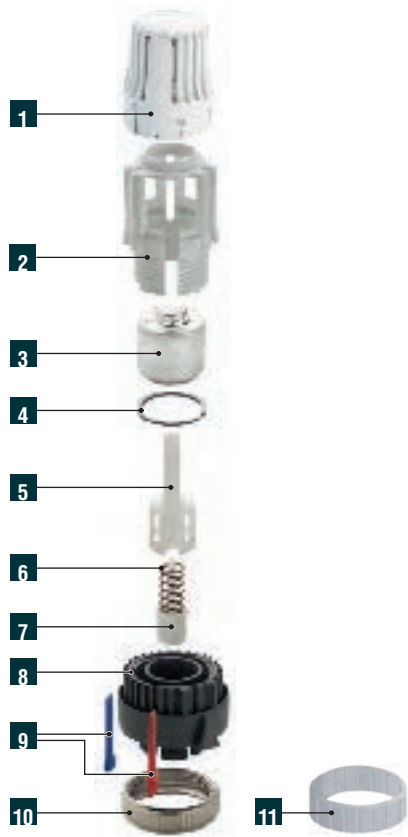
1

Price
€

62,02

CLIMATIC and CLIMATIC ECO

THERMOSTATIC HEADS



Components		Pcs	Material
1	Regulation knob	1	ABS white RAL 9003
2	Basket	1	PA 6.6 stiffened
3	Thermostatic sensor with fluid expansion	1	Steel
4	Ring	1	Spring steel
5	Pusher	1	Natural acetalyc resin
6	Spring	1	UNI 3823 steel class D
7	Stem	1	Natural acetalyc resin
8	Base	1	PA 6.6 stiffened
9	Blue and red regulation limiters	1	Acetalyc resin
10	Ring nut M30x1.5	1	UNI EN 12164 CW614N
11	Ring nut M30x1.5	1	PA 6.6 (50% GF)

EN TECHNICAL DATA OF CONNECTION BETWEEN CLIMATIC THERMOSTATIC HEAD AND GHIBLI THERMOSTATIC AND THERMOSTATISABLE VALVES

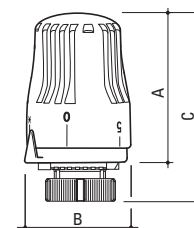
Max working pressure: 10 bar
Max differential pressure: 1 bar
Max ambient temperature: 40 °C
Max system water temperature: 100 °C

Storage temperature: -10 ÷ +50 °C
Range of adjustment: 7 ÷ 28 °C
Nominal climb: 0.22 mm/K
Antifrost action: 7 °C
Nominal flow rate Ghibli right-angle and straight valves: 175 l/h
Response time: 25 minutes

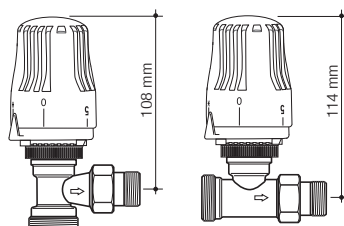
GP 2700
CLIMATIC



Thermostatic head with liquid sensor.



CODE	Size Ring nut	A mm	B mm	C mm	Pack pcs/box	Price €/pc
9645P501	M30x1,5	71,5	48	87	1/6	18,16



ADJUSTMENT SCALE

On the knob there is a scale with values from 0 to 5. Each number matches a set temperature.

The distances between each number correspond to intermediate temperatures.

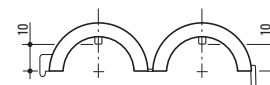
The table indicates the approximate equivalence between the scale on the knob and the relevant temperatures.

0		1	2	3	4	5
(*)	7 °C (**)	12 °C	16 °C	20 °C	24 °C	28 °C
(*) Closed		(**) Antifreeze				

GP 2799
CLIMATIC



Tamperproof lock for thermostatic heads.



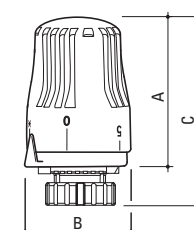
CODE	Pack pcs/box	Price €/pc
90023720	6	2,67

It can only be used in combination with the thermostatic head code 9645P501.

GP 2700
CLIMATIC ECO



Thermostatic head with liquid sensor.



CODE	Size Ring nut	A mm	B mm	C mm	Pack pcs/box	Price €/pc
9645P510	M30x1,5	71,5	48	87	1/12	15,68

KIT CLIMATIC WITH GHIBLI

The Climatic Kit with Ghibli is a boxed set containing a thermostatic head, a Ghibli thermostatic valve for multilayer pipe, a Ghibli lockshield for multilayer pipe, any seals 16x2 and fitting instructions. The high-quality liquid expansion thermostatic radiator valve can be set to the desired room temperature. As the room temperature increases or decreases, the valve will close or open, interrupting or increasing the flow of hot water into the radiator. Contained in special packaging.

GP 2700
KIT CLIMATIC



Kit consisting of a Climatic thermostatic head with liquid sensor, Ghibli right-angle thermostatic valve, Ghibli right-angle lockshield and 16x2 Monoblocco fittings for multi-layer pipe.

CODE	Size	Pack pcs/box	Price €
6274R001	3/8"	1	40,79
6274R002	3/8" with O-RING	1	42,00
6218R002	1/2" with O-RING	1	56,53

GP 2700
KIT CLIMATIC



Kit consisting of a Climatic thermostatic head with liquid sensor, Ghibli right-angle thermostatic valve for 24x19 connection and right-angle lockshield Ghibli for 24x19 connection.

CODE	Size	Pack pcs/box	Price €
6274R003	3/8"	1	34,20
6274R004	3/8" with O-RING	1	35,92
6274R005	1/2"	1	33,81
6274R006	1/2" with O-RING	1	36,39

GP 2700
KIT CLIMATIC



Kit consisting of a Climatic thermostatic head with liquid sensor, Ghibli right-angle thermostatic valve and right-angle lockshield for steel pipe.

CODE	Size	Pack pcs/box	Price €
6218R003	1/2" with O-RING	1	47,13

KIT GHIBLI

The Ghibli Kit is a boxed set containing a manual radiator valve and a 1/2" lockshield, along with the required 16x2 seals for multilayer pipe and fitting instructions.

GP 2700
KIT GHIBLI

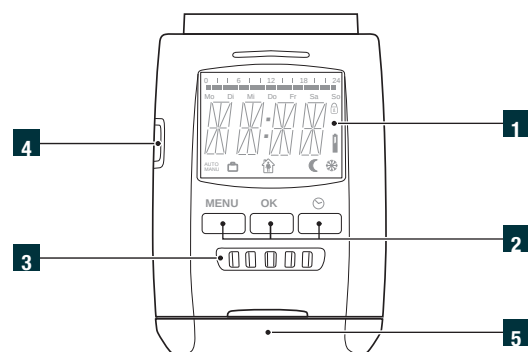


Kit consisting of a Ghibli right-angle manual valve, right-angle lockshield and 16x2 Monoblocco fittings for multi-layer pipe.

CODE	Size	Pack pcs/box	Price €
6220R004	1/2"	1	33,10
6220R104	1/2" with O-RING	1	35,02

STAND ALONE CHRONOTHERMOSTATIC ACTUATOR

STAND ALONE ELECTRONIC CHRONOTHERMOSTATIC
ACTUATOR FOR RADIATOR VALVES



Components

- | | |
|---|---|
| 1 | Display for programming |
| 2 | Function keys (MENU / OK / CLOCK) |
| 3 | Selection wheel |
| 4 | Mini USB port for programming via programming stick |
| 5 | Battery compartment |

EN GENERAL CHARACTERISTICS

Power supply: 2 batteries 1.5 V (type AA)
 Autonomy: 5 years (with low battery indication; estimated but not guaranteed)
 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%

OPERATION

- 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

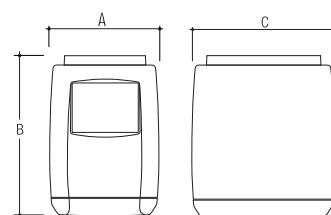
GP 2512
 STAND ALONE
 CHRONOTHERMOSTATIC
 ACTUATOR



Electronic programmable thermostatic actuator for installation on radiator thermostat valves for the adjustment of the ambient temperature.
 The device acts on the valve itself, opening it partially in function of the difference between the set temperature and the temperature detected.
 The function keys, the wheel and the LCD display allow for direct programming on the device.
 To facilitate the operation, you can use the special mini USB programming stick which allows for the programming, in graphical form, directly on your PC.

Articles available while stocks last.

(**) Available only on request.



CODE	Model	A mm	B mm	C mm	Pack pcs/box	Price €
6321R001	Stand alone electronic chronothermostatic actuator for radiator valves (*)	52	83	65	1	91,88
6321R002	Programming key for electronic chronothermostatic actuator (**) / (***)				1	101,40

(*) Can be combined with Ghibli and Oasi thermostatic and thermostatzable valves.

(**) Key programming compatibility with USB 1.1 or 2.0 ports. System requirements: Windows Xp (or higher).



Seals 6 and screw fittings



page 204

**Monoblocco 2.0
seals for copper
pipes for water**



page 207

**Monoblocco seals
for multilayer
and plastic pipes**



page 205

**Monoblocco 2.0
seals for copper
pipes for gas**



page 210

**Modular fittings
to tighten**



page 206

**Monoblocco
seals for copper
pipes for gas**



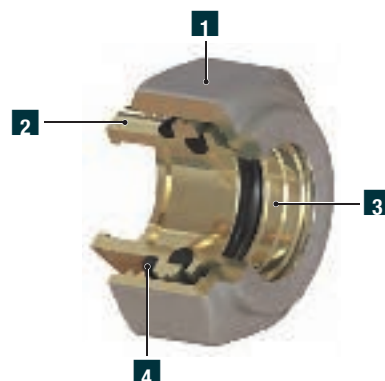
page 215

**Integral
fittings to tighten
for multilayer pipe**



MONOBLOCCO 2.0 SEAL FOR WATER

MONOBLOCCO 2.0 SEAL FOR COPPER PIPE, FOR WATER



Components

	Components	Pcs	Material
1	Nut	1	UNI EN 12165 CW617N - DW
2	Adapter with limit switch	1	UNI EN 12164 CW617N - DW
3	Brass hose clamp ring	1	UNI EN 12164 CW617N - DW
4	O-Ring seals	1	NBR 70 Sh EN 681

EN 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)

- 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)
- 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)

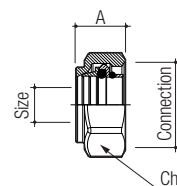
GP 2615

MONOBLOCCO 2.0 SEAL



Monoblocco 2.0 seal for copper pipe, nickel-plated, for WATER.

These seals can be matched with the Modular Fittings.



CODE	Size	Connection	Maximum torque (Nm)	A mm	Ch mm	gr	Pack pcs/pack	Master pcs/box	Price €/pc
9500R110	Ø 10	24x19	30 ÷ 35	14,5	27	46	50	800	4,73
9500R112	Ø 12	24x19	35 ÷ 40	14,5	27	42	50	800	3,84
9500R114	Ø 14	24x19	40 ÷ 45	14,5	27	39	50	800	4,54
9500R115	Ø 15	24x19	40 ÷ 45	14,5	27	36	50	800	3,30
9500R116	Ø 16	24x19	45 ÷ 50	14,5	27	31	50	800	3,44
6047R001	(*)	24x19	30 ÷ 35	14,5	27	30	20	320	3,38

(*) Blind monobloc seal (plug).

GP 2615

STANDARD SEAL



Brass seal for copper pipe, with nickel-plated nut, for WATER.

These seals can be matched with the Modular Fittings.

CODE	Size	Connection	Maximum torque (Nm)	t max °C	Pack pcs/box	Price €/pc
9711R518	Ø 18	24x19	50 ÷ 55	100	40	3,27

GP 2799

SPANNER



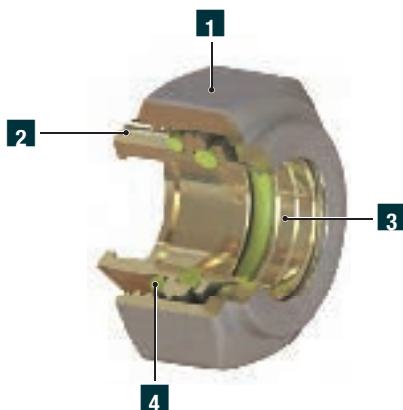
Spanner for tightening joints CH 27 in nickel-plated brass.



CODE	Size	Pack pcs/box	Price €
01306051	CH 27	1	12,47

MONOBLOCCO 2.0 SEAL FOR GAS

MONOBLOCCO 2.0 SEAL FOR COPPER PIPE, FOR GAS



Components

		Pcs	Material
1	Nut	1	UNI EN 12165 CW617N
2	Adapter with limit switch	1	UNI EN 12164 CW617N
3	Hose clamp ring	1	UNI EN 12164 CW617N
4	O-Ring seals	1	HNBR yellow 70 Sh EN 682 - EN 549

REMARKS

Monoblocco seals must only be used with screw fittings or gas-use manifolds manufactured by FIV, with 24x19 thread, verifying applicability in compliance with national regulations.

EN OPERATING CONDITIONS (UNI EN 1254-2)

Operating temperature: -20 ÷ 70 °C

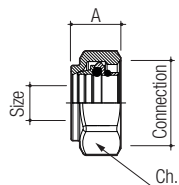
Operating pressure: GT 5 / MOP 5

GP 2615

MONOBLOCCO 2.0 SEAL



Monoblocco 2.0 seal for copper pipe, nickel-plated, for GAS.



CODE	Size	Connection	Maximum torque (Nm)	A mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
9502R110	Ø 10	24x19	30 ÷ 35	14,5	27	46	20	640	6,18
9502R112	Ø 12	24x19	35 ÷ 40	14,5	27	42	20	640	5,06
9502R114	Ø 14	24x19	40 ÷ 45	14,5	27	39	20	640	5,43
9502R115	Ø 15	24x19	40 ÷ 45	14,5	27	36	20	640	4,48
9502R116	Ø 16	24x19	45 ÷ 50	14,5	27	31	20	640	4,56
6047R524	(*)	24x19	-	14,5	27	33	20	320	3,29

(*) Blind monobloc seal (plug).

GP 2799

SPANNER



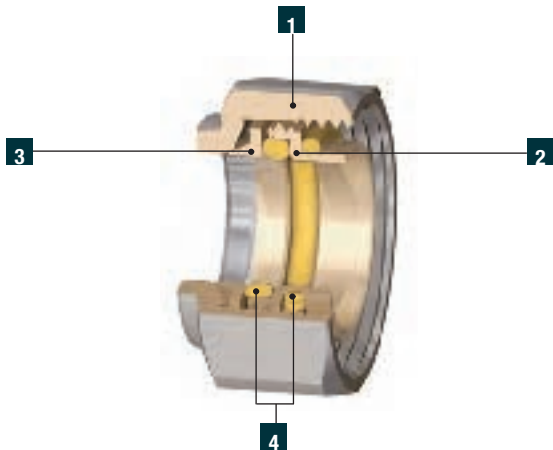
Spanner for tightening joints CH 27 in nickel-plated brass.



CODE	Size	Pack pcs/box	Price €
01306051	CH 27	1	12,47

MONOBLOCCO SEAL FOR GAS

MONOBLOCCO SEAL FOR COPPER PIPE, FOR GAS



Components

		Pcs	Material
1	Nut	1	UNI EN 12165 CW617N
2	Adapter	1	UNI EN 12164 CW617N
3	Hose clamp ring	1	UNI EN 12164 CW617N
4	O-Ring seals	1	HNBR yellow 70 Sh EN 682 - EN 549

GP 2615
GAS MONOBLOCCO SEAL



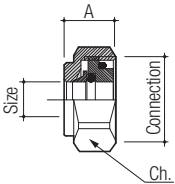
Monoblocco seal for copper pipe, nickel-plated, for GAS.

OPERATING CONDITIONS (UNI EN 1254-2)

Maximum operating pressures as a function of temperatures:

- Operating temperature: -20÷70 °C
- Operating pressure: MOP 5

(*) Article available while stocks last.



CODE	Size	Connection	A mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
9502R515	Ø 15 (*)	24 x 19	14,5	27	32	20	640	4,96
6047R524	(**)	24 x 19	14,5	27	33	20	320	3,29

(**) Blind monobloc seal (plug).

REMARKS

Monoblocco seals must only be used with screw fittings or gas-use manifolds manufactured by FIV, with 24x19 thread, verifying applicability in compliance with national regulations.

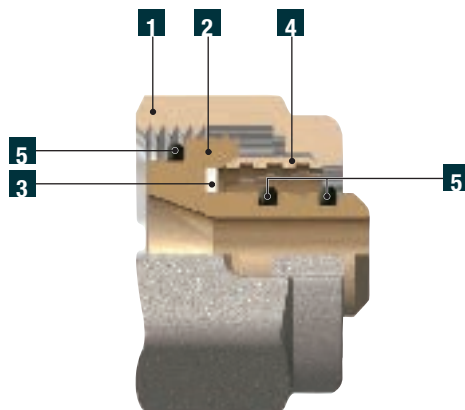
GP 2799
SPANNER



CODE	Size	Pack pcs/box	Price €
01306051	CH 27	1	12,47

MONOBLOCCO SEAL

MONOBLOCCO SEAL FOR MULTILAYER AND PLASTIC PIPES FOR WATER



Components

	Components	Pcs	Material
1	Nut	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
2	Adapter	1	UNI EN 12164 CW617N - DW
3	Washer (*)	1	PTFE, dielectric
4	Serrated hose-clamp, cutted	1	UNI EN 12164 CW617N - DW
5	O-Ring seals (*)	1	EPDM peroxidic 70 Sh

(*) Featured only on: Seals for multilayer pipe, 3-piece seals and 3/4" EK seals.

GP 2615

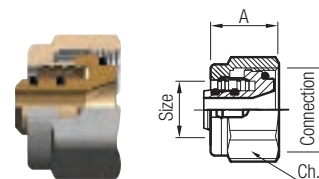
.MONOBLOCCO SEAL



Monoblocco nickel-plated seal, for multilayer pipes.

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).

These seals can be matched with the Modular Fittings.



CODE	Size	Connection	Maximum torque (Nm)	A mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
9505R910	14x2	24x19	30÷35	20,5	27	68	50	400	5,33
6238R917	16x2	24x19	30÷35	20,5	27	65	50	400	4,89
6238R918	16x2,25	24x19	30÷35	20,5	27	65	50	400	4,98
9505R927	18x2	24x19	30÷35	20,5	27	61	50	400	4,98
9505R931	20x2	24x19	30÷35	20,5	27	57	50	400	4,89
6243R932	20x2,5	24x19	30÷35	22	27	52	40	640	7,53
9505R938	25x2,5	M32x1,5	55÷60	20,5	37	119	20	320	11,35
9505R940	26x3	M32x1,5	55÷60	20,5	37	117	20	320	10,03
6171R817	16x2 (*)	1/2"	30÷35	15,4	24	38	10	150	3,19

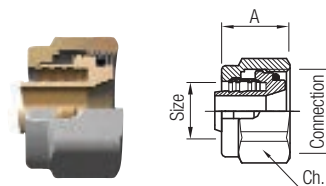
(*) Seal not preassembled.

GP 2615
MONOBLOCCO SEAL



Monoblocco nickel-plated seal, for PE-X, PE-RT, PP pipes.

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 pipe type PE-Xc PENTA; UNI EN ISO 15875-1 for pipe type PE-Xa; UNI EN ISO 22391-1 for pipe type PE-RT).



These seals can be matched with the Modular Fittings.

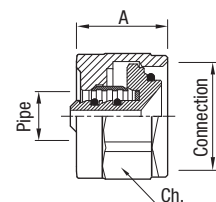
CODE	Size	Connection	Maximum torque (Nm)	A mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
6239R902	12x1	24x19	30+35	20,5	27	68	40	640	6,26
6239R906	12x2	24x19	30+35	20,5	27	67	40	640	6,26
6239R915	16x1,5	24x19	30+35	20,5	27	61	40	640	6,19
6239R916	16x1,8	24x19	30+35	20,5	27	62	40	640	5,16
6239R917	16x2	24x19	30+35	20,5	27	62	40	640	5,78
6239R924	17x2	24x19	30+35	20,5	27	60	40	640	5,80
6239R931	20x2	24x19	30+35	20,5	27	56	40	640	6,07

GP 2615
MONOBLOCCO SEAL



Monoblocco nickel-plated seal, for multilayer and PE-X, PE-RT, PP pipes.

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).

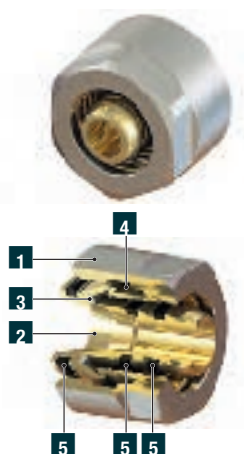


Available only on request.

CODE	Size	Connection	Maximum torque (Nm)	A mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
6245R912	12x2	EUROCONO	30+35	22,5	27	65	10	400	8,43
6245R931	20x2	EUROCONO	40+45	22,5	27	60	10	400	7,29

Supplied with O-rings.

GP 2615
MONOBLOCCO 2.0 SEAL



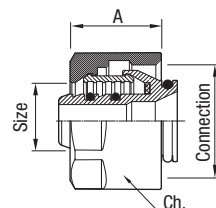
Monoblocco 2.0, nickel-plated 3/4" Eurocone seal, for multilayer and PE-X, PE-RT, PP pipes.

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

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 pipe type PE-Xa; UNI EN ISO 22391-1 for pipe type PE-RT).

Available only on request.



CODE	Size	Connection	Maximum torque (Nm)	A mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
9510R100	16x2	EUROCONO	30+35	20	27	69	10	320	5,28
9510R101	17x2	EUROCONO	35+40	20	27	67	10	320	5,23

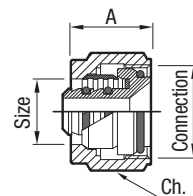
Supplied with O-rings.

GP 2615
3-PIECES FITTING



Brass three-pieces fitting, nickel-plated, for multilayer and PE-X, PE-RT, PP pipes.

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 pipe type PE-Xc PENTA; UNI EN ISO 15875-1 for pipe type PE-Xa; UNI EN ISO 22391-1 for pipe type PE-RT).



CODE	Size	Connection	A mm	Ch mm	gr	Pack pcs/box	Price €/pc
9993R017	17x2	24x19	20,5	27	60	20	4,40

GP 2799
SPANNER

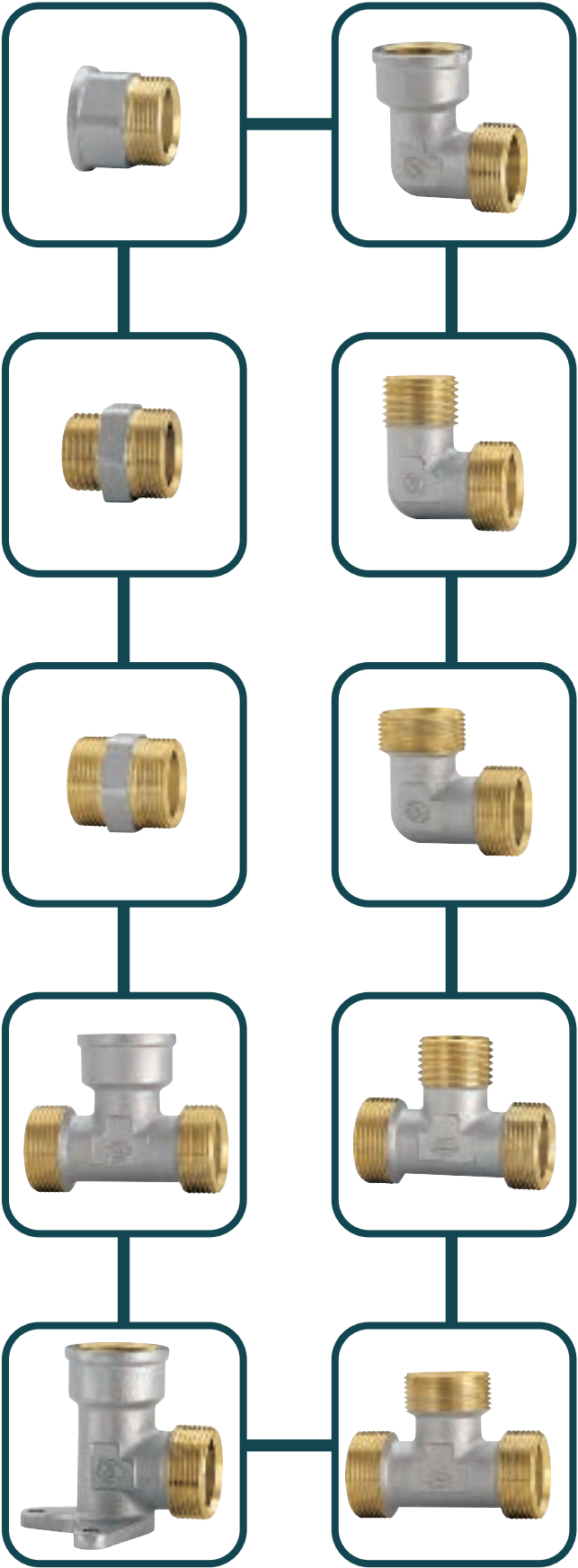


Spanner for tightening joints CH 27 in nickel-plated brass.



CODE	Size	Pack pcs/box	Price €
01306051	CH 27	1	12,47

Modular fittings to tighten for Copper, Multilayer, PE-X, PE-RT, PP pipes



Monoblocco seal
for copper pipe



24x19 connection

Monoblocco seal
for multilayer pipe



24x19 / M32x1.5 connection

Monoblocco seal
for PE-X, PE-RT, PP pipes



24x19 connection

MODULAR FITTINGS

MODULAR FITTINGS TO TIGHTEN



Components

Pcs Material

1 Body	1 UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
--------	---

Female and Male connection GAS threads ISO 228/1 (DIN 259)

REMARKS

** All types of 24x19 seals for Multilayer, PE-X, PE-RT and PP pipes size 12 to 20 can be fitted.

*** All types of M32x1.5 seals for Multilayer pipes size 26 can be fitted.

CONSTRUCTIONAL AND TECHNICAL CHARACTERISTICS

The use of tightened fittings makes installation of the pipe easy, quick, and above all with the use of very few tools. The threading of the fittings, 24x19 (or 32x1.5), allows the use of a single type of fitting that can be coupled with various seals of different sizes, thus rationalizing stocks. Nickel-plated only on surface non in contact with fluids.

THE RANGE

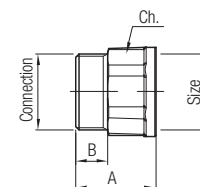
Fittings of 1/2" and 3/4" with attachment 24x19

Fittings of 3/4" and 1" with attachment M32x1.5

Double jointed and triple jointed fittings, attachment 24x19 and M32x1.5

GP 2610
FITTINGS

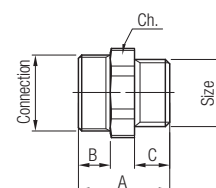
Straight Female joint, nickel-plated.



CODE	Size	Connection	A mm	B mm	Ch mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
1330K804	1/2" **	24x19	25	10	25	49	16	50	800	2,61
1330K807	3/4" **	24x19	27	10	31	75	16	30	480	4,02
1330K809	3/4" ***	M32x1.5	27	10	34	78	16	25	400	4,46
1330K811	1" ***	M32x1.5	28,5	10	38	95	16	20	320	5,12

GP 2610
FITTINGS

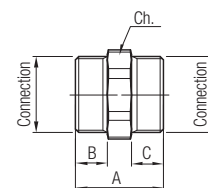
Straight Male joint, nickel-plated.



CODE	Size	Connection	A mm	B mm	C mm	Ch mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
1331K804	1/2" **	24x19	28,5	10	11	25	50	16	50	800	2,69
1331K807	3/4" **	24x19	29,5	10	12	31	73	16	30	480	3,87
1331K809	3/4" ***	M32x1.5	30	10	12	34	85	16	25	400	4,46
1331K811	1" ***	M32x1.5	31,5	10	13,5	34	88	16	20	320	4,79

GP 2610
FITTINGS

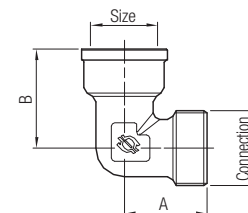
Straight joint - Double-jointed, nickel-plated.



CODE	Size	Connection	A mm	B mm	C mm	Ch mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
1332K831	20x20 **	24x19	27,5	10	10	25	50	16	50	800	2,71
1332K833	26x26 ***	M32x1.5	28	10	10	34	84	16	25	400	4,65

GP 2610
FITTINGS

Female elbow joint, nickel-plated.

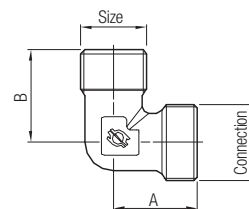


CODE	Size	Connection	A mm	B mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
1333K804	1/2" **	24x19	26	31	71	16	25	400	4,64
1333K807	3/4" **	24x19	29	33,5	99	16	20	320	5,76
1333K809	3/4" ***	M32x1.5	31	35	118	16	12	192	7,12
1333K811	1" ***	M32x1.5	33	38,5	143	16	10	160	8,96

GP 2610
FITTINGS



Male elbow joint, nickel-plated.

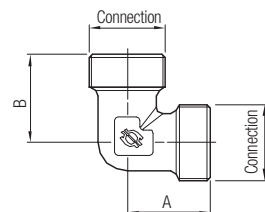


CODE	Size	Connection	A mm	B mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
1334K804	1/2" **	24x19	26	29	60	16	30	480	4,31
1334K807	3/4" **	24x19	29	31	73	16	25	400	5,11
1334K809	3/4" ***	M32x1.5	31	32	90	16	15	240	6,27
1334K811	1" ***	M32x1.5	33	35	114	16	12	192	8,31

GP 2610
FITTINGS



Double-jointed elbow, nickel-plated.

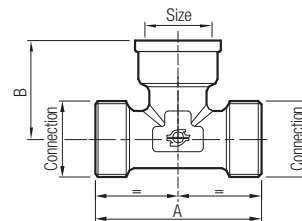


CODE	Size	Connection	A mm	B mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
1335K831	20x20 **	24x19	26	27,5	59	16	30	480	4,38
1335K833	26x26 ***	M32x1.5	31	31,5	95	16	15	240	6,60

GP 2610
FITTINGS



T-joint - Female, nickel-plated.

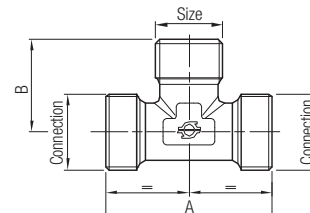


CODE	Size	Connection	A mm	B mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
1336K804	1/2" **	24x19	52	31	92	16	16	256	5,47
1336K807	3/4" **	24x19	58	33,5	118	16	12	192	7,21

GP 2610
FITTINGS



T-joint - Male, nickel-plated.



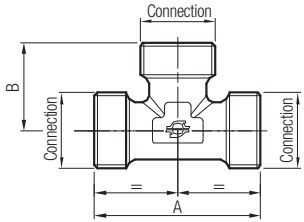
(*) Article available while stocks last.

CODE	Size	Connection	A mm	B mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
1337K804	1/2" **	24x19	52	29	82	16	20	320	5,32
1337K807	3/4" **	24x19	58	31	98	16	15	240	6,69
1337K811	1" *** (*)	M32x1.5	66	35	154	16	6	96	10,20

GP 2610
FITTINGS



T-joint - Three-piece, nickel-plated.



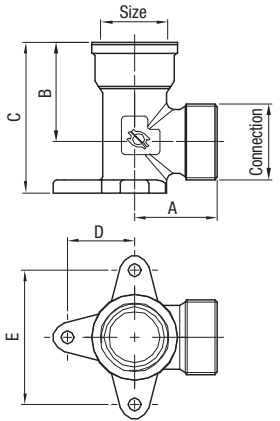
(*) Article available while stocks last.

CODE	Size	Connection	A mm	B mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
1338K854	20x20x20 **	24x19	52	27,5	81	16	20	320	5,03
1338K856	26x26x26 *** (*)	M32x1.5	62	32	134	16	8	128	8,88

GP 2610
FITTINGS



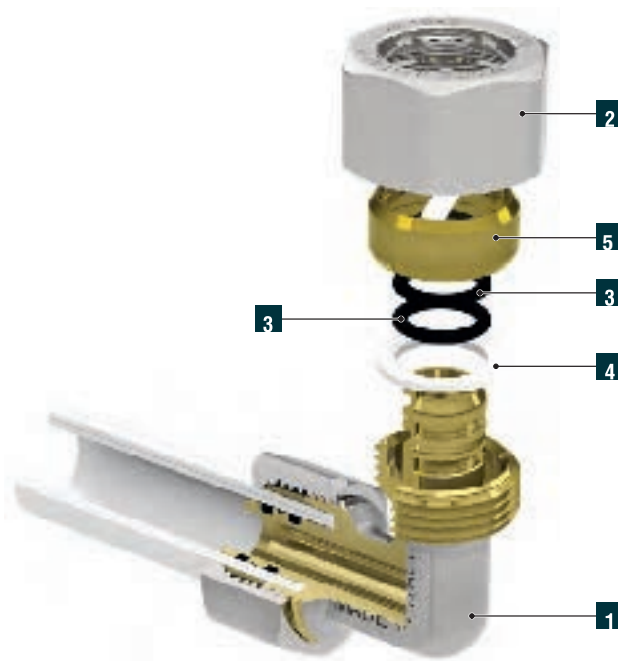
Female elbow joint with flange, nickel-plated.



CODE	Size	Connection	A mm	B mm	C mm	D mm	E mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
1339K804	1/2" **	24x19	26	31	47	21	42	105	16	12	192	6,47

INTEGRAL

FITTINGS TO TIGHTEN FOR MULTILAYER PIPE



Components

	Components	Pcs	Material
1	Brass body (nickel-plating on surfaces not in contact with transported fluids)	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
2	Nut	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
3	Double O-Ring	2	EPDM peroxidic 70 Sh
4	Washer	1	Polyethylene
5	Ogive	1	UNI EN 12164 CW617N - DW

EN TECHNICAL AND CONSTRUCTIONAL CHARACTERISTICS

INTEGRAL 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

INTEGRAL screw compression fittings comply with Italian Ministry of Health Decree no. 174 dated 06/04/2004.

TIGHTENING TORQUES

Pipe size 16x2 - Maximum torque 18-20 Nm

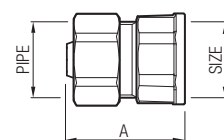
Pipe size 20x2 - Maximum torque 22-25 Nm

Pipe size 26x3 - Maximum torque 25-30 Nm

GP 2605
INTEGRAL



Female straight fitting, nickel-plated.

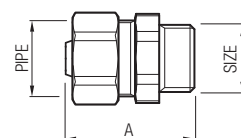


CODE	Size	Pipe	A mm	Pack pcs/box	Master pcs/box	Price €/pc
9220R802	16 x 1/2"	16x2	35	10/150	600	4,52
9220R804	20 x 1/2"	20x2	33	10/100	400	6,72
9220R807	20 x 3/4"	20x2	38	10/60	240	7,25
9220R809	26 x 3/4"	26x3	39	5/50	200	13,84
9220R811	26 x 1"	26x3	42	5/50	200	14,62

GP 2605
INTEGRAL



Male straight fitting, nickel-plated.

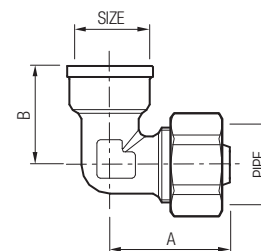


CODE	Size	Pipe	A mm	Pack pcs/box	Master pcs/box	Price €/pc
9221R802	16 x 1/2"	16x2	35	10/150	600	4,35
9221R804	20 x 1/2"	20x2	36	10/100	400	6,76
9221R807	20 x 3/4"	20x2	36	10/100	400	6,60
9221R809	26 x 3/4"	26x3	39	5/50	200	13,65
9221R811	26 x 1"	26x3	43	5/50	200	13,70

GP 2605
INTEGRAL



Female elbow fitting, nickel-plated.

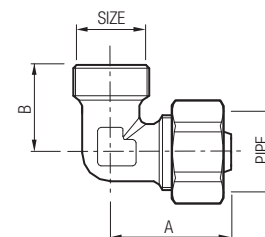


CODE	Size	Pipe	A mm	B mm	Pack pcs/box	Master pcs/box	Price €/pc
9222R802	16 x 1/2"	16x2	27	33	10/100	400	5,63
9222R804	20 x 1/2"	20x2	30	36	10/60	240	9,13
9222R807	20 x 3/4"	20x2	32	36	10/60	240	10,93
9222R809	26 x 3/4"	26x3	42	38	5/30	120	17,40

GP 2605
INTEGRAL



Male elbow fitting, nickel-plated.

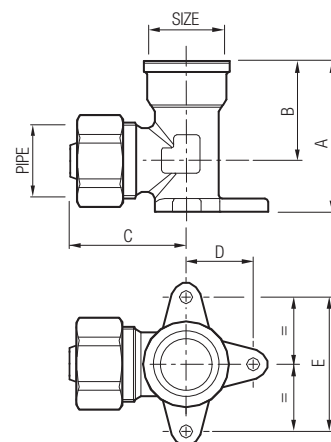


CODE	Size	Pipe	A mm	A mm	Pack pcs/box	Master pcs/box	Price €/pc
9223R802	16 x 1/2"	16x2	25	33	10/100	400	5,22
9223R804	20 x 1/2"	20x2	29	36	10/60	240	8,11
9223R807	20 x 3/4"	20x2	31	36	10/60	240	10,80
9223R809	26 x 3/4"	26x3	39	38	5/30	120	15,82

GP 2605
INTEGRAL



Female elbow fitting with flange, nickel-plated.

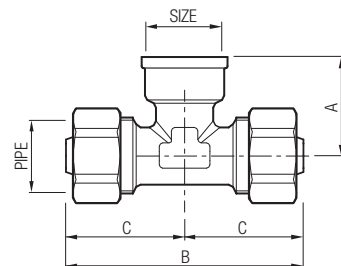


CODE	Size	Pipe	A mm	B mm	C mm	D mm	E mm	Pack pcs/box	Master pcs/box	Price €/pc
9224R802	16 x 1/2"	16x2	40	27	34	17	34	10/50	200	8,20
9224R804	20 x 1/2"	20x2	40	27	35	17	34	5/30	120	9,59

GP 2605
INTEGRAL



Intermediate T-fitting with female threaded central branch, nickel-plated.

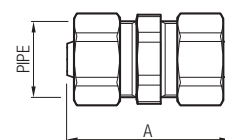


CODE	Size	Pipe	A mm	B mm	C mm	Pack pcs/box	Master pcs/box	Price €/pc
9225R817	16 x 1/2" x 16	16x2	27	66	33	10/50	200	9,00
9225R819	20 x 1/2" x 20	20x2	30	72	36	5/30	120	14,19
9225R822	20 x 3/4" x 20	20x2	32	72	36	5/30	120	13,19
9225R823	26 x 3/4" x 26	26x3	42	76	38	5/20	80	24,18

GP 2605
INTEGRAL



Intermediate straight fitting, nickel-plated.

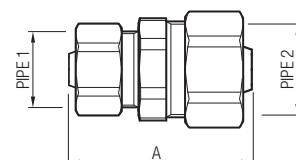


CODE	Size	Pipe	A mm	Pack pcs/box	Master pcs/box	Price €/pc
9226R829	16 x 16	16x2	43	10/100	400	7,20
9226R831	20 x 20	20x2	44	10/50	200	10,85
9226R833	26 x 26	26 x 3	50	5/30	120	19,93

GP 2605
INTEGRAL

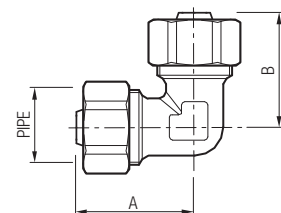


Intermediate reduced straight fitting, nickel-plated.



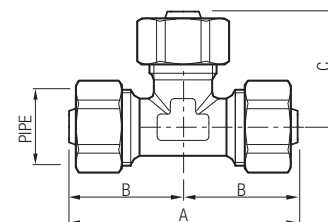
CODE	Size	Pipe 1	Pipe 2	A mm	Pack pcs/box	Master pcs/box	Price €/pc
9227R841	16 x 20	16x2	20x2	43	10/70	280	10,19
9227R845	20 x 26	20x2	26x3	48	5/50	200	17,10

GP 2605
INTEGRAL



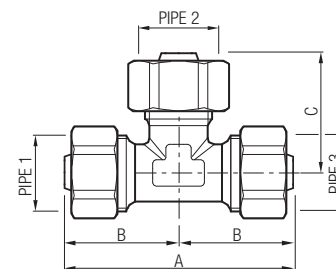
CODE	Size	Pipe	A mm	B mm	Pack pcs/box	Master pcs/box	Price €/pc
9228R829	16 x 16	16x2	34	34	10/100	400	7,47
9228R831	20 x 20	20x2	36	36	10/60	240	12,21
9228R833	26 x 26	26x3	38	48	5/30	120	23,08

GP 2605
INTEGRAL



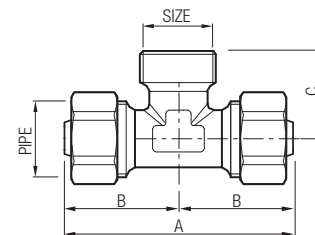
CODE	Size	Pipe	A mm	B mm	C mm	Pack pcs/box	Master pcs/box	Price €/pc
9229R852	16 x 16 x 16	16x2	72	36	36	10/50	200	10,73
9229R854	20 x 20 x 20	20x2	72	36	36	5/30	120	17,54
9229R856	26 x 26 x 26	26x3	76	38	48	5/15	60	30,05

GP 2605
INTEGRAL



CODE	Size	Pipe 1	Pipe 2	Pipe 3	A mm	B mm	C mm	Pack pcs/box	Master pcs/box	Price €/pc
9230R861	16 x 20 x 16	16x2	20x2	16x2	72	36	36	5/30	120	15,81
9230R874	16 x 20 x 20	16x2	20x2	20x2	72	36	36	5/30	120	16,29
9230R885	26 x 20 x 26	26x3	20x2	26x3	76	38	43	5/15	60	30,11

GP 2605
INTEGRAL

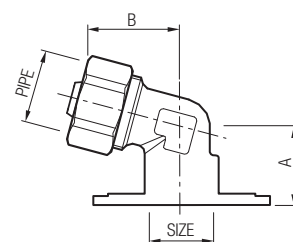


CODE	Size	Pipe	A mm	B mm	C mm	Pack pcs/box	Master pcs/box	Price €/pc
9231R817	16 x 1/2" x 16	16x2	68	34	24	10/50	200	8,85
9231R819	20 x 1/2" x 20	20x2	72	36	29	5/30	120	13,85
9231R822	20 x 3/4" x 20	20x2	72	36	30	5/30	120	13,45

GP 2605
INTEGRAL



105° female fitting, nickel-plated.

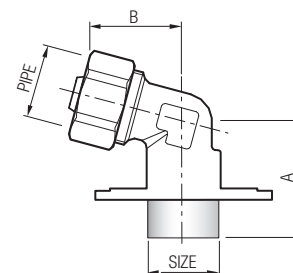


CODE	Size	Pipe	A mm	B mm	Pack pcs/box	Master pcs/box	Price €/pc
9232R802	16 x 1/2"	16x2	21	30	5/50	200	8,94

GP 2605
INTEGRAL



105° long female fitting, nickel-plated.

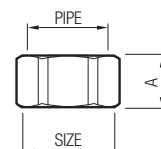


CODE	Size	Pipe	A mm	B mm	Pack pcs/box	Master pcs/box	Price €/pc
9232R902	16 x 1/2"	16x2	38	30	5/50	200	13,52

GP 2605
INTEGRAL



1/2" coupling nut, nickel-plated.

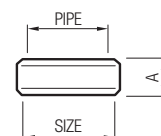


CODE	Size	Pipe	A mm	Pack pcs/box	Master pcs/box	Price €/pc
4800R016	16	16x2	13	20/240	960	1,14
4800R020	20	20x2	14	10/200	800	1,51
4800R026	26	26x3	18	5/100	400	3,23

GP 2605
INTEGRAL



Ogive.



CODE	Size	Pipe	A mm	Pack pcs/box	Master pcs/box	Price €/pc
5787L016	16	16x2	8	20/240	960	0,50
5787L020	20	20x2	8	10/200	800	0,76
5787L026	26	26x3	11	5/100	400	1,18



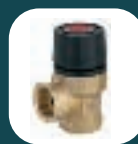
Heating unit components, **7**

FITTINGS AND FLEXIBLE PIPES



page 222

**Export
compensated
pressure
reducers**



page 236

**Security
relief valves**



page 225

**Compensated
pressure
reducers**



page 238

**Tightening
connections
with brass seals**



page 228

**Automatic
filling valve**



page 242

**3-piece fittings
for radiators**



page 230

**Safety group
kit**



page 244

**AISI 304
stainless steel
flexible pipes**



page 232

**Wind Plus
air vent valves**



page 248

**Antivibration
flexible pipes**



page 234

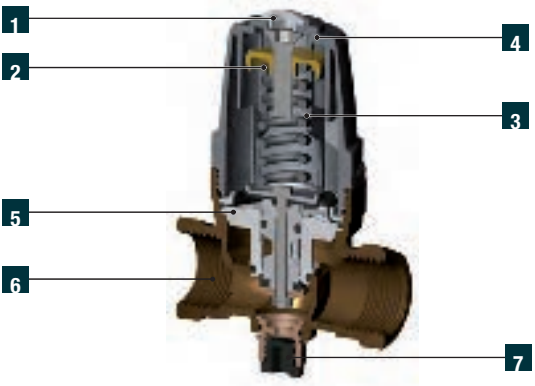
**Wind
air vent valves**



page 250

**Extensible
flexible pipes**





Components		Material
1	Protection cap	PA6 (15% GF)
2	Adjustment mechanics	UNI EN 12164 CW617N - DW
3	Spring	AISI 302 stainless steel
4	Cap	PA66 (30% FV)
5	Shutter cartridge:	
	Plastics	Hostaform
	Gasket and membrane	EPDM 70 WRAS
	Stem and washers	AISI 304 stainless steel
6	Body	UNI EN 12165 CW617N - DW
7	G 1/4 "F fitting for pressure gauge	UNI EN 12164 CW617N - DW

Diagram of pressure drops: see technical attachments.

EXPORT - COMPENSATED PRESSURE REDUCERS

Membrane pressure reducer equipped with stopper with compensated surfaces.
This measure ensures stability of outlet pressure regardless of variations in upstream pressure.
The stopper is made of synthetic material with a low friction coefficient to reduce the formation of lime build-up, which is the main cause of malfunctions.
The stopper cartridge, which can be entirely replaced, and the seal gaskets of the body can however all be removed and serviced without having to remove the reducer from the system.
Available with connections to pipes with male/female double threading.
The pressure reducers can work with maximum upstream pressure of 25 bar with minimum downstream pressure of 1 bar and a maximum of 6 bar.
They are calibrated at the test bench with an upstream pressure of 8 bar and 3 bar downstream, with 100% testing prior to packaging.
The default calibration can be changed by loosening the upper screw to decrease pressure or by tightening it to increase pressure.
The reducer body are standard equipped with fittings for the gauge for the control of downstream pressure (thread G ¼" female).
Upstream from the reducer it is advisable to install a silt filter to collect any impurities in the water. This will ensure longer life of the reducer.

- EN
- GENERAL CHARACTERISTICS

Maximum upstream pressure: 25 bar

Downstream pressure: 1 ÷ 6 bar

Maximum temperature: 70°C

Preset at the outlet to 3 bar

External connection Male thread of reducer ISO 228/1 (DIN 259)

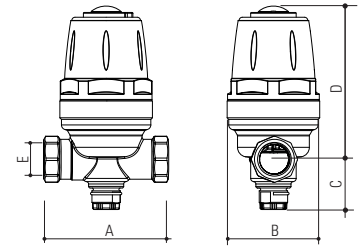
Internal connection Female thread of reducer ISO 228/1 (DIN 259)

For special uses (in accordance with the pressure values established for these pressure reducers and the compatibility of the various fluids with the materials the item is made of) see the chemical compatibility table in the technical annexes.

GP 2282
EXPORT



Pressure reducer Female-Female without pipe unions, sand-blasted.

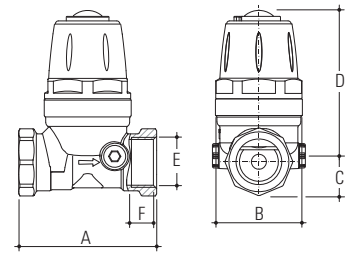


CODE	Size	DN	A mm	B mm	C mm	D mm	E	Pack pcs/box	Price €
8719S004	1/2"	15	78	58	31,5	96	1/2"	1	42,13
8719S005	3/4"	20	86	58	32,5	96	3/4"	1	46,75

GP 2282
EXPORT



Pressure reducer Female-Female without pipe unions, sand-blasted.

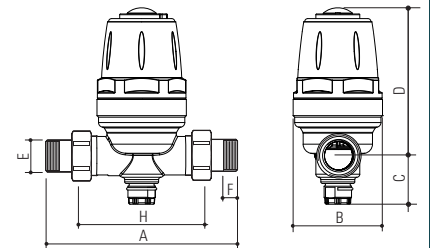


CODE	Size	DN	A mm	B mm	C mm	D mm	E	F mm	Pack pcs/box	Price €
8721S006	1"	25	92	62	23	102	1"	16,8	1	54,07

GP 2282
EXPORT



Pressure reducer complete with male pipe unions, sandblasted.

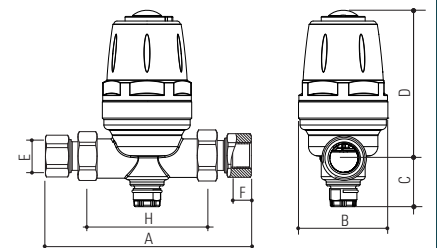


CODE	Size	DN	A mm	B mm	C mm	D mm	E	F mm	H mm	Pack pcs/box	Price €
8718S004	1/2"	15	132	58	31,5	96	1/2"	8	78	1	50,38
8718S005	3/4"	20	146	58	32,5	96	3/4"	10	86	1	59,18

GP 2282
EXPORT



Pressure reducer complete with female pipe unions, sandblasted.



CODE	Size	DN	A mm	B mm	C mm	D mm	E	F mm	H mm	Pack pcs/box	Price €
8717S004	1/2"	15	156	70	24	93	1/2"	15	92	1	54,31
8717S005	3/4"	20	165	70	25	93	3/4"	16,3	96	1	61,41

GP 2299
PIPE UNIONS



Female threaded pipe union kit, flat seal with gasket (provided in pairs), sandblasted.

CODE	Size	Pack pcs/box	Price €
8709S104	1/2" F	1	18,63
8709S105	3/4" F	1	26,84

GP 2299
PIPE UNIONS



Male threaded pipe union kit, flat seal with gasket (provided in pairs), sandblasted.

CODE	Size	Pack pcs/box	Price €
8710S004	1/2" M	1	8,46
8710S005	3/4" M	1	12,46

GP 2000
GAUGE



Pressure gauge Ø 63 with a 1/4" radial fitting for pressure reducers.

CODE	Size	Pressure	Pack pcs/box	Price €/pc
00622006	1/4"	6 bar	10	10,64

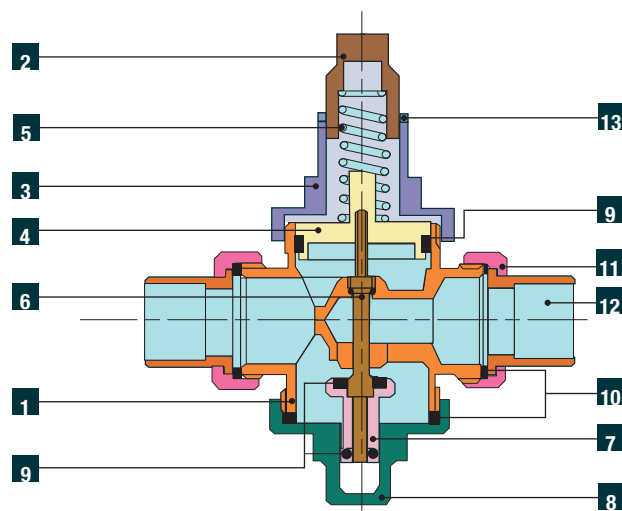
GP 2000
GAUGE



Pressure gauge Ø 50 with rear fitting 1/4" for pressure reducers.

CODE	Size	Pressure	Pack pcs/box	Price €/pc
00622442	1/4"	10 bar	10	10,00

PRESSURE REDUCERS AND SAFETY VALVE



Components

	Components	Pcs	Material
1	Body	1	UNI EN 12165 CW617N - DW
2	Spring press	1	UNI EN 12164 CW617N - DW
3	Cap	1	UNI EN 12164 CW617N - DW
4	Diaphragm	1	UNI EN 12164 CW617N - DW
5	Spring	1	Cadmium-plated steel
6	Stem	1	UNI EN 12164 CW617N - DW
7	Shutter	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW AISI 303 from 1"1/4 to 2"
8	Lower cap	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
9	Seal	1	NBR
10	Seal	1	FAST
11	Nuts	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
12	Tangs	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
13	Block nut	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW

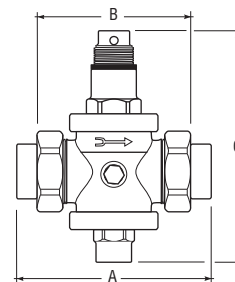
Characteristics

Maximum upstream pressure	25 bar
Downstream adjustment range	0,5 - 6 bar
Preset at outlet	3 bar
Maximum temperature	80 °C
Tang threads	UNI EN ISO 228/1
Side connections for pressure gauge	1/4"
In accordance with regulation	DIN EN 1567

GP 2028 PRESSURE REDUCERS



Compensated pressure reducers with two Female pipe unions, nickel-plated.



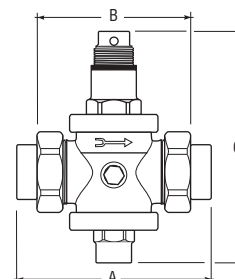
CODE	Size	A mm	B mm	C mm	Flow rate ideal l/min	Flow rate ideal m³/h	gr	Pack pcs/box	Master pcs/box	Price €/pc
08026002	1/2"	112	75	120	20 - 50	1,2 - 3	920	1	8	67,08
08026004	3/4"	135	88	160	50 - 75	3 - 4,5	1600	1	6	104,40

Pressure drops diagram in the Technical annexes.

GP 2028 PRESSURE REDUCERS



Compensated pressure reducers with two Female pipe unions, sand-blasted.



CODE	Size	A mm	B mm	C mm	Flow rate ideal l/min	Flow rate ideal m³/h	gr	Pack pcs/box	Master pcs/box	Price €/pc
08026114	1"1/4	170	110	220	95 - 130	6 - 8	3430	1	8	206,30
08026112	1"1/2	175	110	220	110 - 140	7 - 8,5	3450	1	8	236,20
08026200	2"	200	130	250	120 - 160	7,5 - 10	5110	1	6	337,10

Pressure drops diagram in the Technical annexes.

CHOICE OF REDUCER

When choosing a Pressure reducer to install on the system, choose on the basis of the ideal load values, expressed both in litres/minute and in m³/hour, indicated in the table representing the load range within which functioning, silence and reduced load loss are optimized.

INSTALLATION

Pressure reducers with balancing chambers remain stable in the face of upstream pressure that does not influence downstream pressure and may be installed in any position (horizontal, vertical, oblique or upside down). Reducers can be damaged by impurities present in the water; a self-cleaning filter installed on the reducer provides adequate protection against this hazard.

In case of a boiler in the system, below the reducer, malfunctions in the pressure reducer are possible due to the increase in pressure following an increase in water temperature; install a surge chamber between the boiler and the pressure reducer to eliminate this problem. Finally, insert an anti-pipe hammer in the system to avoid failure of the internal elements of the pressure reducer.

PRESSURE SETTING

All pressure reducers are tested and set in output at a pressure of 3 bar; output pressure may easily be modified even when the reducer is installed on the system.

To change output pressure loosen the ring nut and rotate the spring clamp. Rotating in a clockwise direction increases output pressure, rotating in an anti-clockwise direction decreases pressure. Correct pressure setting must be made in closed system mode.

GP 2000 GAUGE



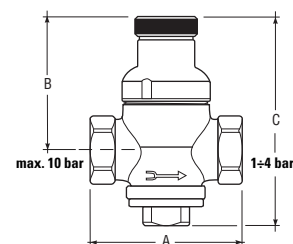
Pressure gauge Ø 50 with rear fitting 1/4" for pressure reducers.

CODE	Size	Pressure	Pack pcs/box	Price €/pc
00622442	1/4"	10 bar	10	10,00

GP 2028
PRESSURE REDUCER



1/2" Female-Female nickel-plated pressure reducer for water heater.



CODE	Size	A mm	B mm	C mm	Flow rate ideal l/min	Flow rate ideal m³/h	gr	Pack pcs/box	Master pcs/box	Price €/pc
08026312	1/2"	60	55	93	10 - 14	0,6 - 0,8	430	8	64	29,20

Pressure drops diagram in the Technical annexes.

CHARACTERISTICS

Maximum pressure upstream: 15 bar
Downstream pressure: 1³ 4 bar
Preset at outlet at 3 bar
Maximum temperature: 80 °C
Threading connections: ISO 228/1

USES

Considering their small size, pressure reducers for boilers are ideal for water systems with one user, boiler charge systems, coffee machines and soft drink vending machines.

INSTALLATION

Pressure reducers for boilers may be installed in any position (horizontal, vertical, oblique or upside down).
Reducers can be damaged by impurities present in the water; a self-cleaning filter installed on the reducer provides adequate protection against this hazard.
In case of a boiler in the system, below the reducer, malfunctions in the pressure reducer are possible due to the increase in pressure following an increase in water temperature; install a surge chamber between the boiler and the pressure reducer to eliminate this problem.
Finally, insert an anti-pipe hammer in the system to avoid failure of the internal elements of the pressure reducer.

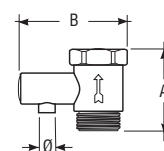
PRESSURE SETTING

All pressure reducers are tested and set in output at a pressure of 3 bar; output pressure may easily be modified even when the reducer is installed on the system.
To change output pressure unscrew and remove the black plastic tap; use a screwdriver to unscrew the brass spring clamp; rotating in a clockwise direction increases output pressure, rotating in an anti-clockwise direction decreases pressure. Correct pressure setting must be made in closed system mode.

GP 2030
SAFETY VALVE



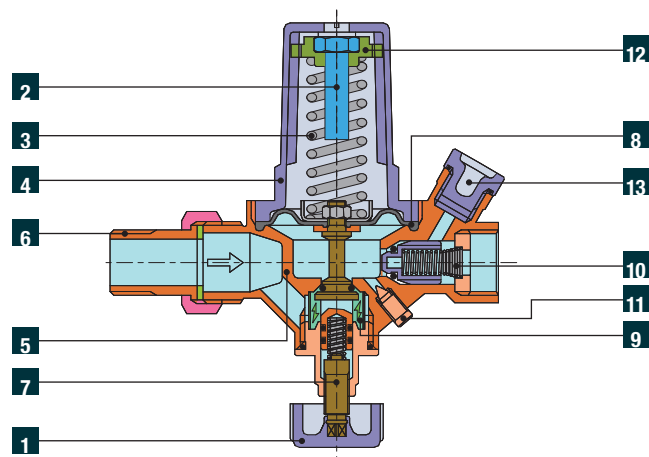
Male safety no-return valve for water heater, nickel-plated.



- Preset at 6 bar

CODE	Size	A mm	B mm	Ø mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
08022012	1/2"	41	52	5	83	50	400	7,62
08022034	3/4"	57	71	9	196	20	160	14,01

AUTOMATIC FILLING VALVE



Components

Material

1	Knob	High impact plastic
2	Adjustment mechanism	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
3	Spring	AISI 302 stainless steel
4	Cap	High impact plastic
5	Body	UNI EN 12165 CW617N - DW
6	Pipe joints	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
7	Shutter	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
8	Membrane	NBR rubber reinforced with nylon fabric
9	Filtering cartridge	AISI 304 stainless steel
10	Check valve	Hostaform
11	Drain	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
12	Spring presser	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
13	Pressure gauge connection	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW

Flow rate / pressure drops diagram: see Technical Annexes.

AUTOMATIC FILLING VALVE

Automatic filling valve for closed or open vessel heating systems. The valve is fitted with a pressure reducer, a filter, an on/off valve and a check valve. The valve is placed between the water supply network and the heating system to ensure the pressure is kept stable at a pre-set value and water losses are automatically replenished in the system. They have a manual tap to intercept the water supplied to the system and a check valve used as a protection against possible flow reversal, which would contaminate the water supply system.

- EN

GENERAL CHARACTERISTICS

Maximum upstream pressure: 10 bar

Downstream pressure: 0.3 ÷ 4 bar

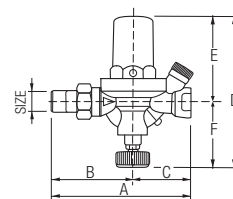
Maximum flow rate: 1.8 m /h

Maximum temperature: 40 °C
Fittings: Thread UNI EN ISO 228/1 (DIN 259)
Pressure gauge connection: 1/4" F

GP 2799
AUTOMATIC FILLER



Automatic filler unit for heating systems.



CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	gr	Pack pcs/box	Price €
6106R004	1/2"	125	73	52	142	78,5	63,5	550	1	69,33

GP 2000
GAUGE

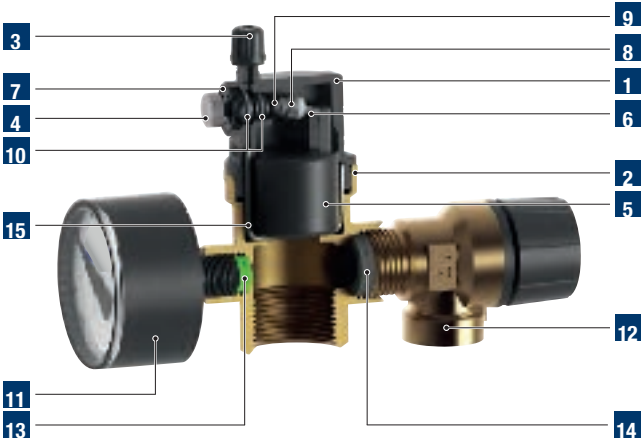


Pressure gauge $\varnothing$ 63 with a 1/4" radial fitting for pressure reducers.

CODE	Size	Pressure	Pack pcs/box	Price €/pc
00622006	1/4"	6 bar	10	10,64

SAFETY GROUP KIT

SAFETY VALVE / AIR VENT / PRESSURE GAUGE



Components	Pcs	Material
1 Cover	1	Zytel (HTN51)
2 Main body	1	UNI EN 12165 CW617N - DW
3 Black plug for manual vent	1	PA 6 stiffened
4 Grey plug for automatic vent	1	PA 6 stiffened
5 Float	1	PP
6 Stem	1	PA 6
7 Ring nut	1	PPO
8 Spring	1	Stainless steel
9 Shutter	1	Silicone rubber
10 O-Ring seal	2	NBR
11 Pressure gauge Ø 50 mm / 4 bar	1	
12 Safety valve from 3 bar size 1/2" M-F	1	
13 Gaskets	2	Fasit
14 Gasket	1	EPDM
15 Float support	1	AISI 304 stainless steel

SAFETY GROUP KIT

The Safety Group is usually employed in thermal centres. Its purpose is to discharge the water when the pressure limit is reached and can be used as protection for hot water heaters and water systems generally. The excellent air flow characteristics make the Safety Group indispensable for eliminating any air bubbles from water heating systems. Even with a high air flow capacity, the space taken up is low enough to allow for use with gas wall boilers, on manifolds, and anywhere where conduits need to be purged of air. The visual checking of water pressure is possible using the manometer with a full scale from 0-4 bar. Every product is individually tested immersed in water to ensure perfect operation.

EN GENERAL CHARACTERISTICS
Range: from 3/4"
Female fitting: Thread UNI EN ISO 228/1 (DIN 259)

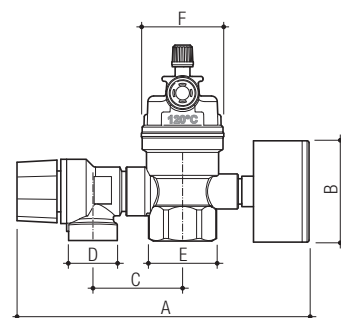
OPERATING CONDITIONS
Nominal working pressure: 10 bar
Maximum working pressure: 3 bar
Maximum working temperature: 95 °C

TECHNICAL FEATURES
The membrane of the stopper is protected by anti-adherence characteristics and remains unchanged over time.
The calibration pressure is printed in the plug at the top of the valve.
Accidental manual opening is prevented by a protective cap.–To use the knob, you must remove the cap.

GP 2799
SAFETY GROUP KIT



KIT Safety Group, complete with gasket,
3 bar 1/2" F-F safety valve and Ø 50 mm
pressure gauge, 4 bar full scale.



CODE	Size	A mm	B mm	C mm	D	E	F	Pack pcs/box	Price €
6230R005	3/4" F	150	100	46	G 1/2"	G 3/4"	M 38x1,5	1	39,74

GP 2799
SAFETY GROUP KIT

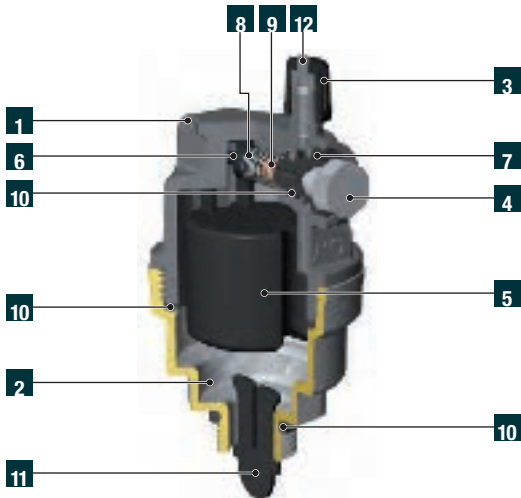


Spare cartridge Wind Plus valve for Safety Group.

CODE	Size	Pack pcs/box	Price €
6231R005	1/2"	1	8,18

WIND PLUS

AUTOMATIC AIR VENT VALVES WITH PLASTIC COVER



Components		Pcs	Material
1	Cover	1	Zytel (HTN51)
2	Cup	1	UNI EN 12165 CW617N - DW
3	Black plug for manual vent	1	PA 6 stiffened
4	Grey plug for automatic vent	1	PA 6 stiffened
5	Float	1	PP
6	Stem	1	PA 6
7	Ring nut	1	PPO
8	Spring	1	Stainless steel
9	Shutter	1	Silicone rubber
10	O-Ring seal	3	NBR
11	Bubble breaker	1	PA 6 stiffened
12	Gasket	1	NBR

Pressure drops: See diagram on Technical Attachments.

EN GENERAL CHARACTERISTICS

Range: From 3/8" to 1/2"

Male fitting: Thread UNI EN ISO 228/1 (DIN 259)

OPERATING CONDITIONS

Maximum temperature: 110 °C.

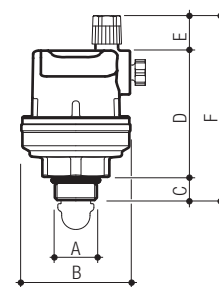
Max. working pressure: 10 bar.

Excellent air flow characteristics, it is indispensable for eliminating any air bubbles from water heating systems. Even with a high air flow capacity, the space taken up is low enough to allow for use with gas wall boilers, on manifolds, and anywhere where conduits need to be purged of air. Every product is individually tested immersed in water to ensure perfect operation.

GP 2070
WIND PLUS



Reduced air vent valve, with plastic cover and anti-dirt air chamber, with bubble breaker.

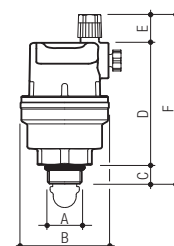


CODE	Size	A	B mm	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Master pcs/box	Price €/pc
9460R003	3/8"	G 3/8"	42	9	49	13,5	71,5	10	12	96	8,73

GP 2070
WIND PLUS



Standard air vent valve, with plastic cover and anti-dirt air chamber, with bubble breaker.

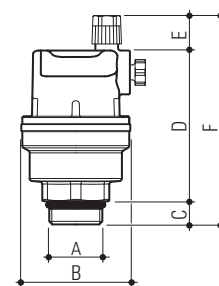


CODE	Size	A	B mm	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Master pcs/box	Price €/pc
9461R003	3/8"	G 3/8"	42	9	58,5	13,5	81	10	12	96	9,32

GP 2070
WIND PLUS



Standard air vent valve, with plastic cover and anti-dirt air chamber, without bubble breaker.

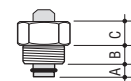


CODE	Size	A	B mm	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Master pcs/box	Price €/pc
9461R004	1/2"	G 1/2"	42	9	58,5	13,5	81	10	12	96	10,25

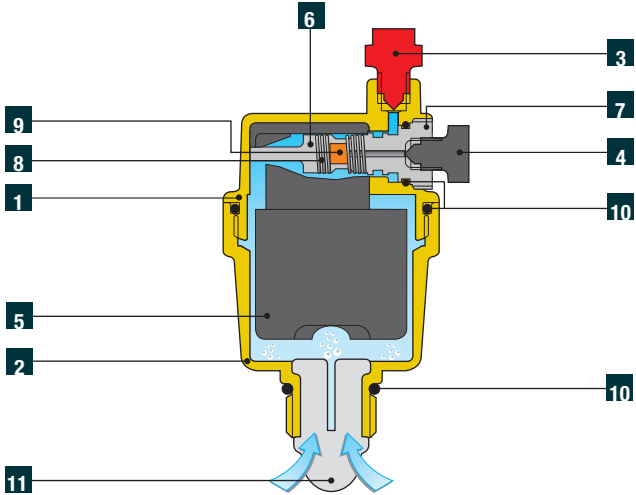
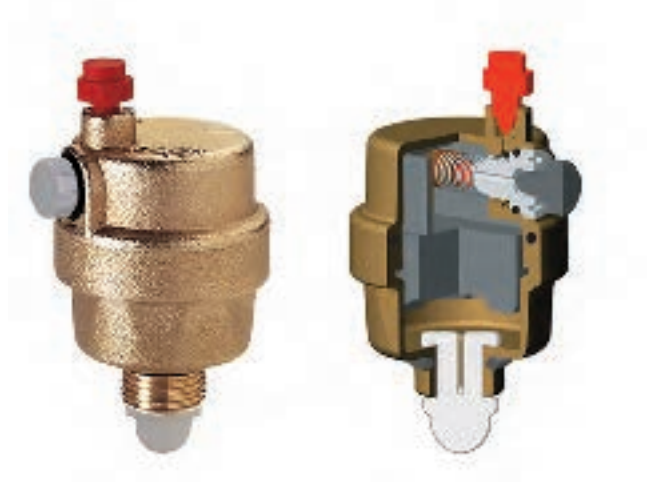
GP 2070
WIND PLUS



Check valve for air vent valve.



CODE	Size	A mm	B mm	C mm	PN	Pack pcs/box	Master pcs/box	Price €/pc
08020100	F3/8"-M3/8"	5	10	12	10	12	960	2,59
08023812	F3/8"-M1/2"	5	10	12	10	12	960	3,34
08020112	F1/2"-M1/2"	5	10	12	10	12	960	4,07



Components		Pcs	Material
1	Cover	1	UNI EN 12165 CW617N - DW
2	Cup	1	UNI EN 12165 CW617N - DW
3	Red plug for manual vent	1	PA 6 stiffened
4	Black plug for automatic vent	1	PA 6 stiffened
5	Float	1	PP
6	Stem	1	PA 6
7	Ring nut	1	PPO
8	Spring	1	Stainless steel
9	Shutter	1	Silicone rubber
10	O-Ring seal	3	NBR
11	Bubble breaker	1	PA 6 stiffened

Pressure drops: See diagram on Technical Attachments.

EN GENERAL CHARACTERISTICS

Range: From 3/8" to 1/2"
Male fitting: Thread UNI EN ISO 228/1 (DIN 259)

OPERATING CONDITIONS

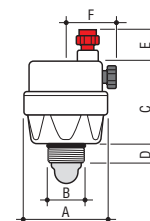
Maximum temperature: 120 °C.
Maximum working pressure: 10 bar.

Constructed entirely in UNI EN 12165 CW617N brass with excellent air flow characteristics, it is indispensable for eliminating any air bubbles from water heating systems. Even with a high air flow capacity, the space taken up is low enough to allow for use with gas wall boilers, on manifolds, and anywhere where conduits need to be purged of air. Every product is individually tested immersed in water to ensure perfect operation.

GP 2070
WIND



Reduced size automatic air vent valve, with bubble breaker.

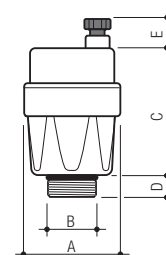


CODE	Size	øA mm	B mm	C mm	D mm	E mm	F mm	PN	Pack pcs/box	Master pcs/box	Price €/pc
00400630	3/8"	40	3/8"	40	10	15	25	10	16	96	10,44

GP 2070
VALVOLE WIND



Standard upper air vent valve, without bubble breaker.

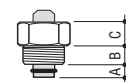


CODE	Size	øA mm	B mm	C mm	D mm	E mm	PN	Pack pcs/box	Master pcs/box	Price €/pc
00400670	1/2"	40	1/2"	50	10	12	10	12	96	12,26

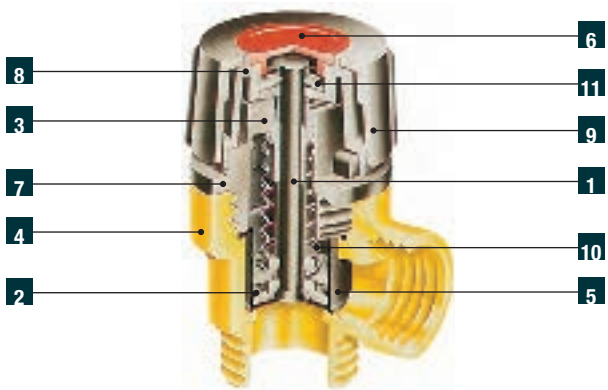
GP 2070
WIND



Check valve for air vent valve.



CODE	Size	A mm	B mm	C mm	PN	Pack pcs/box	Master pcs/box	Price €/pc
08020100	F3/8"-M3/8"	5	10	12	10	12	960	2,59
08023812	F3/8"-M1/2"	5	10	12	10	12	960	3,34
08020112	F1/2"-M1/2"	5	10	12	10	12	960	4,07



Components		Pcs	Material
1	Stem	1	Nylon stiffened
2	Disk	1	Nylon stiffened
3	Calibration ring nut	1	Nylon
4	Body	1	UNI EN 12165 CW617N
5	Membrane	1	EPDM
6	Identification plug	1	PVC
7	Closure ring nut	1	Nylon
8	Click knob	1	Nylon
9	Protection cap	1	Nylon
10	Spring	3	AISI 302 stainless steel
11	Fastener	1	KS5 steel

EN GENERAL CHARACTERISTICS

Range: 1/2"

Male and female fitting: Thread UNI EN ISO 228/1 (DIN 259)

OPERATING CONDITIONS

Maximum temperature: 110 °C.

TECHNICAL FEATURES

The membrane of the stopper is protected by anti-adherence characteristics and remains unchanged over time.

The calibration pressure is printed in the plug at the top of the valve.

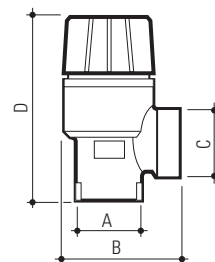
Accidental manual opening is prevented by a protective cap. -To use the knob, you must remove the cap.

The Security Pressure Relief Valve is normally used in heating systems with closed expansion tank. Its purpose is to discharge the water if the pressure limit is reached. It can also be used to protect the heaters of domestic water and in water systems in general.

GP 2032
SECURITY



Relief valves 1/2" FF, plug with calibration pressure, protective cap and manual discharge knob.

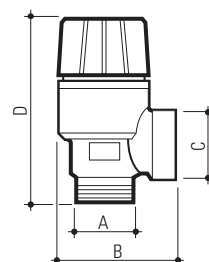


CODE	Size	A	B mm	C	D mm	Calibration pressure bar	Nominal discharge pressure bar	Pack pcs/box	Master pcs/box	Price €/pc
9470S004	1/2"	1/2"	43	1/2"	64,5	3	3,3	12	48	9,17
9472S004	1/2"	1/2"	43	1/2"	64,5	6	6,6	12	48	9,17

GP 2032
SECURITY



Relief valves 1/2" MF, plug with calibration pressure, protective cap and manual discharge knob.

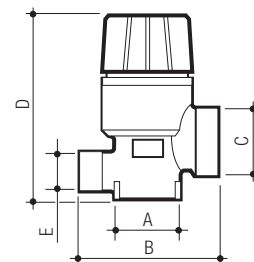


CODE	Size	A	B mm	C	D mm	Calibration pressure bar	Nominal discharge pressure bar	Pack pcs/box	Master pcs/box	Price €/pc
9471S004	1/2"	1/2"	43	1/2"	64,5	3	3,3	12	48	9,17
9473S004	1/2"	1/2"	43	1/2"	64,5	6	6,6	12	48	9,17

GP 2032
SECURITY



Relief valves 1/2" FF, plug with calibration pressure, protective cap, manual discharge knob and with pressure gauge.

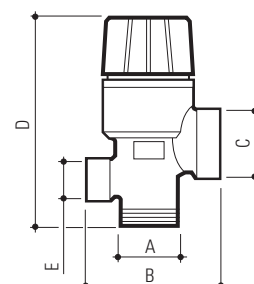


CODE	Size	A	B mm	C	D mm	E	Calibration pressure bar	Nominal discharge pressure bar	Pack pcs/box	Master pcs/box	Price €/pc
9474S004	1/2"	1/2"	49,5	1/2"	67	1/4"	3	3,3	8	32	21,03
9476S004	1/2"	1/2"	49,5	1/2"	67	1/4"	6	6,6	8	32	21,77

GP 2032
SECURITY

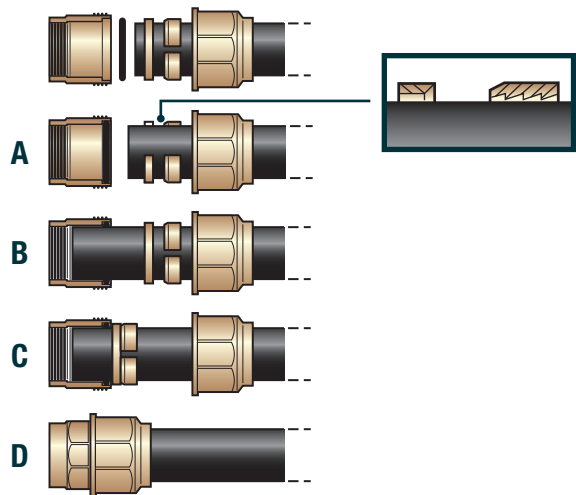
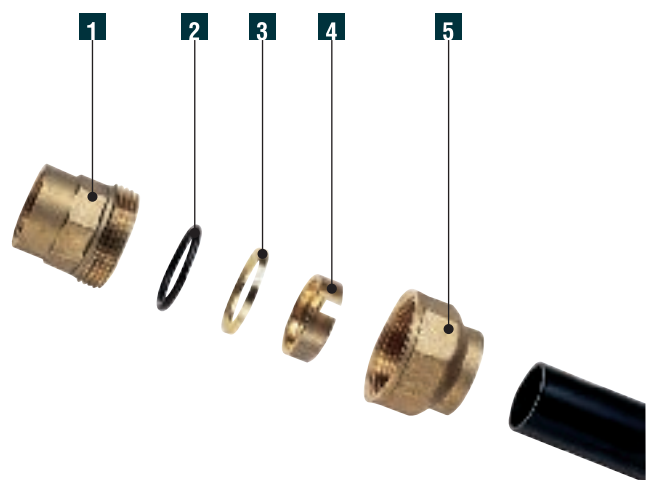


Relief valves 1/2" MF, plug with calibration pressure, protective cap, manual discharge knob and with pressure gauge.



CODE	Size	A	B mm	C	D mm	E	Calibration pressure bar	Nominal discharge pressure bar	Pack pcs/box	Master pcs/box	Price €/pc
9475S004	1/2"	1/2"	49,5	1/2"	73,5	1/4"	3	3,3	8	32	21,94
9477S004	1/2"	1/2"	49,5	1/2"	73,5	1/4"	6	6,6	8	32	20,20

TIGHTENING CONNECTIONS FOR POLYETHYLENE PIPES, WITH BRASS SEALS



Components		Pcs	Material
1	Body	1	UNI EN 12165 CW617N - DW
2	O-Ring seal	1	EPDM 70 Sh A
3	Stop ring	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
4	Toothed ring	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
5	Nut	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW

INSTALLATION

Connection of the joints for FIV polyethylene is extremely simple.
If the extremity of the pipe to be connected is smooth (i.e. is cut using a pipe-shear), it is sufficient to loosen the nut, insert the pipe fully into the coupling and then tighten the nut securely.
If the extremity of the pipe is rough-edged, it is advisable to connect as follows:
A Insert the O-Ring into its seat in the joint. Fit the STOP RING, the TOOTHED RING and the NUT to the polyethylene pipe. If necessary, also fit the "pressure cone" to the pipe.
B Insert the pipe into its seat in the joint.
C Slide the STOP RING and the TOOTHED RING towards the O-Ring.
D Tighten the NUT.

EN GENERAL CHARACTERISTICS

Bore: Full
Range: From 1/2" (20) to 2" (63)
Female fitting: Thread UNI EN ISO 228/1 (DIN 259)
Male fitting: Thread UNI EN ISO 228/1 (DIN 259)

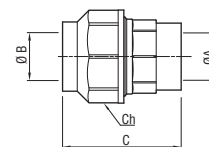
OPERATING CONDITIONS

Flow direction: Both ways.
Temperature limit from -20 °C to +80 °C.
Maximum working pressure: 16 bar.
Suitable for use in circuits for water distribution and non-aggressive fluids, with high or low density polyethylene pipes comply with the EN 12201-2 regulation.

GP 2065
JOINT



Straight joint with Female threaded connection, sand-blasted.

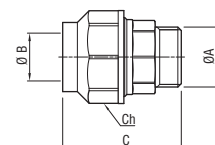


CODE	Size	ØA	ØB mm	C mm	Ch mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
07710012	20 x 1/2"	1/2"	21	43	31	86	16	40	320	5,59
07710034	25 x 3/4"	3/4"	26	49	38	136	16	20	160	7,75
07710100	32 x 1"	1"	33	58	47	214	16	15	120	12,04
07710114	40 x 1"1/4	1"1/4	41	72	56	335	16	8	64	20,60
07710112	50 x 1"1/2	1"1/2	51	64,5	70,5	515	16	10	40	30,35
07710200	63 x 2"	2"	64	85,5	85	806	16	6	24	48,70

GP 2065
JOINT



Straight joint with Male threaded connection, sand-blasted.

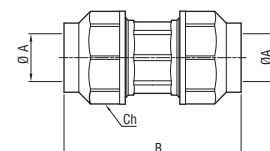


CODE	Size	ØA	ØB mm	C mm	Ch mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
07711012	20 x 1/2"	1/2"	21	43	31	86	16	40	320	5,55
07711034	25 x 3/4"	3/4"	26	49	38	136	16	20	160	7,75
07711100	32 x 1"	1"	33	58	47	229	16	15	120	12,15
07711114	40 x 1"1/4	1"1/4	41	72	56	352	16	8	64	21,23
07711112	50 x 1"1/2	1"1/2	51	64,5	70,5	456	16	10	40	29,44
07711200	63 x 2"	2"	64	85,5	85	783	16	6	24	48,31

GP 2065
JOINT



Double straight joint connection, sand-blasted.

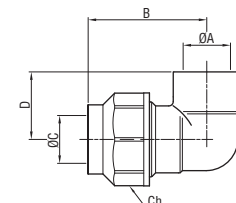


CODE	Size	ØA mm	B mm	Ch mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
07712012	20x20	21	67,5	31	152	16	25	200	9,32
07712034	25x25	26	72	38	223	16	15	120	12,89
07712100	32x32	33	82	47	355	16	10	80	19,84
07712114	40x40	41	96,5	56	529	16	5	40	31,92
07712112	50x50	51	108	70,5	773	16	6	24	47,56
07712200	63x63	64	131	85	1251	16	4	16	81,89

GP 2065
JOINT



Elbow joint with Female threaded connection, sand-blasted.

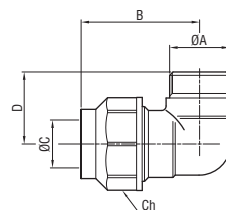


CODE	Size	ØA	B mm	ØC mm	D mm	Ch mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
07700012	20 x 1/2"	1/2"	41,5	21	30,5	31	114	16	30	240	7,28
07700034	25 x 3/4"	3/4"	54	26	29,8	38	170	16	18	144	10,21
07700100	32 x 1"	1"	57,5	33	32,5	47	263	16	10	80	16,09
07700114	40 x 1"1/4	1"1/4	69	41	44	56	432	16	5	40	25,10
07700112	50 x 1"1/2	1"1/2	80	51	55	70,5	702	16	6	24	41,61
07700200	63 x 2"	2"	98,5	64	67,5	85	1070	16	3	12	76,44

GP 2065
JOINT



Elbow joint with Male threaded connection, sand-blasted.

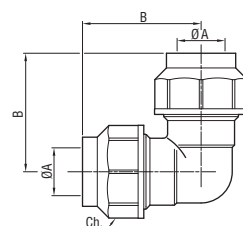


CODE	Size	ØA	B mm	ØC mm	D mm	Ch mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
07701012	20 x 1/2"	1/2"	41,5	21	30	31	119	16	30	240	7,35
07701034	25 x 3/4"	3/4"	54	26	31,8	38	191	16	18	144	10,78
07701100	32 x 1"	1"	57,5	33	37,5	47	311	16	10	80	17,33
07701114	40 x 1 1/4"	1 1/4"	69	41	44	56	471	16	5	40	25,81
07701112	50 x 1 1/2"	1 1/2"	80	51	54,5	70,5	709	16	6	24	41,90
07701200	63 x 2"	2"	98,5	64	67	85	1178	16	4	16	77,76

GP 2065
JOINT



Double joint elbow, sand-blasted.

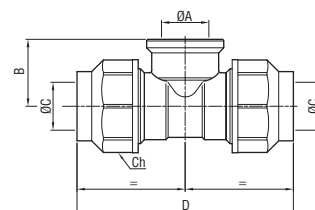


CODE	Size	ØA mm	B mm	Ch mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
07702012	20x20	21	44	31	167	16	20	160	10,66
07702034	25x25	26	52	38	263	16	10	80	15,47
07702100	32x32	33	58	47	411	16	8	64	23,89
07702114	40x40	41	69	56	600	16	3	24	38,41
07702112	50x50	51	80	70,5	975	16	4	16	58,23
07702200	63x63	64	98,5	85	1505	16	2	8	96,39

GP 2065
JOINT



T-joint with Female threaded connection, sand-blasted.

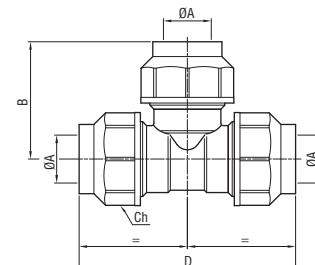


CODE	Size	ØA	B mm	ØC mm	D mm	Ch mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
07703012	20x1/2"x20	1/2"	23,5	21	83	31	172	16	18	144	11,09
07703034	25x3/4"x25	3/4"	29,5	26	92,5	38	280	16	10	80	15,92
07703100	32x1"x32	1"	35,5	33	108,5	47	440	16	6	48	24,08
07703114	40x1 1/4"x40	1 1/4"	41,5	41	121	56	665	16	4	32	39,75
07703112	50x1 1/2"x50	1 1/2"	50	51	145	70,5	1108	16	4	16	63,02
07703200	63x2"x63	2"	65	64	180,5	85	1733	16	2	8	102,20

GP 2065
JOINT



T-joint with three-piece connection, sand-blasted.

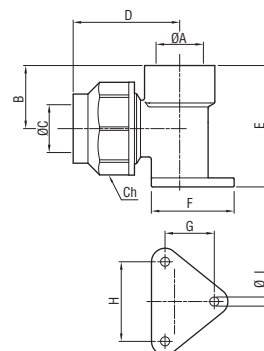


CODE	Size	ØA mm	B mm	C mm	Ch mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
07704012	20x20x20	21	46	83	31	228	16	12	96	14,90
07704034	25x25x25	26	52	92,5	38	356	16	8	64	20,73
07704100	32x32x32	33	69,5	108,5	47	551	16	4	32	30,60
07704114	40x40x40	41	74	121	56	823	16	3	24	46,36
07704112	50x50x50	51	81	145	70,5	1284	16	2	8	75,31
07704200	63x63x63	64	99	180,5	85	2070	16	2	8	121,80

GP 2065
JOINT



Elbow joint flanged with Female threaded connection, sand-blasted.

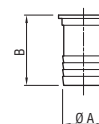


CODE	Size	ØA	B	ØC	D	E	F	G	H	ØI	Ch	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
07709012	20 x 1/2"	1/2"	24,8	21	47	46,5	33,5	21,5	35	4	31	173	16	20	160	9,27
07709034	25 x 3/4"	3/4"	27,8	26	58	53,5	36,5	24,5	39	4	38	253	16	12	96	14,22

GP 2065
JOINT

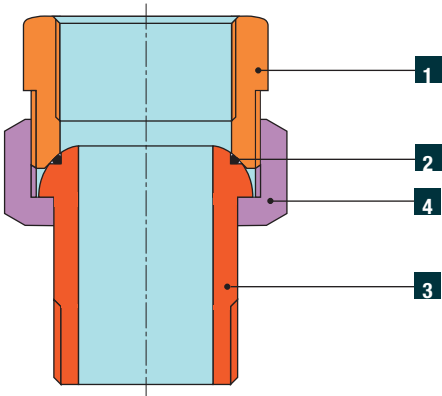


Internal pressure cone.



CODE	Size	ØA	B	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
07005012	20	13,5	26	12	16	25	2300	1,39
07005034	25	18,5	31	25	16	50	800	2,34
07005100	32	25	35,5	46	16	25	400	3,82
07005114	40	32	46,5	88	16	15	240	13,51
07005112	50	40	56	108	16	10	160	11,65
07005200	63	52	65,5	294	16	4	64	49,64

3-PIECE FITTINGS FOR RADIATORS

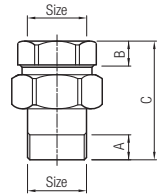


Components		Pcs	Material
1	Body	1	UNI EN 12165 CW617N - DW
2	O-Ring seal	1	NBR 70 Sh A (ASTM D 2240)
3	Tang	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
4	Nut	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
Temperature limit		From -20 °C to +100 °C	
Male and female threads		UNI EN ISO 228/1 (DIN 259)	

GP 2067
JOINT



Female-Male straight fitting with conical seal, sandblasted.

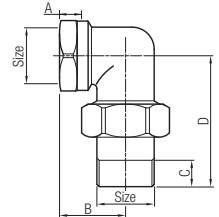


CODE	Size	A mm	B mm	C mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
07040012	1/2"	11	12	47	93	50	400	8,35
07040034	3/4"	11	12	51	169	30	240	12,46
07040100	1"	15	15	59	293	15	120	20,23
07040114	1"1/4	15	15	64	428	8	64	32,42

GP 2067
JOINT



Female-Male elbow fitting with conical seal, sandblasted.

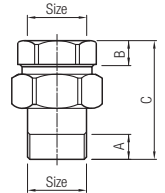


CODE	Size	A mm	B mm	C mm	D mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
07050012	1/2"	10	23	10	50	139	30	240	11,27
07050034	3/4"	10	29	12	56	228	16	128	14,98
07050100	1"	12	34	14	63	374	8	64	26,58
07050114	1"1/4	12	34	16	73	518	6	48	40,48

GP 2067
JOINT



Female-Male straight fitting with conical seal, nickel-plated.

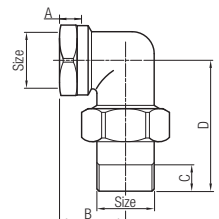


CODE	Size	A mm	B mm	C mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
07041012	1/2"	11	12	47	93	50	400	8,51
07041034	3/4"	11	12	51	169	30	240	13,11
07041100	1"	15	15	59	293	15	120	21,61
07041114	1"1/4	15	15	64	428	8	64	29,34

GP 2067
JOINT



Female-Male elbow fitting with conical seal, nickel-plated.



CODE	Size	A mm	B mm	C mm	D mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
07051012	1/2"	10	23	10	50	139	30	240	11,41
07051034	3/4"	10	29	12	56	228	16	128	16,38
07051100	1"	12	34	14	63	374	8	64	29,34
07051114	1"1/4	12	34	16	73	518	6	48	40,88



INOX AISI 304 FLEXIBLE



Components	Material
Fittings	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
Internal pipe	DUTRAL NFT 54041 DIN 7715 non tossic rubber
Covering	AISI 304 stainless steel in 24 plaits of 8 strands each, section 0.22 mm

Internal diameter	9,5 mm
External diameter	14 mm
Nominal pressure	10 bar
Temperature limit	from +4 °C to +90 °C
Water flow (l/min)	20 (1 bar) - 28,8 (2 bar) - 35,6 (3 bar)

- Excellent resistance to: air and steam up to 130 °C, seawater, saline solutions, bases and their solutions, glycols, alcohols, ketones, ozone and atmospheric agents.
- Good resistance to: acids and their solutions, vegetable and animal oils and grease.
Little or no resistance to: Mineral oils and grease, aromatic and chlorinated hydrocarbons.
- We confirm that the hoses contain no harmful substances that can be extracted by the passage of water: thus we can assure you that there is no possibility for migration of harmful substances from the hose to the water.

GP 2310
AISI FLEXIBLE PIPES



AISI 304 stainless steel flexible pipes Female-Female.



Longer sizes available on request.

CODE	Size	Length cm	Pack pcs/box	Price €/pc
06030015	3/8" - 3/8"	15	25	5,37
06030020	3/8" - 3/8"	20	25	5,68
06030025	3/8" - 3/8"	25	25	5,99
06030030	3/8" - 3/8"	30	25	6,29
06030035	3/8" - 3/8"	35	25	6,57
06030040	3/8" - 3/8"	40	25	6,93
06030045	3/8" - 3/8"	45	25	6,78
06030050	3/8" - 3/8"	50	25	7,48
06030060	3/8" - 3/8"	60	25	7,99
06031120	3/8" - 1/2"	20	25	5,43
06031125	3/8" - 1/2"	25	25	5,67
06031130	3/8" - 1/2"	30	25	6,29
06031135	3/8" - 1/2"	35	25	6,57
06031140	3/8" - 1/2"	40	25	6,93
06031145	3/8" - 1/2"	45	25	6,84
06031150	3/8" - 1/2"	50	25	7,48
06031160	3/8" - 1/2"	60	25	7,55
06031015	1/2" - 1/2"	15	25	5,09
06031020	1/2" - 1/2"	20	25	5,68
06031025	1/2" - 1/2"	25	25	5,99
06031030	1/2" - 1/2"	30	25	6,29
06031035	1/2" - 1/2"	35	25	6,57
06031040	1/2" - 1/2"	40	25	6,85
06031045	1/2" - 1/2"	45	25	6,97
06031050	1/2" - 1/2"	50	25	7,48
06031060	1/2" - 1/2"	60	25	7,99

GP 2310
AISI FLEXIBLE PIPES



AISI 304 stainless steel flexible pipes Male-Male, short hexagonal.



Longer sizes available on request

CODE	Size	Length cm	Pack pcs/box	Price €/pc
06037015	M 3/8" - M 3/8"	15	25	4,84
06037020	M 3/8" - M 3/8"	20	25	5,12
06037025	M 3/8" - M 3/8"	25	25	5,39
06037030	M 3/8" - M 3/8"	30	25	5,94
06038015	M 3/8" - M 1/2"	15	25	4,84
06038020	M 3/8" - M 1/2"	20	25	5,12
06038025	M 3/8" - M 1/2"	25	25	5,39
06038030	M 3/8" - M 1/2"	30	25	6,23
06039015	M 1/2" - M 1/2"	15	25	4,84
06039020	M 1/2" - M 1/2"	20	25	5,12
06039025	M 1/2" - M 1/2"	25	25	5,39
06039030	M 1/2" - M 1/2"	30	25	5,94



Longer sizes available on request.

CODE	Size	Length cm	Pack pcs/box	Price €/pc
06032015	M 3/8" - F 3/8"	15	25	5,37
06032020	M 3/8" - F 3/8"	20	25	5,68
06032025	M 3/8" - F 3/8"	25	25	5,99
06032030	M 3/8" - F 3/8"	30	25	6,29
06032035	M 3/8" - F 3/8"	35	25	6,66
06032040	M 3/8" - F 3/8"	40	25	6,93
06032045	M 3/8" - F 3/8"	45	25	6,45
06032050	M 3/8" - F 3/8"	50	25	7,48
06032060	M 3/8" - F 3/8"	60	25	7,70
06033015	M 1/2" - F 1/2"	15	25	4,84
06033020	M 1/2" - F 1/2"	20	25	5,68
06033025	M 1/2" - F 1/2"	25	25	5,99
06033030	M 1/2" - F 1/2"	30	25	6,29
06033035	M 1/2" - F 1/2"	35	25	6,57
06033040	M 1/2" - F 1/2"	40	25	6,93
06033045	M 1/2" - F 1/2"	45	25	7,10
06033050	M 1/2" - F 1/2"	50	25	7,48
06033060	M 1/2" - F 1/2"	60	25	8,17
06034015	M 3/8" - F 1/2"	15	25	4,84
06034020	M 3/8" - F 1/2"	20	25	5,64
06034025	M 3/8" - F 1/2"	25	25	5,99
06034030	M 3/8" - F 1/2"	30	25	6,29
06034035	M 3/8" - F 1/2"	35	25	6,42
06034040	M 3/8" - F 1/2"	40	25	6,85
06034045	M 3/8" - F 1/2"	45	25	6,45
06034050	M 3/8" - F 1/2"	50	25	6,75
06034060	M 3/8" - F 1/2"	60	25	7,26
06035015	M 1/2" - F 3/8"	15	25	5,13
06035020	M 1/2" - F 3/8"	20	25	5,68
06035025	M 1/2" - F 3/8"	25	25	5,99
06035030	M 1/2" - F 3/8"	30	25	6,29
06035035	M 1/2" - F 3/8"	35	25	6,66
06035040	M 1/2" - F 3/8"	40	25	6,85
06035045	M 1/2" - F 3/8"	45	25	6,45
06035050	M 1/2" - F 3/8"	50	25	6,75
06035060	M 1/2" - F 3/8"	60	25	7,70

GP 2310
AISI FLEXIBLE PIPES



AISI 304 stainless steel flexible pipes Female - Male long hexagonal.



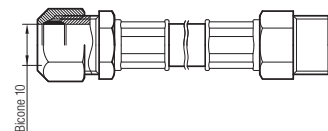
Longer sizes available on request.

CODE	Size	Length cm	Pack pcs/box	Price €/pc
06050015	M 3/8" - F 3/8"	15	25	6,38
06050020	M 3/8" - F 3/8"	20	25	6,64
06050025	M 3/8" - F 3/8"	25	25	6,96
06050030	M 3/8" - F 3/8"	30	25	7,29
06050035	M 3/8" - F 3/8"	35	25	7,58
06050040	M 3/8" - F 3/8"	40	25	7,87
06050045	M 3/8" - F 3/8"	45	25	7,33
06050050	M 3/8" - F 3/8"	50	25	8,49
06050060	M 3/8" - F 3/8"	60	25	8,98
06051015	M 1/2" - F 1/2"	15	25	6,38
06051020	M 1/2" - F 1/2"	20	25	6,64
06051025	M 1/2" - F 1/2"	25	25	6,96
06051030	M 1/2" - F 1/2"	30	25	7,29
06051035	M 1/2" - F 1/2"	35	25	7,58
06051040	M 1/2" - F 1/2"	40	25	7,87
06051045	M 1/2" - F 1/2"	45	25	7,52
06051050	M 1/2" - F 1/2"	50	25	8,49
06051060	M 1/2" - F 1/2"	60	25	9,06
06052015	M 3/8" - F 1/2"	15	25	6,10
06052020	M 3/8" - F 1/2"	20	25	5,98
06052025	M 3/8" - F 1/2"	25	25	6,70
06052030	M 3/8" - F 1/2"	30	25	7,29
06052035	M 3/8" - F 1/2"	35	25	7,58
06052040	M 3/8" - F 1/2"	40	25	7,09
06052045	M 3/8" - F 1/2"	45	25	7,33
06052050	M 3/8" - F 1/2"	50	25	7,64
06052060	M 3/8" - F 1/2"	60	25	8,17
06053015	M 1/2" - F 3/8"	15	25	5,76
06053020	M 1/2" - F 3/8"	20	25	6,73
06053025	M 1/2" - F 3/8"	25	25	7,04
06053030	M 1/2" - F 3/8"	30	25	7,29
06053035	M 1/2" - F 3/8"	35	25	7,58
06053040	M 1/2" - F 3/8"	40	25	7,87
06053045	M 1/2" - F 3/8"	45	25	7,33
06053050	M 1/2" - F 3/8"	50	25	8,49
06053060	M 1/2" - F 3/8"	60	25	8,77

GP 2310
AISI FLEXIBLE PIPES



Flexible pipe AISI 304 stainless steel Male - Bicone 10.



Longer sizes available on request.

CODE	Size	Length cm	Pack pcs/box	Price €/pc
06048020	1/2"x10	20	25	7,35
06048025	1/2"x10	25	25	7,96
06048030	1/2"x10	30	25	8,33
06048035	1/2"x10	35	25	8,52
06048040	1/2"x10	40	25	8,89
06048050	1/2"x10	50	25	8,51



ANTIVIBRATION FLEXIBLE PIPES



Components

Fittings

Material

Zinc-plated steel (1") or
UNI EN 12165 CW617N - DW
(1/2" - 3/4" - 1" - 1 1/4" - 1 1/2" - 2")

Internal pipe

EPDM with galvanized steel mesh

Covering

Plait in zinc-plated steel

Temperature limit

from +4 °C to +90 °C

Suitable for passage of water and air at low pressure for pumps and autoclaves, with blue/blue bands.

SIZE	DN	Ø internal rubber	Ø external rubber	Ø Internal hose passage	Ø Male-side passage	Ø Female-side passage	No. of wires	PN	Curvature
1/2"	13x18	13 mm	18 mm	12,5	7,6	9	7	15 bar	90°
3/4"	19x25	19 mm	25 mm	18,5	14	14	9	15 bar	90°
1"	25x33	25 mm	33 mm	25	20	19	10	15 bar	80°
1 1/4"	32x42	32 mm	42 mm	31,5	26	26	12	10 bar	60°
1 1/2"	40x51	40 mm	52 mm	40	32	32	12	10 bar	40°
2"	50x62	50 mm	62 mm	51,5	41	41	12	6 bar	35°

GP 2050
ANTIVIBRATION FLEXIBLE PIPES



Antivibration flexible pipes Female-Male.

(*) Available only on request.

Longer sizes available on request



CODE	Size	Length cm	Pack pcs/box	Price €
06081030	1/2"	30	1	8,75
06081040	1/2"	40	1	9,50
06081050	1/2"	50	1	10,26
06081060	1/2"	60	1	11,03
06081070	1/2"	70	1	11,73
06081080	1/2"	80	1	12,50
06081090	1/2"	90 (*)	1	12,36
06081100	1/2"	100	1	14,01
06082030	3/4"	30	1	13,68
06082040	3/4"	40	1	14,87
06082050	3/4"	50	1	16,04
06082060	3/4"	60	1	17,26
06082070	3/4"	70	1	18,43
06082080	3/4"	80	1	19,86
06082090	3/4"	90 (*)	1	19,40
06082100	3/4"	100	1	22,03
06083030	1"	30	1	19,82
06083040	1"	40	1	22,50
06083050	1"	50	1	24,09
06083060	1"	60	1	25,68
06083070	1"	70	1	27,15
06083080	1"	80	1	28,82
06083090	1"	90 (*)	1	28,20
06083100	1"	100	1	31,84
06084030	1" 1/4	30	1	41,88
06084040	1" 1/4	40	1	44,51
06084050	1" 1/4	50	1	47,10
06084060	1" 1/4	60	1	49,88
06084070	1" 1/4	70	1	48,71
06084080	1" 1/4	80	1	54,97
06084090	1" 1/4	90 (*)	1	53,60
06084100	1" 1/4	100	1	60,24
06085030	1" 1/2	30	1	55,62
06085040	1" 1/2	40	1	63,08
06085050	1" 1/2	50	1	67,52
06085060	1" 1/2	60	1	71,20
06085070	1" 1/2	70	1	70,07
06085080	1" 1/2	80	1	78,20
06085090	1" 1/2	90 (*)	1	77,27
06085100	1" 1/2	100	1	86,79
06086030	2"	30	1	88,49
06086040	2"	40	1	92,15
06086050	2"	50	1	100,90
06086060	2"	60	1	104,60
06086070	2"	70	1	102,00
06086080	2"	80	1	114,10
06086090	2"	90 (*)	1	110,60
06086100	2"	100	1	123,20

EXTENSIBLE FLEXIBLE PIPES



Components

Fittings
Internal pipe

Material

AISI 303 stainless steel
AISI 316L stainless steel

Nominal pressure
Temperature limit

6 bar
from -10 °C to +90 °C

EN GENERAL FEATURES

Deformable part in stainless steel ASTM A2 40 TP-AISI 316L
Lap fusion welded in an argon atmosphere.
Female fitting: Thread UNI EN ISO 228/1 (DIN 259)
Male fitting: Thread UNI EN 10226 (UNI EN ISO 7/1 R) (DIN 2999)
Good protection from intergranular corrosion.

OPERATING CONDITIONS

Extension up to twice the initial length.
Possibility of curvature up to 360°.
Maximum operating temperature: -10 °C a +90 °C.

GP 2330
EXTENSIBLE FLEXIBLE PIPES

Flexible pipe in stainless steel AISI 316L, Male-Female fittings.
Maximum working pressure: 8 bar.



CODE	Size	Length cm	Pack pcs/box	Price €/pc
6141P124	1/2" M-F	10-20	18	13,11
6141P244	1/2" M-F	20-40	18	15,68
6141P125	3/4" M-F	10-20	18	18,15
6141P245	3/4" M-F	20-40	18	23,12



Ball valves, check valves, BIBCOCKS AND UNDER SINKS FOR WATER

8



page 254

**Perfecta
ball valves**



page 277

**Incasso
recessed
ball valve**



page 257

**Evolution
ball valves**



pages 279 - 282

**Garden
Export - Pesante
and Anti-freeze
ball bibcocks**



page 267

**Motorized
valve body**



pages 284 - 286

**Filter King
and Twister
angle bibcocks**



page 268

**Three-way
ball valves
"L" and "T"**



page 288

**Mignon
ball valves**



page 270

**Compression
ball valves**



page 290

**Gate
valves**



page 271

**Spacing
accessory of
elongation lever**



page 292

**Eura
check valves**



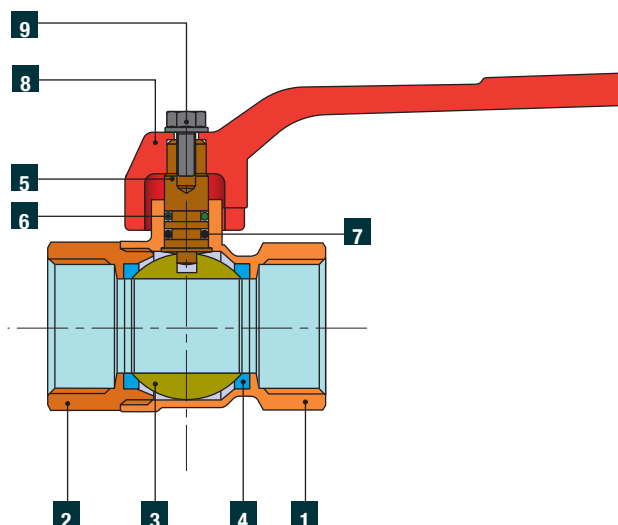
pages 273 - 275

Bibcocks



page 294

**Clapet
check valve,
Sift filter and
Foot valve**



Components

	Pcs	Material
1 Body	1	UNI EN 12165 CW617N - DW
2 End sleeve	1	UNI EN 12165 CW617N - DW
3 Ball	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
4 Ball seal seats	2	Virgin P.T.F.E.
5 Stem	1	UNI EN 12164 CW617N - DW
6 Stem upper seal O-Ring	1	VITON 70 Sh A (ASTM D2240)
7 Stem lower seal O-Ring	1	EPDM peroxidic 70 Sh A (ASTM D2240)
8 Aluminum lever handle	1	Die-cast aluminium, red painted
Steel lever handle	1	Zinc-plated steel, red plastified
Alluminium butterfly handle	1	Die-cast aluminium, red painted
9 Screw	1	Zinc-plated steel
Nut		Zinc-plated steel
* Nut	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
* Tang	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
* O-ring tang seal	1	EPDM peroxidic 70 Sh A (ASTM D2240)

(*) With Pipe union

A ACCESSORIES

See Spacing kit for lever handle

EN GENERAL CHARACTERISTICS

Bore: Standard
 Range: From 1/2" to 2"
 Female fitting: Thread UNI EN ISO 228/1 (DIN 259)
 Male fitting: Thread UNI EN ISO 228/1 (DIN 259)
 Tang and nut: Thread UNI EN ISO 228/1 (DIN 259)
 Functioning: 90° degrees rotation of operating device.
 Operating device: Aluminium or steel lever handles, aluminium Butterfly.

OPERATING CONDITIONS

Flow direction: Both ways.
 Minimum and maximum operating temperature: -20 °C/+120 °C **
 Maximum pressure (T=120 °C): 10 bar
 Nominal pressure (T=20 °C): See tables below
 ** In absence of steam; for temperatures below 0 °C use mixes of water and glycol.

Valves must be used in fully open or fully closed position.

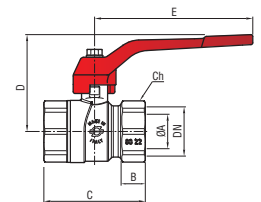
These valves must be used with the pressure set forth in the catalogue and are suitable for domestic hot and cold water distribution systems (Ref. Directive 2014/68/EU, art. 13). From size 1 1/4 they must not be used for fluids of group 1 (substances and mixes classified as dangerous).

For special uses (in compliance with the pressures set out for these valves and the compatibility of the different fluids with the materials making up the valve) see chemical compatibility chart in the technical annexes of the current catalogue. The CW617N-DW brass, the Teflon (P.T.F.E.), and the O-Rings in EPDM Peroxidic in contact with the fluid, are in compliance with the Italian Ministerial Decree n. 174 (dated 06/04/2004).

GP 2245
PERFECTA BALL VALVE



Female-Female nickel-plated ball valve, with red painted aluminum lever handle.



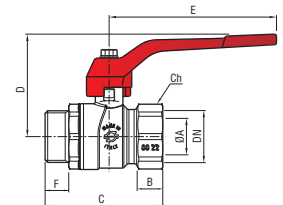
A

CODE	Size	øA mm	B mm	C mm	D mm	E mm	DN	Ch mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
8363R004	1/2"	14,8	12	47,5	49	85	15	25	141	50	36	144	7,57
8363R005	3/4"	18,5	13	54,5	52	85	20	31	201	40	24	96	10,40
8363R006	1"	23,5	14,5	64	61,5	105	25	38	319	25	12	48	17,21
8363R007	1"1/4	30	15,5	76	66,5	105	32	46	518	25	8	32	27,25
8363R008	1"1/2	35	17	88	84,5	135	40	54	771	25	4	16	43,47
8363R009	2"	45	18	103,5	92	135	50	66	1237	16	4	16	66,53

GP 2245
PERFECTA



Male-Female nickel-plated ball valve, with red painted aluminum lever handle.



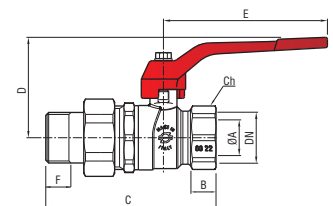
A

CODE	Size	øA mm	B mm	C mm	D mm	E mm	F mm	DN	Ch mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
8364R004	1/2"	14,8	12	53	49	85	11	15	25	153	50	36	144	8,73
8364R005	3/4"	18,5	13	59,5	52	85	12	20	31	215	40	24	96	11,30
8364R006	1"	23,5	14,5	69,5	61,5	105	13,5	25	38	343	25	12	48	19,65
8364R007	1"1/4	30	15,5	81,5	66,5	105	14,5	32	46	557	25	8	32	30,05
8364R008	1"1/2	35	17	93	84,5	135	16	40	54	810	25	4	16	43,93
8364R009	2"	45	18	110	92	135	17,5	50	66	1328	16	4	16	66,36

GP 2245
PERFECTA



Female-Pipe union nickel-plated ball valve, with red painted aluminum lever handle.



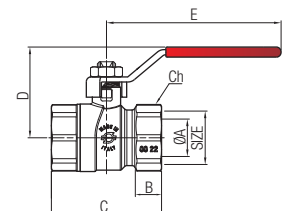
A

CODE	Size	øA mm	B mm	C mm	D mm	E mm	F mm	DN	Ch mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
8372R004	1/2"	14,8	12	78	49	85	10	15	25	229	50	24	96	12,50
8372R005	3/4"	18,5	13	87	52	85	12	20	31	331	40	18	72	18,08
8372R006	1"	23,5	14,5	101	61,5	105	14	25	38	546	25	12	48	28,08
8372R007	1"1/4	30	15,5	117	66,5	105	15	32	46	806	25	8	32	43,04

GP 2245
PERFECTA



Female-Female nickel-plated ball valve, with red plastified steel lever handle.

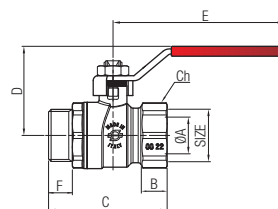


CODE	Size	øA mm	B mm	C mm	D mm	E mm	DN	Ch mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
8360R004	1/2"	14,8	12	47,5	44,5	86	15	25	152	50	36	144	7,91
8360R005	3/4"	18,5	13	54,5	48	86	20	31	212	40	24	96	11,07
8360R006	1"	23,5	14,5	64	57	112	25	38	352	25	12	48	18,06
8360R007	1"1/4	30	15,5	76	62	112	32	46	557	25	8	32	27,52
8360R008	1"1/2	35	17	88	71,5	143	40	54	837	25	4	16	43,93
8360R009	2"	45	18	103,5	79	143	50	66	1303	16	4	16	64,24

GP 2245
PERFECTA



Male-Female nickel-plated ball valve, with red plastified steel lever handle.

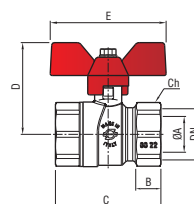


CODE	Size	øA mm	B mm	C mm	D mm	E mm	F mm	DN	Ch mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
8361R004	1/2"	14,8	12	53	44,5	86	11	15	25	164	50	36	144	8,75
8361R005	3/4"	18,5	13	59,5	48	86	12	20	31	226	40	24	96	11,16
8361R006	1"	23,5	14,5	69,5	57	112	13,5	25	38	376	25	12	48	18,53
8361R007	1 1/4"	30	15,5	81,5	62	112	14,5	32	46	596	25	8	32	28,23
8361R008	1 1/2"	35	17	93	71,5	143	16	40	54	876	25	4	16	43,93
8361R009	2"	45	18	110	79	143	17,5	50	66	1394	16	4	16	71,00

GP 2245
PERFECTA



Female-Female nickel-plated ball valve, with red painted aluminum Butterfly handle.

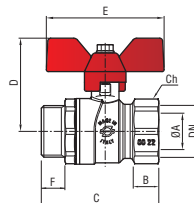


CODE	Size	øA mm	B mm	C mm	D mm	E mm	DN	Ch mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
8366R004	1/2"	14,8	12	47,5	44,5	60	15	25	139	50	36	144	8,21
8366R005	3/4"	18,5	13	54,5	47	60	20	31	199	40	24	96	10,86
8366R006	1"	23,5	14,5	64	53,5	65	25	38	314	25	12	48	17,26
8366R007	1 1/4"	30	15,5	76	58,5	65	32	46	513	25	8	32	26,73

GP 2245
PERFECTA



Male-Female nickel-plated ball valve, with red painted aluminum Butterfly handle.

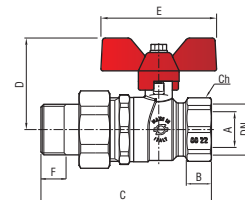


CODE	Size	øA mm	B mm	C mm	D mm	E mm	F mm	DN	Ch mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
8367R004	1/2"	14,8	12	53	44,5	60	11	15	25	151	50	36	144	8,73
8367R005	3/4"	18,5	13	59,5	47	60	12	20	31	213	40	24	96	11,49
8367R006	1"	23,5	14,5	69,5	53,5	65	13,5	25	38	338	25	12	48	19,65
8367R007	1 1/4"	30	15,5	81,5	58,5	65	14,5	32	46	551	25	8	32	27,67

GP 2245
PERFECTA



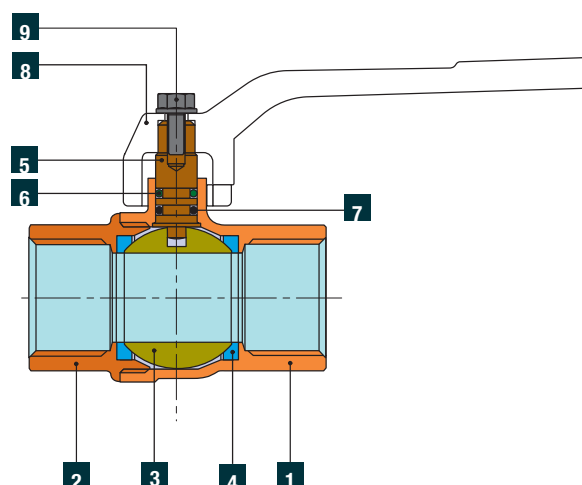
Female-Pipe union nickel-plated ball valve, with red painted aluminum Butterfly handle.



CODE	Size	øA mm	B mm	C mm	D mm	E mm	F mm	DN	Ch mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
8373R004	1/2"	14,8	12	78	44,5	60	10	15	25	227	50	36	144	12,50
8373R005	3/4"	18,5	13	87	47	60	12	20	31	329	40	24	96	18,08
8373R006	1"	23,5	14,5	101	53,5	65	14	25	38	541	25	12	48	28,08
8373R007	1 1/4"	30	15,5	117	58,5	65	15	32	46	801	25	8	32	43,06

EVOLUTION

BALL VALVES SIZES FROM 1/4" TO 2", FROM 3" TO 4"



(*) Only for sizes from 1/4" to 2"

Components

	Components	Pcs	Material
1	Body	1	UNI EN 12165 CW617N - DW
2	End sleeve	1	UNI EN 12165 CW617N - DW
3	Ball	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
4	Ball seal seats	2	Virgin P.T.F.E.
5	Stem	1	UNI EN 12164 CW617N - DW
6	Stem upper seal O-Ring	1	VITON 70 Sh A (ASTM D2240)
7	Stem lower seal O-Ring	1	EPDM peroxidic 70 Sh A (ASTM D2240)
8	Aluminum lever handle	1	Die-cast aluminium, painted
	Steel lever handle	1	Zinc-plated steel, plastified
	Alluminium butterfly handle	1	Die-cast aluminium, painted
9	Screw	1	Zinc-plated steel
	Nut	1	Zinc-plated steel
*	Nut	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
*	Tang	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
*	O-ring tang seal	1	EPDM peroxidic 70 Sh A (ASTM D2240)

(*) With Pipe union

A ACCESSORIES

See Spacing kit for lever handle

EN GENERAL CHARACTERISTICS

Bore: Total
Range: From 1/4" to 2", from 3" to 4"
Female fitting from 1/4" to 2": Thread UNI EN 10226 (UNI EN ISO 7/1 Rp) (DIN 2999)
Female fitting from 3" to 4": Thread UNI EN ISO 228/1 (DIN 259)
Male fitting: Thread UNI EN 10226 (UNI EN ISO 7/1 R) (DIN 2999)
Tang and Nut: Thread UNI EN ISO 228/1 (DIN 259)
Functioning: 90° degrees rotation of operating device.
Operating device: Aluminium or steel lever handles, aluminium Butterfly.

OPERATING CONDITIONS

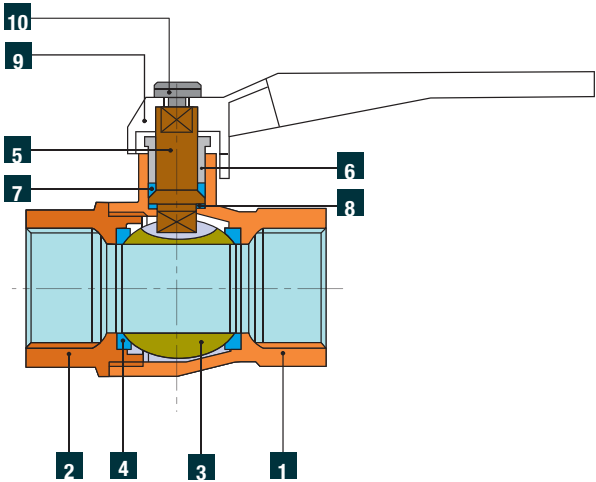
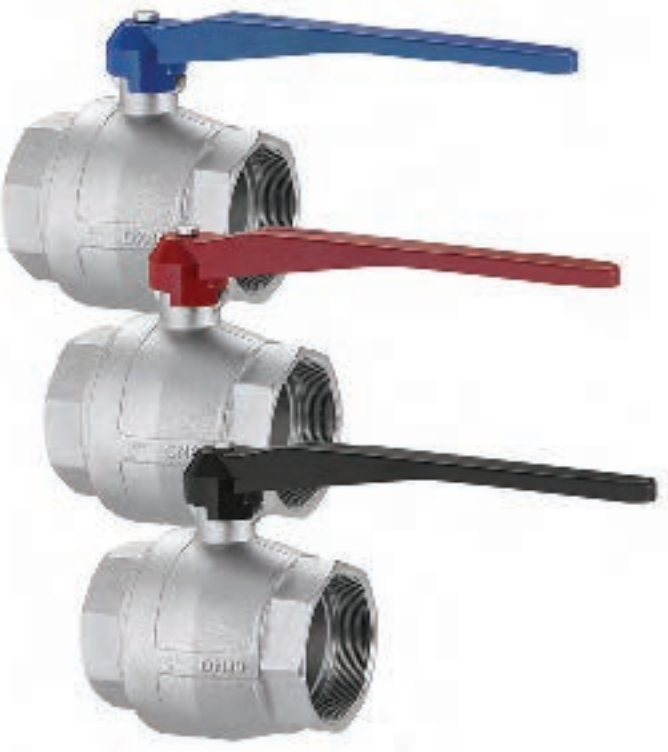
Flow direction: Both ways.
Minimum and maximum operating temperature: -20 °C/+120 °C **
Maximum pressure (T=120 °C): 10 bar
Nominal pressure (T=20 °C): See tables below
** In absence of steam; for temperatures below 0 °C use mixes of water and glycol.

Valves must be used in fully open or fully closed position.

These valves must be used with the pressure set forth in the catalogue and are suitable for domestic hot and cold water distribution systems (Ref. Directive 2014/68/EU, art. 13). From size 1 "1/4 they must not be used for fluids of group 1 (substances and mixes classified as dangerous).
For special uses (in compliance with the pressures set out for these valves and the compatibility of the different fluids with the materials making up the valve) see chemical compatibility chart in the technical annexes of the current catalogue. The CW617N-DW brass, the Teflon (P.T.F.E.), and the O-Rings in EPDM Peroxidic in contact with the fluid, are in compliance with the Italian Ministerial Decree n. 174 (dated 06/04/2004).

EVOLUTION

BALL VALVES SIZES FROM 2"1/2 TO 4"



Components		Pz.	Material
1	Body	1	UNI EN 12165 CW617N - DW
2	End sleeve	1	UNI EN 12165 CW617N - DW
3	Ball	1	DELTA C EN1982 CB 745S
4	Ball seal seats	2	Virgin P.T.F.E.
5	Stem	1	UNI EN 12164 CW617N - DW
6	Gland	1	UNI EN 12164 CW617N - DW
7	Stem seal ring	1	P.T.F.E.
8	Anti-friction washer	1	P.T.F.E.
9	Lever	1	Aluminium plastified with epoxy resin
10	Screw	1	Zinc-plated steel

EN GENERAL CHARACTERISTICS

Bore: Total
Range: From 2"1/2 to 4"
Female end from 2"1/2 to 4": Thread UNI EN ISO 228/1 (DIN 259)
Functioning: 90° degrees rotation of operating device.
Operating device: plasticified aluminium lever handle.

OPERATING CONDITIONS

Flow direction: Both ways
Maximum operating temperature: 120 °C **
Maximum pressure (T=120 °C): 10 bar
Nominal pressure (T=20 °C): 10 bar
** In absence of steam.

Valves must be used in fully open or fully closed position.

These valves must be used with the pressure set forth in the catalogue and are suitable for domestic hot and cold water distribution systems (Ref. Directive 2014/68/EU, art. 13). They must not be used for fluids of group 1 (substances and mixes classified as dangerous).
For special uses (in compliance with the pressures set out for these valves and the compatibility of the different fluids with the materials making up the valve) see chemical compatibility chart in the technical annexes of the current catalogue. The CW617N, DELTA C EN1982 CB 745S brass and the Teflon (P.T.F.E.) in contact with the fluid, are in compliance with the Italian Ministerial Decree n. 174 (dated 06/04/2004).

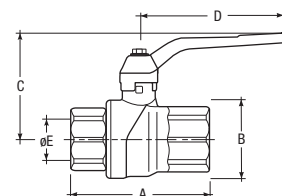
GP 2240
GP 2210
EVOLUTION



Female-Female nickel-plated ball valve, with painted aluminum lever handle.

(*) Valve with threading ISO 228/1 and supplied with lever disassembled.

(**) Article available while stocks last.



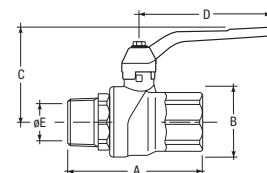
A

CODE	Size	A mm	ØB mm	C mm	D mm	ØE mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
BLUE VERSION											
80001014	1/4"	45	26	47	85	10	140	50	36	144	8,40
80001038	3/8"	47	26	47	85	10	141	50	36	144	7,58
80001012	1/2"	56	31	49	85	15	175	50	36	144	9,12
80001034	3/4"	67	38	53	85	20	280	40	24	96	14,15
80001100	1"	80	46	63	105	25	460	30	12	48	25,59
80001114	1"1/4	94	57	69	105	32	675	25	8	32	36,87
80001112	1"1/2	103	68	86	135	40	987	25	4	16	52,09
80001200	2"	126	85	94	135	50	1650	16	4	16	85,24
80002212	2"1/2	130	-	112	270	63	2850	10	1	10	199,80
80002300	3"	150	-	123	270	76	3635	10	1	8	285,30
80001400	4"	(*)	185,5	164	153	300	7835	15	1	2	478,90
RED VERSION											
86001014	1/4"	45	26	47	85	10	140	50	36	144	8,40
86001038	3/8"	47	26	47	85	10	141	50	36	144	7,58
86001012	1/2"	56	31	49	85	15	175	50	36	144	8,94
86001034	3/4"	67	38	53	85	20	280	40	24	96	14,15
86001100	1"	80	46	63	105	25	460	30	12	48	23,08
86001114	1"1/4	94	57	69	105	32	675	25	8	32	37,24
86001112	1"1/2	103	68	86	135	40	987	25	4	16	52,09
86001200	2"	126	85	94	135	50	1650	16	4	16	85,24
86002212	2"1/2	130	-	112	270	63	2850	10	1	10	199,80
86002300	3"	150	-	123	270	76	3635	10	1	8	285,90
08007400	4"	(*)	185,5	164	153	300	7835	15	1	2	504,90
BLACK VERSION											
81001012	1/2"	56	31	49	85	15	175	50	36	144	9,70
81001034	3/4"	67	38	53	85	20	280	40	24	96	14,16
81001100	1"	80	46	63	105	25	460	30	12	48	23,98
81001114	1"1/4	94	57	69	105	32	675	25	8	32	36,83
81001112	1"1/2	103	68	86	135	40	987	25	4	16	54,18
81001200	2"	126	85	94	135	50	1650	16	4	16	88,39
81002212	2"1/2	130	-	112	270	63	2850	10	1	10	199,40
08107300	3"	(*) (**)	149	135	129	240	76	3970	15	6	292,20
81002300	3"		150	-	123	270	76	3635	10	8	293,60
81002400	4"		194	-	161	320	100	8730	10	3	522,60

GP 2240
EVOLUTION



Male-Female nickel-plated ball valve, with painted aluminum lever handle.

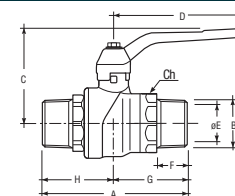


CODE	Size	A mm	øB mm	C mm	D mm	øE mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
BLUE VERSION											
80004014	1/4"	51	26	47	85	10	146	50	36	144	8,67
80004038	3/8"	52	26	47	85	10	160	50	36	144	8,40
80004012	1/2"	60	31	49	85	15	181	50	36	144	9,24
80004034	3/4"	70	38	53	85	20	287	40	24	96	14,57
80004100	1"	83	46	63	105	25	510	30	12	48	24,02
80004114	1 1/4"	97	57	69	105	32	710	25	8	32	37,24
80004112	1 1/2"	110	68	86	135	40	1080	25	4	16	53,68
80004200	2"	134	85	94	135	50	1700	16	4	16	87,59
RED VERSION											
86004014	1/4"	51	26	47	85	10	146	50	36	144	8,67
86004038	3/8"	52	26	47	85	10	160	50	36	144	8,40
86004012	1/2"	60	31	49	85	15	181	50	36	144	9,06
86004034	3/4"	70	38	53	85	20	287	40	24	96	14,57
86004100	1"	83	46	63	105	25	510	30	12	48	24,02
86004114	1 1/4"	97	57	69	105	32	710	25	8	32	37,24
86004112	1 1/2"	110	68	86	135	40	1080	25	4	16	53,68
86004200	2"	134	85	94	135	50	1700	16	4	16	87,59
BLACK VERSION											
81004012	1/2"	60	31	49	85	15	181	50	36	144	10,08
81004034	3/4"	70	38	53	85	20	287	40	24	96	14,96
81004100	1"	83	46	63	105	25	510	30	12	48	24,77
81004114	1 1/4"	97	57	69	105	32	710	25	8	32	37,73
81004112	1 1/2"	110	68	86	135	40	1080	25	4	16	60,06
81004200	2"	134	85	94	135	50	1700	16	4	16	92,07

GP 2240
EVOLUTION



Male-Male nickel-plated ball valve, with painted aluminum lever handle.

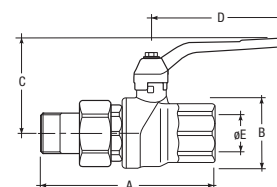


CODE	Size	DN	A mm	øB mm	C mm	D mm	øE mm	F mm	G mm	H mm	Ch1 mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
BLUE VERSION																
6046R104	1/2"	15	61	1/2"	49,5	85	15	14,8	29	32	25	185	50	36	144	9,40
6046R105	3/4"	20	71,3	3/4"	53	85	20	16,5	34,5	36,8	31	295	40	24	96	14,85
6046R106	1"	25	83	1"	63	105	25	19,5	40	43	38	475	30	12	48	24,97
RED VERSION																
6004R104	1/2"	15	61	1/2"	49,5	85	15	14,8	29	32	25	185	50	36	144	9,40
6004R105	3/4"	20	71,3	3/4"	53	85	20	16,5	34,5	36,8	31	295	40	24	96	14,41
6004R106	1"	25	83	1"	63	105	25	19,5	40	43	38	475	30	12	48	24,97

GP 2240
EVOLUTION



Female-Pipe union nickel-plated ball valve, with painted aluminum lever handle.

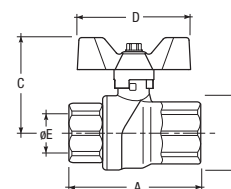


CODE	Size	A mm	øB mm	C mm	D mm	øE mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
BLUE VERSION											
80005013	1/2"	82	31	49	85	15	245	50	24	96	14,01
80005035	3/4"	94	38	53	85	20	395	40	18	72	20,66
80005101	1"	109	46	63	105	25	650	30	12	48	32,91
80005115	1 1/4"	125	57	69	105	32	880	25	8	32	49,45
RED VERSION											
86005013	1/2"	82	31	49	85	15	245	50	24	96	14,01
86005035	3/4"	94	38	53	85	20	395	40	18	72	21,17
86005101	1"	109	46	63	105	25	650	30	12	48	32,91
86005115	1 1/4"	125	57	69	105	32	880	25	8	32	49,45

GP 2240
EVOLUTION



Female-Female nickel-plated ball valve, with painted aluminum butterfly handle.

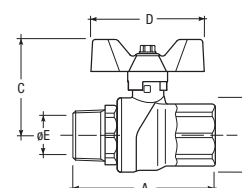


CODE	Size	A mm	øB mm	C mm	D mm	øE mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
BLUE VERSION											
80001015	1/4"	45	26	42	60	10	140	50	36	144	8,40
80001039	3/8"	47	26	42	60	10	140	50	36	144	7,58
80001013	1/2"	56	31	46	60	15	175	50	36	144	9,12
80001035	3/4"	67	38	49	60	20	280	40	24	96	14,08
80001101	1"	80	46	56	65	25	455	30	12	48	23,08
80001115	1 1/4"	94	57	62	65	32	660	25	8	32	37,24
RED VERSION											
86001015	1/4"	45	26	42	60	10	140	50	36	144	8,40
86001039	3/8"	47	26	42	60	10	140	50	36	144	7,58
86001013	1/2"	56	31	46	60	15	175	50	36	144	9,12
86001035	3/4"	67	38	49	60	20	280	40	24	96	14,16
86001101	1"	80	46	56	65	25	455	30	12	48	23,08
86001115	1 1/4"	94	57	62	65	32	660	25	8	32	37,24
BLACK VERSION											
81001013	1/2"	56	31	46	60	15	175	50	36	144	9,70
81001035	3/4"	67	38	49	60	20	280	40	24	96	14,27
81001101	1"	80	46	56	65	25	455	30	12	48	23,98
81001115	1 1/4"	94	57	62	65	32	660	25	8	32	37,01

GP 2240
EVOLUTION



Male-Female nickel-plated ball valve, with painted aluminum butterfly handle.

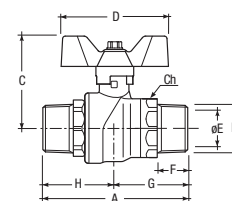


CODE	Size	A mm	øB mm	C mm	D mm	øE mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
BLUE VERSION											
80004015	1/4"	51	26	42	60	10	140	50	36	144	8,79
80004039	3/8"	52	26	42	60	10	140	50	36	144	8,40
80004013	1/2"	60	31	46	60	15	180	50	36	144	9,26
80004035	3/4"	70	38	49	60	20	290	40	24	96	14,57
80004101	1"	83	46	56	65	25	470	30	12	48	24,05
80004115	1 1/4"	97	57	62	65	32	720	25	8	32	37,24
RED VERSION											
86004015	1/4"	51	26	42	60	10	140	50	36	144	8,79
86004039	3/8"	52	26	42	60	10	140	50	36	144	8,40
86004013	1/2"	60	31	46	60	15	180	50	36	144	9,26
86004035	3/4"	70	38	49	60	20	290	40	24	96	14,57
86004101	1"	83	46	56	65	25	470	30	12	48	24,05
86004115	1 1/4"	97	57	62	65	32	720	25	8	32	37,24
BLACK VERSION											
81004013	1/2"	60	31	46	60	15	180	50	36	144	10,25
81004035	3/4"	70	38	49	60	20	290	40	24	96	14,99
81004101	1"	83	46	56	65	25	470	30	12	48	24,77
81004115	1 1/4"	97	57	62	65	32	720	25	8	32	39,29

GP 2240
EVOLUTION

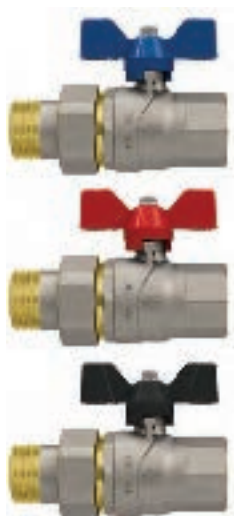


Male-Male nickel-plated ball valve, with painted aluminum butterfly handle.

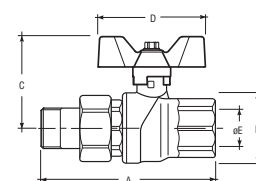


CODE	Size	DN mm	A mm	øB mm	C mm	D mm	øE mm	F mm	G mm	H mm	Ch1 mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
BLUE VERSION																
6041R104	1/2"	15	61	1/2"	14,8	60	15	46	29	32	25	185	50	36	144	9,42
6041R105	3/4"	20	71,3	3/4"	16,5	60	20	49,5	34,5	36,8	31	295	40	24	96	14,41
6041R106	1"	25	83	1"	19,5	65	25	56	40	43	38	475	30	12	48	24,23
RED VERSION																
6021R104	1/2"	15	61	1/2"	14,8	60	15	46	29	32	25	185	50	36	144	9,42
6021R105	3/4"	20	71,3	3/4"	16,5	60	20	49,5	34,5	36,8	31	295	40	24	96	14,85
6021R106	1"	25	83	1"	19,5	65	25	56	40	43	38	475	30	12	48	24,97

GP 2240
EVOLUTION

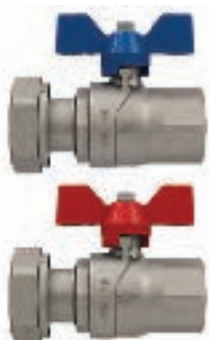


Female-Pipe union nickel-plated ball valve, with painted aluminum butterfly handle.

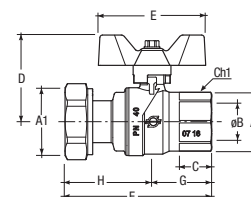


CODE	Size	A mm	øB mm	C mm	D mm	øE mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
BLUE VERSION											
80005012	1/2"	82	31	46	60	15	248	50	36	144	14,01
80005034	3/4"	94	38	49	60	20	400	40	24	96	21,19
80005100	1"	109	46	56	65	25	646	30	12	48	32,95
80005114	1"1/4	125	57	62	65	32	873	25	8	32	49,69
RED VERSION											
86005012	1/2"	82	31	46	60	15	248	50	36	144	14,01
86005034	3/4"	94	38	49	60	20	400	40	24	96	20,68
86005100	1"	109	46	56	65	25	646	30	12	48	32,95
86005114	1"1/4	125	57	62	65	32	873	25	8	32	49,69
BLACK VERSION											
81005012	1/2"	82	31	46	60	15	248	50	36	144	15,11
81005034	3/4"	94	38	49	60	20	400	40	24	96	21,69
81005100	1"	109	46	56	65	25	646	30	12	48	36,83
81005114	1"1/4	125	57	62	65	32	873	25	8	32	50,71

GP 2240
EVOLUTION



Female-Revolving nut nickel-plated ball valve, with painted aluminum butterfly handle.



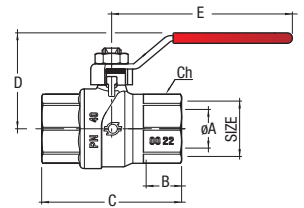
CODE	Size	A	A1	øB mm	C mm	D mm	E mm	F mm	G mm	H mm	Ch1 mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
BLUE VERSION																
6067R077	1/2"x3/4"	1/2"	3/4"	15	17	46	60	73,2	28,5	44,7	25	230	50	30	120	14,00
6067R080	3/4"x3/4"	3/4"	3/4"	20	18,3	49,5	60	81,9	33,5	48,4	31	327	40	18	72	18,69
6067R081	3/4"x1"	3/4"	1"	20	18,3	49,5	60	82,3	33,5	48,8	31	340	40	18	72	19,78
6067R085	1"x1"1/4	1"	1"1/4	25	22	56	65	93,5	40	53,5	38	535	30	12	48	31,00
RED VERSION																
6068R077	1/2"x3/4"	1/2"	3/4"	15	17	46	60	73,2	28,5	44,7	25	230	50	30	120	14,00
6068R080	3/4"x3/4"	3/4"	3/4"	20	18,3	49,5	60	81,9	33,5	48,4	31	327	40	18	72	18,69
6068R081	3/4"x1"	3/4"	1"	20	18,3	49,5	60	82,3	33,5	48,8	31	340	40	18	72	19,78
6068R085	1"x1"1/4	1"	1"1/4	25	22	56	65	93,5	40	53,5	38	535	30	12	48	29,53

GP 2240
EVOLUTION



Female-Female nickel-plated ball valve, with red plastified steel lever handle.

(*) Note: 4" valves are with threading ISO 228/1 and are supplied with levers disassembled.
Article available while stocks last.

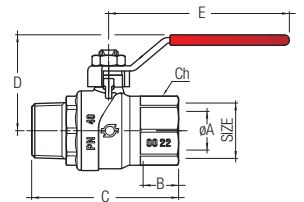


CODE	Size	DN	øA mm	B mm	C mm	D mm	E mm	Ch mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
80008014	1/4"	8	10	12,5	45	41	86	20	154	50	36	144	8,79
80008038	3/8"	10	10	13	47	41	86	20	158	50	36	144	7,78
80008012	1/2"	15	15	17	56	43	86	25	195	50	36	144	9,59
80008034	3/4"	20	20	18,3	67	46	86	31	297	40	24	96	14,50
80008100	1"	25	25	22	80	58	112	38	495	30	12	48	24,55
80008114	1"1/4	32	32	24	94	63	112	47	700	25	8	32	37,24
80008112	1"1/2	40	40	24	103	73	143	53	1070	20	4	16	53,00
80008200	2"	50	50	28,5	126	81	143	66	1755	20	4	16	86,16
08008830	4" (*)	100	100	29	185,5	149	251	124	8030	15	1	2	482,60

GP 2240
EVOLUTION



Male-Female nickel-plated ball valve, with red plastified steel lever handle.

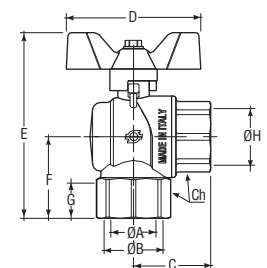


CODE	Size	DN	øA mm	B mm	C mm	D mm	E mm	Ch mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
80008514	1/4"	8	10	12,5	51	41	86	20	154	50	36	144	8,79
80008538	3/8"	10	10	13	52	41	86	20	158	50	36	144	8,67
80008512	1/2"	15	15	17	60	43	86	25	195	50	36	144	9,57
80008534	3/4"	20	20	18,3	70	46	86	31	297	40	24	96	15,06
80008600	1"	25	25	22	83	58	112	38	495	30	12	48	24,97
80008614	1"1/4	32	32	24	97	63	112	47	700	25	8	32	37,60
80008612	1"1/2	40	40	24	110	73	143	53	1070	20	4	16	54,59
80008700	2"	50	50	28,5	134	81	143	66	1755	20	4	16	88,47

GP 2240
EVOLUTION



Female-Female nickel-plated ball angle valve, with painted aluminium butterfly handle.

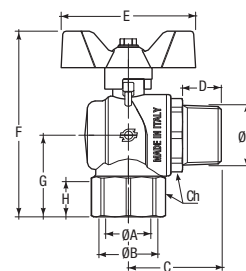


CODE	Size	øA mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
BLUE VERSION														
6770R104	1/2"x1/2"	15	1/2"	30	60	77,3	32,5	17	1/2"	25	196	36	144	12,61
6770R105	3/4"x3/4"	20	3/4"	34,5	60	86,6	38	18,3	3/4"	31	307	24	96	17,54
6770R106	1"x1"	25	1"	41,5	65	99,5	45	22	1"	38	505	12	48	28,65
6770R107	1"1/4x1"1/4	32	1"1/4	48,5	65	113	53	24	1"1/4	47	807	8	32	46,38
RED VERSION														
6778R104	1/2"x1/2"	15	1/2"	30	60	77,3	32,5	17	1/2"	25	196	36	144	13,24
6778R105	3/4"x3/4"	20	3/4"	34,5	60	86,6	38	18,3	3/4"	31	307	24	96	17,54
6778R106	1"x1"	25	1"	41,5	65	99,5	45	22	1"	38	505	12	48	28,95
6778R107	1"1/4x1"1/4	32	1"1/4	48,5	65	113	53	24	1"1/4	47	807	8	32	46,84

GP 2240
EVOLUTION



Female-Male nickel-plated ball angle valve, with painted aluminium butterfly handle.

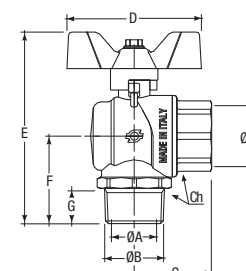


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
BLUE VERSION															
6771R104	1/2"x1/2"	15	1/2"	35,5	14,8	60	77,3	32,5	17	1/2"	25	208	36	144	12,35
6771R105	3/4"x3/4"	20	3/4"	40,5	16,5	60	86,6	38	18,3	3/4"	31	319	24	96	17,35
6771R106	1"x1"	25	1"	47,5	19,5	65	99,5	45	22	1"	38	535	12	48	28,95
RED VERSION															
6779R104	1/2"x1/2"	15	1/2"	35,5	14,8	60	77,3	32,5	17	1/2"	25	208	36	144	12,35
6779R105	3/4"x3/4"	20	3/4"	40,5	16,5	60	86,6	38	18,3	3/4"	31	319	24	96	17,35
6779R106	1"x1"	25	1"	47,5	19,5	65	99,5	45	22	1"	38	535	12	48	28,95

GP 2240
EVOLUTION



Male-Female nickel-plated ball angle valve, with painted aluminium butterfly handle.

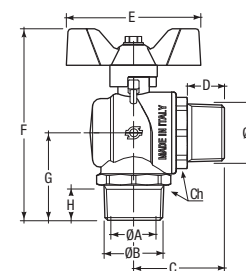


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
BLUE VERSION														
6772R104	1/2"x1/2"	15	1/2"	30	60	79,8	35	14,8	1/2"	25	198	36	144	12,61
6772R105	3/4"x3/4"	20	3/4"	34,5	60	89,6	41	16,5	3/4"	31	309	24	96	17,54
6772R106	1"x1"	25	1"	41,5	65	102	47,5	19,5	1"	38	513	12	48	28,95
RED VERSION														
6780R104	1/2"x1/2"	15	1/2"	30	60	79,8	35	14,8	1/2"	25	198	36	144	12,61
6780R105	3/4"x3/4"	20	3/4"	34,5	60	89,6	41	16,5	3/4"	31	309	24	96	17,54
6780R106	1"x1"	25	1"	41,5	65	102	47,5	19,5	1"	38	513	12	48	28,95

GP 2240
EVOLUTION



Male-Male nickel-plated ball angle valve, with painted aluminium butterfly handle.

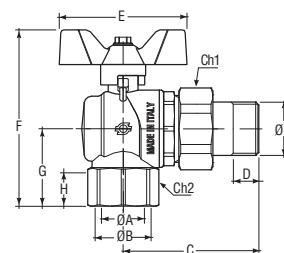


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
BLUE VERSION															
6773R104	1/2"x1/2"	15	1/2"	35,5	14,8	60	79,8	35	14,8	1/2"	25	210	36	144	12,35
6773R105	3/4"x3/4"	20	3/4"	40,5	16,5	60	89,6	41	16,5	3/4"	31	321	24	96	17,42
6773R106	1"x1"	25	1"	47,5	19,5	65	102	47,5	19,5	1"	38	543	12	48	29,80
RED VERSION															
6781R104	1/2"x1/2"	15	1/2"	35,5	14,8	60	79,8	35	14,8	1/2"	25	210	36	144	13,08
6781R105	3/4"x3/4"	20	3/4"	40,5	16,5	60	89,6	41	16,5	3/4"	31	321	24	96	17,42
6781R106	1"x1"	25	1"	47,5	19,5	65	102	47,5	19,5	1"	38	543	12	48	28,95

GP 2240
EVOLUTION



Female-Pipe union nickel-plated ball angle valve, with painted aluminium butterfly handle.



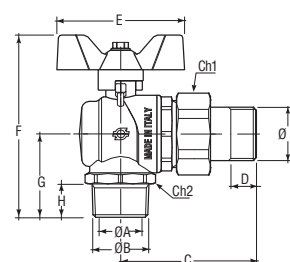
A

CODE	Size	A mm	B	C mm	D mm	E mm	F mm	G mm	H mm	I	Ch1 mm	Ch2 mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
BLUE VERSION																
6774R076	1/2"x1/2"	15	1/2"	56,5	10	60	77,3	32,5	17	1/2"	30	25	273	30	120	16,94
6774R080	3/4"x3/4"	20	3/4"	63,5	12	60	86,6	38	18,3	3/4"	37	31	425	18	72	24,05
6774R084	1"x1"	25	1"	73,5	14	65	99,5	45	22	1"	46	38	690	10	40	38,27
RED VERSION																
6782R076	1/2"x1/2"	15	1/2"	56,5	10	60	77,3	32,5	17	1/2"	30	25	273	30	120	16,94
6782R080	3/4"x3/4"	20	3/4"	63,5	12	60	86,6	38	18,3	3/4"	37	31	425	18	72	24,05
6782R084	1"x1"	25	1"	73,5	14	65	99,5	45	22	1"	46	38	690	10	40	38,27

GP 2240
EVOLUTION



Male-Pipe union nickel-plated ball angle valve, with painted aluminium butterfly handle.



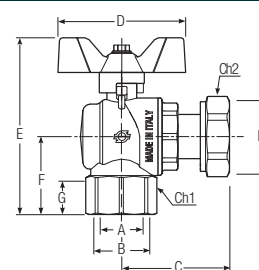
A

CODE	Size	A mm	B	C mm	D mm	E mm	F mm	G mm	H mm	I	Ch1 mm	Ch2 mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
BLUE VERSION																
6775R076	1/2"x1/2"	15	1/2"	56,5	10	60	79,8	35	14,8	1/2"	30	25	275	30	120	17,00
6775R080	3/4"x3/4"	20	3/4"	63,5	12	60	89,6	41	16,5	3/4"	37	31	428	18	72	24,97
6775R084	1"x1"	25	1"	73,5	14	65	102	47,5	19,5	1"	46	38	697	10	40	38,70
RED VERSION																
6783R076	1/2"x1/2"	15	1/2"	56,5	10	60	79,8	35	14,8	1/2"	30	25	275	30	120	17,00
6783R080	3/4"x3/4"	20	3/4"	63,5	12	60	89,6	41	16,5	3/4"	37	31	428	18	72	24,97
6783R084	1"x1"	25	1"	73,5	14	65	102	47,5	19,5	1"	46	38	697	10	40	38,70

GP 2240
EVOLUTION



Female-Revolving nut nickel-plated ball angle valve, with painted aluminium butterfly handle.



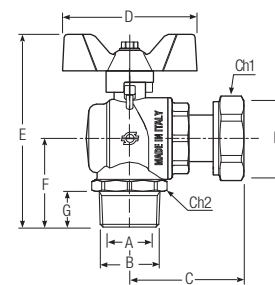
A

CODE	Size	A mm	B	C mm	D mm	E mm	F mm	G mm	H	Ch1 mm	Ch2 mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
BLUE VERSION																
6069R077	1/2"Fx3/4"D	15	1/2"	47,8	60	77,3	32,5	17	3/4"	25	32	253	50	30	120	15,95
6069R080	3/4"Fx3/4"D	20	3/4"	52,3	60	86,6	38	18,3	3/4"	31	32	361	40	18	72	20,92
6069R081	3/4"Fx1"D	20	3/4"	52,8	60	86,6	38	18,3	1"	31	38	370	40	18	72	22,63
6069R085	1"Fx1"1/4 D	25	1"	58,2	65	99,5	45	22	1"1/4	38	47	580	30	10	40	35,93
RED VERSION																
6070R077	1/2"Fx3/4"D	15	1/2"	47,8	60	77,3	32,5	17	3/4"	25	32	253	50	30	120	15,95
6070R080	3/4"Fx3/4"D	20	3/4"	52,3	60	86,6	38	18,3	3/4"	31	32	361	40	18	72	20,92
6070R081	3/4"Fx1"D	20	3/4"	52,8	60	86,6	38	18,3	1"	31	38	370	40	18	72	22,63
6070R085	1"Fx1"1/4 D	25	1"	58,2	65	99,5	45	22	1"1/4	38	47	580	30	10	40	35,93

GP 2240
EVOLUTION



Male-Revolving nut nickel-plated ball angle valve, with painted aluminium butterfly handle.



CODE	Size	A mm	B	C mm	D mm	E mm	F mm	G mm	H	Ch1 mm	Ch2 mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
BLUE VERSION															
6071R077	1/2" Mx 3/4" D	15	1/2"	47,8	60	79,8	35	14,8	3/4"	25	32	253	30	120	16,48
6071R080	3/4" Mx 3/4" D	20	3/4"	52,3	60	89,6	41	16,5	3/4"	31	32	364	18	72	21,60
6071R081	3/4" Mx 1" D	20	3/4"	52,8	60	89,6	41	16,5	1"	31	38	374	18	72	22,63
6071R085	1" Mx 1 1/4" D	25	1"	58,2	65	102	47,5	19,5	1 1/4"	38	47	598	10	40	37,24
RED VERSION															
6072R077	1/2" Mx 3/4" D	15	1/2"	47,8	60	79,8	35	14,8	3/4"	25	32	253	30	120	16,48
6072R080	3/4" Mx 3/4" D	20	3/4"	52,3	60	89,6	41	16,5	3/4"	31	32	364	18	72	21,60
6072R081	3/4" Mx 1" D	20	3/4"	52,8	60	89,6	41	16,5	1"	31	38	374	18	72	22,63
6072R085	1" Mx 1 1/4" D	25	1"	58,2	65	102	47,5	19,5	1 1/4"	38	47	598	10	40	37,24

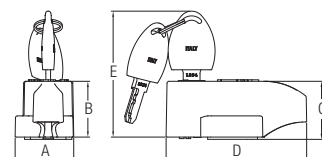
HANDLES WITH SAFETY LOCKS FOR BALL VALVES

These handles, which can be used on FIV Evolution series ball valves with aluminium lever or butterfly, are equipped with a safety lock for use by the user and normally applicable to the water meter supplied from the network. The water flow can be cut off without using the key.

GP 2000
ACCESSORIES



Blue butterfly with a safety lock.



CODE	Size	A mm	B mm	C mm	D mm	E mm	Pack pcs/box	Price €
4405R004	1/2" - 3/4"	31	29,5	31	74	67	1	22,16
4405R006	1" - 1 1/4"	31	29,5	31	74	67	1	22,17

The Butterfly with lock is set to join only with the Evolution series with aluminum Butterfly or Lever handle.

MOTORIZED VALVE BODY

FOR ACTUATORS FITTING ISO 5211



EN GENERAL CHARACTERISTICS AND MATERIALS VALVE

Body in brass: UNI EN 12165 CW617N nickel-plated
Ball in brass: UNI EN 12165 CW617N chromed
Thread UNI EN 10226 (UNI EN ISO 7/1 Rp) (DIN 2999)
Ball seals: PTFE with anti-seizure device
Functioning arm grip: O-Ring in HNBR

OPERATING CONDITIONS

Operating temperature: from -40 to 100 °C (Circulating fluid)
Operating pressure: 40 bar
Maximum pressure differential: 6 bar

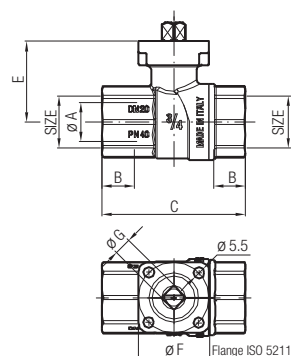
Suitable for hot and cold water domestic distribution plants (Ref. Directive 2014/68/EU Art. 13) for special uses (in accordance with the pressures set out for these items and the compatibility of the different fluids with the materials making up the specific item) see chemical compatibility chart in the technical annexes.

These valve bodies CANNOT be operated by MOTORVALV series servomotors.

GP 2262
MOTORIZED VALVE BODY



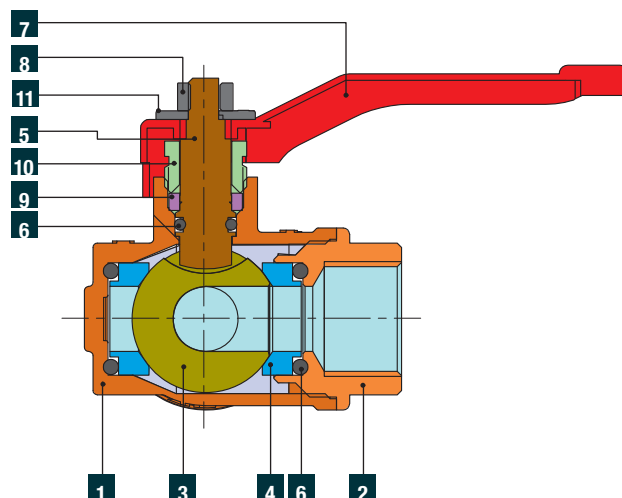
Two-way female nickel-plated ball valve for industrial use, with ISO 5211 fitting, for electric or pneumatic actuators.



CODE	Size	DN	B mm	B mm	C mm	E mm	F mm	G mm	Flange ISO	gr	Pack pcs/box	Price €
7956R104	1/2"	15	15	15	64	37	36	9	F3	291	1	24,49
7956R105	3/4"	20	20	16,3	73	40,5	36	9	F3	435	1	34,31
7956R106	1"	25	25	19,1	88	45	36	9	F3	745	1	53,15
7956R107	1"1/4	32	32	21,4	101	50,5	36	9	F3	1000	1	66,57
7956R108	1"1/2	40	40	21,4	112	62,5	42	11	F4	1700	1	117,70
7956R109	2"	50	50	25,6	132	69,5	42	11	F4	2585	1	175,80

THREE-WAY BALL VALVES

THREE-WAY BALL VALVES



Components

	Components	Pcs	Material
1	Body	1	UNI EN 12165 CW617N - DW
2	End sleeve	1	UNI EN 12165 CW617N - DW
3	Ball	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
4	Ball seal seats	4	P.T.F.E.
5	Stem	1	UNI EN 12164 CW617N - DW
6	O-Ring	4	FPM (Viton®) (*)
7	Lever	1	Fe EN1011 DD13
8	Nut	1	Zinc-plated steel
9	Gasket	1	P.T.F.E. (**)
10	Gland	1	UNI EN 12164 CW617N - DW
11	Mark flow	1	EN 7639 SGALSI 1

(*) Viton is a registered trademark of DuPont Company

(**) Not present in the size 1"1/2 and 2" (Double O-ring seal)

In accordance with Directive 2014/68/EU as regards to pressure equipment (Table 6).

EN GENERAL CHARACTERISTICS

Bore: Reduced

Range: From 1/2" to 2"

Female fitting: Thread UNI EN ISO 228/1 (DIN 259)

Functioning: 90° degrees rotation of operating device.

Operating device: Painted iron lever handles.

OPERATING CONDITIONS

Temperature limit from -10 °C to +100 °C.

Operating pressure: See diagram on Technical Attachments.

Valves must be used in fully open or fully closed position.

USE

Valves suitable to redirect the flow from one lone to the other without using more two-way valves.

These valves must be used respecting the pressures and temperatures indicated in the catalogue and, from size 1"1/4, they must not be used for fluids of group 1 (substances and mixtures classified as dangerous), ref. Directive 2014/68/EU, Art. 13.

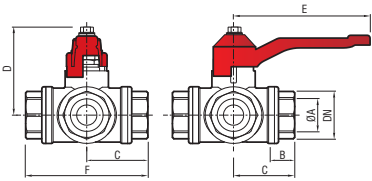
For particular uses, in compliance with the indicated pressures, and for the compatibility of the different fluids with the materials constituting the valve, see the chemical compatibility table in the technical annexes of the current catalogue.

These valves are suitable for the distribution of hot and cold water for heating systems and are manufactured in accordance with the Sound Engineering Practice (Art. 4, Par. 3) of Directive 2014/68/EU.

GP 2255
THREE-WAY BALL VALVES

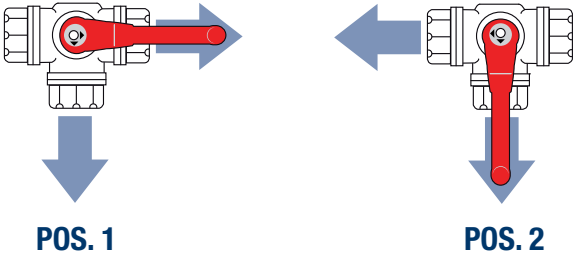


Three-way 'L' ball valve in nickel plated brass, reduced bore.



CODE	Size	ØA mm	B mm	C mm	D mm	E mm	F mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
9081R004	1/2"	10	17	41	52	115	82	633	16	6	36	72,14
9081R005	3/4"	15	18,5	45	55,5	115	90	864	16	5	30	90,52
9081R006	1"	20	20	53	64	150	106	1492	16	4	16	138,40
9081R007	1"1/4	25	23,5	60	76,5	150	120	2046	16	3	12	176,90
9081R008	1"1/2	32	28,5	71	93,5	240	142	3725	16	1	6	291,20
9081R009	2"	40	32	82,5	103,5	240	165	5860	16	1	4	441,10

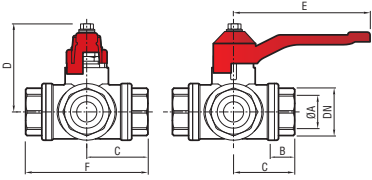
SCHEMES OF USE 'L' BALL VALVE



GP 2255
THREE-WAY BALL VALVES

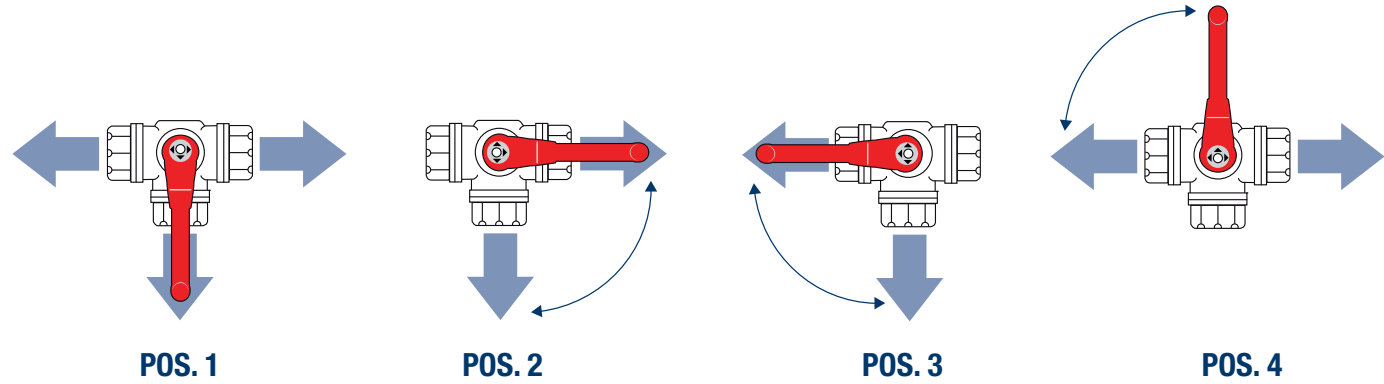


Three-way 'T' ball valve in nickel plated brass, reduced bore.

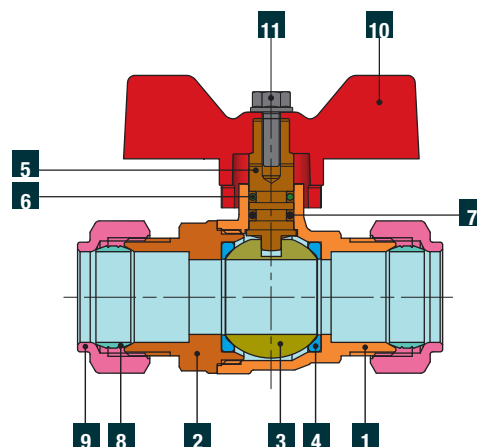


CODE	Size	ØA mm	A mm	B mm	C mm	D mm	E mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
9082R004	1/2"	10	17	41	52	115	82	626	16	6	36	72,14
9082R005	3/4"	15	18,5	45	55,5	115	90	861	16	5	30	89,71
9082R006	1"	20	20	53	64	150	106	1479	16	4	16	141,10
9082R007	1"1/4	25	23,5	60	76,5	150	120	1990	16	3	12	176,90
9082R008	1"1/2	32	28,5	71	93,5	240	142	3664	16	1	6	295,30
9082R009	2"	40	32	82,5	103,5	240	165	5728	16	1	4	410,30

SCHEMES OF USE 'T' BALL VALVE



To obtain position 3 and 4 it is necessary to remove the lever from the pin and place it at 90° towards left.



Components

	Components	Pcs	Material
1	Body	1	UNI EN 12165 CW617N - DW
2	End sleeve	1	UNI EN 12165 CW617N - DW
3	Ball	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
4	Ball seal seats	2	P.T.F.E.
5	Stem	1	UNI EN 12164 CW617N - DW
6	Stem upper seal O-Ring	1	VITON 70 Sh A (ASTM D2240)
7	Stem lower seal O-Ring	1	EPDM Peroxidic 70 Sh A (ASTM D2240)
8	Ogive	2	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
9	Nut	2	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
10	Butterfly	1	Aluminium, painted
11	Screw	1	Zinc-plated steel

EN GENERAL CHARACTERISTICS

Bore: See drawings and charts.

Range: 15 mm.

Male fitting: Thread UNI EN 10226 (UNI EN ISO 7/1 R) (DIN 2999).

Functioning: 90° degrees rotation of operating device.

Operating device: Aluminium Butterfly.

OPERATING CONDITIONS

Flow direction: Both ways.

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

Maximum pressure (T=120 °C): 10 bar

Nominal pressure (T=20 °C): See tables below

** In absence of steam; for temperatures below 0 °C use mixes of water and glycol.

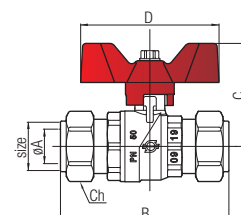
Valves must be used in fully open or fully closed position.

These valves must be used with the pressure set forth in the catalogue and are suitable for domestic hot and cold water distribution systems (Ref. Directive 2014/68/EU, art. 13). For special uses (in compliance with the pressures set out for these valves and the compatibility of the different fluids with the materials making up the valve) see chemical compatibility chart in the technical annexes of the current catalogue. The CW617N-DW brass, the Teflon (P.T.F.E.), and the O-Rings in EPDM Peroxidic in contact with the fluid, are in compliance with the Italian Ministerial Decree n. 174 (dated 06/04/2004).

GP 2250
COMPRESSION

Nickel-plated ball valve complete with fittings for copper pipe BS 864, with red painted aluminum butterfly handle.

Article available while stocks last.

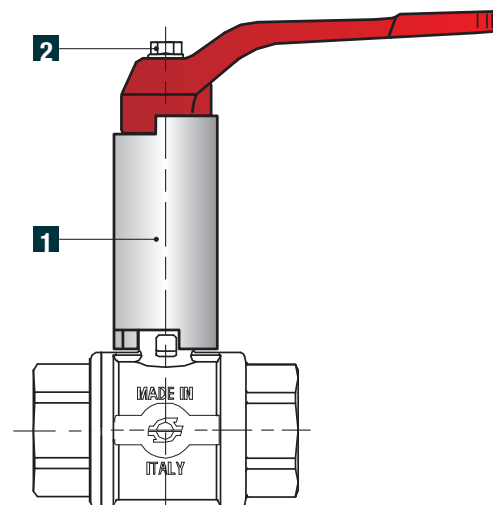


CODE	Size	øA mm	B mm	C mm	D mm	Ch mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
6012R515	15x15	15	64,8	44,8	60,2	24	220	10	36	144	16,04



SPACING

ACCESSORY OF ELONGATION LEVER



Components

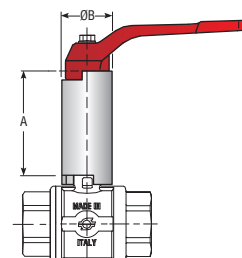
	Components	Pcs	Material
1	Elongation	1	Die-cast aluminium
2	Screw	1	Zinc-plated steel

Suitable for Perfecta and Evolution valves.

GP 2000
SPACING

Kit SPACING, accessory of elongation lever.

The SPACING kits can only be coupled with aluminum Levers.



CODE		A mm	ØB mm	Pack pcs/box	Price €/pc
09008701	1°	55	23	20	2,24
09008702	2°	60	28	15	3,07
09008703	3°	60	33	10	3,77
09008704	4°	63	48	10	5,33
09008860	5°	64	46	1	33,89
09008862	6°	64	58	1	66,75

TABLE FOR THE CHOICE OF THE MEASURE

	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"
PERFECTA	1°	1°	2°	2°	3°	3°	/	/	/
EVOLUTION	1°	1°	2°	2°	3°	3°	4°/5° (1)	4°/5° (2)	4°/6° (3)

(1) Provide "4°" spacing for valves codes 80001212, 08007212, 08107212, and "5°" spacing for valves codes 80002212, 86002212, 81002212.

(2) Provide "4°" spacing for valves codes 80001300, 08007300, 08107300, and "5°" spacing for valves codes 80002300, 86002300, 81002300.

(3) Provide "4°" spacing for valves codes 80001400, 08007400, 08107400, and "6°" spacing for valves codes 80002400, 86002400, 81002400.

BALL VALVES WITH BLEEDER

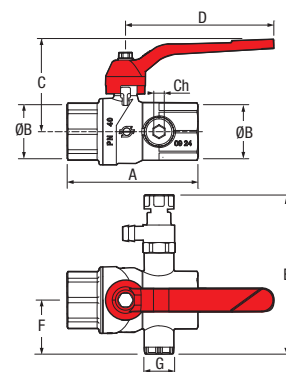


EN These valves must be used at the pressure shown in the catalogue and from measurement 1"1/4 they must not be used for group 1 fluids (substances and mixes classified as dangerous), Ref. Directive 2014/68/EU, art. 13 - for special uses (in compliance with the pressures set out for these valves and the compatibility of the different fluids with the materials, making up the valve) see chemical compatibility chart in the technical annexes of the applicable catalogue.
Suitable for use for the distribution of water in hydrothermal plants, for transportation of drinkable water, in compliance with the Italian Ministerial Decree n. 174 (dated 06/04/2004).

GP 2240
VALVES WITH BLEEDER



Female-female ball valve, with drain and nylon plug, with red-painted aluminium lever.

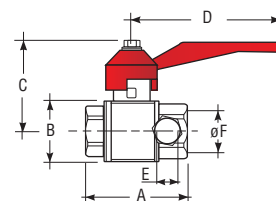


CODE	Size	A mm	øB mm	C mm	D mm	E mm	øF mm	G mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
6022R004	1/2"	64	Rp 1/2"	49,5	85	77,2	24	G 1/4"	-	50	20	80	21,33
6022R005	3/4"	75	Rp 3/4"	53	85	83,2	27	G 1/4"	-	40	10	40	27,38
6022R006	1"	89	Rp 1"	63	105	87,2	29	G 1/4"	-	30	10	40	33,11

GP 2022
VALVES WITH BLEEDER



Female-female ball valve, with drain and nickel-plated plug, with red-painted aluminium lever.



CODE	Size	A mm	øB mm	C mm	D mm	E mm	øF mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
08011114	1"1/4	86	56	65	115	G 1/4"	32	740	25	10	40	62,62
08011112	1"1/2	93	67	83	150	G 1/4"	40	1038	20	5	15	86,17
08011200	2"	112	82	94	180	G 1/4"	50	1675	20	2	12	133,00



Components

Components	Pcs	Material
Body	1	UNI EN 12165 CW617N-DW UNI EN 12164 CW617N-DW for models: - Bibcock for washing machine - Drain bibcock - Oil bibcock UNI EN 12165 CW617N-DW UNI EN 12164 CW614N for models: - Bibcock with washing machine fitting - Bibcock Classic
End sleeve	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
Ball	1	UNI EN 12164 CW617N - DW
Ball seal seats	2	P.T.F.E.
Stem	1	UNI EN 12164 CW617N - DW
Stem seal O-Ring	2	EPDM Peroxidic 70 Sh A (ASTM D2240) for models: - Bibcock for washing machine - Drain bibcock - Oil bibcock NBR 70 Sh A (ASTM D2240) for models: - Bibcock with washing machine fitting - Bibcock Classic
Lever (for washing machines bibcock)	1	Chromed ABS
Lever (for oil and drain bibcock)	1	Painted aluminium
Screw	1	Zinc-plated steel

EN GENERAL CHARACTERISTICS

Bore: See drawing.
Range: From 3/8" to 1/2"
Male fitting: Thread UNI EN ISO 228/1 (DIN 259)
Functioning: 90° rotation of operating device.
Operating device: ABS or Aluminium lever with open/close indicators.

OPERATING CONDITIONS

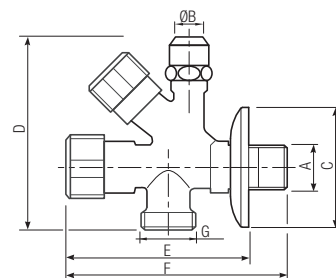
Flow direction: Both ways.
Minimum and maximum operating temperature: -20 °C/+90 °C **
Maximum pressure (T=90 °C): 10 bar
Nominal pressure (T=20 °C): See tables below
** In absence of steam; for temperatures below 0 °C use mixes of water and glycol.
Valves must be used in fully open or fully closed position.

These valves must be used with the pressure set forth in the catalogue and are suitable for domestic hot and cold water distribution systems (Ref. Directive 2014/68/EU, art. 13). For special uses (in compliance with the pressures set out for these valves and the compatibility of the different fluids with the materials making up the valve) see chemical compatibility chart in the technical annexes of the current catalogue. The CW617N-DW brass, the Teflon (P.T.F.E.), and the O-Rings in EPDM Peroxidic in contact with the fluid, are in compliance with the Italian Ministerial Decree n. 174 (dated 06/04/2004).

GP 2016
BIBCOCK



Bibcock with washing machine fitting, chrome-plated.

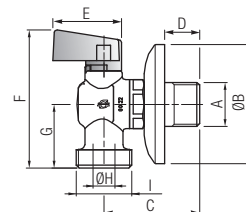


CODE	Size (A)	ØB mm	ØC mm	D mm	E mm	F mm	Connection (G)	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
7702C004	1/2"	10	56	87	87	105	3/4"	305	10	12	48	29,32

GP 2120
BIBCOCK



Chrome-plated bibcock for washing machines, with rosette.

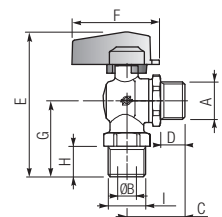


CODE	Size (A)	DN	ØB mm	C mm	Dmin mm	Dmax mm	E mm	F mm	G mm	ØH mm	Connection (I)	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
7700C025	1/2"	15	56	45	8	16	33	65	30	10	1/2"	155	10	24	96	10,06
7700C026	1/2"	15	56	45	8	16	33	65	30	10	3/4"	162	10	24	96	10,50

GP 2120
BIBCOCK



Right angle ball bibcock for drain boxes, nickel-plated.

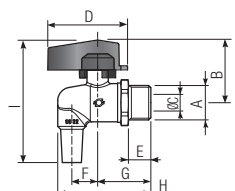


CODE	Size (A)	DN	ØB mm	C mm	D mm	E mm	F mm	G mm	H mm	Connection (I)	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
8834R025	1/2"	15	10	32,5	13,5	79,6	48	42	17	1/2"	159	10	48	192	8,93

GP 2120
BIBCOCK



Angle bibcocks for Oil canister with black handle.

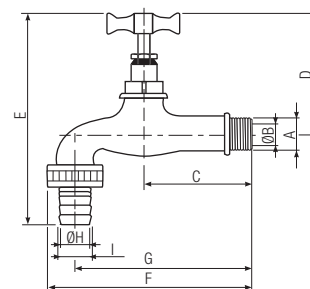


CODE	Size (A)	DN	B mm	ØC mm	D mm	E mm	F mm	G mm	H mm	I mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
8260R004	1/2"	10	37,6	10	48	13,5	15,5	32,5	56,5	73,5	162	10	40	160	8,50

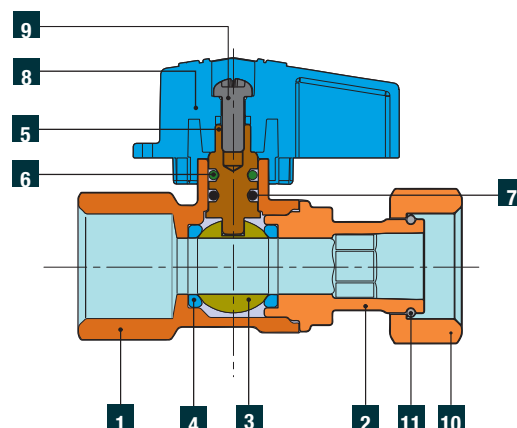
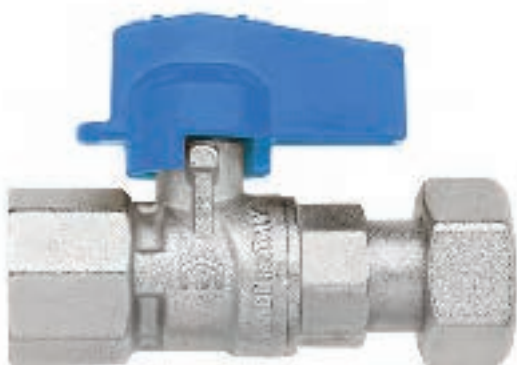
GP 2016
BIBCOCK



Hose end bibcock, sandblasted.



CODE	Size (A)	ØB mm	C mm	D mm	E mm	F mm	G mm	ØH mm	Connection (I)	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
08027312	1/2"	10	60	69	121	113	98	15	3/4"	270	20	20	80	22,29
08027334	3/4"	16	67	88	155	130	115	20	1"	505	20	12	48	31,50



Components

	Components	Pcs	Material
1	Body	1	UNI EN 12165 CW617N - DW
2	End sleeve	1	UNI EN 12165 CW617N - DW
3	Ball	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
4	Ball seal seats	2	P.T.F.E.
5	Stem	1	UNI EN 12164 CW617N - DW
6	Stem upper seal O-Ring	1	VITON 70 Sh A (ASTM D2240)
7	Stem lower seal O-Ring	1	EPDM Peroxidic 70 Sh A (ASTM D2240)
8	Alluminium butterfly handle	1	Aluminium, painted
9	Screw	1	Zinc-plated steel
10	Swivel nut	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
11	Elastic ring	1	Carbon steel EN 10270/1 SM

EN GENERAL CHARACTERISTICS

Bore: Total
 Range: 1/2"
 Female fitting: Thread UNI EN 10226 (UNI EN ISO 7/1 Rp) (DIN 2999)
 Male fitting: Thread UNI EN 10226 (UNI EN ISO 7/1 R) (DIN 2999)
 Tang and Nut: Thread UNI EN ISO 228/1 (DIN 259)
 Functioning: 90° degrees rotation of operating device.
 Operating device: Aluminium lever handle.

OPERATING CONDITIONS

Flow direction: Both ways.
 Minimum and maximum operating temperature: -20 °C/+120 °C **
 Maximum pressure (T=120 °C): 10 bar
 Nominal pressure (T=20 °C): 10 bar
 ** In absence of steam; for temperatures below 0 °C use mixes of water and glycol.

Valves must be used in fully open or fully closed position.

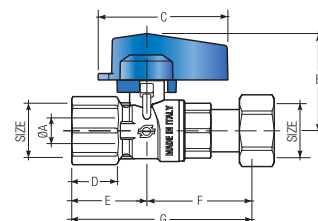
These valves must be used with the pressure set forth in the catalogue and are suitable for domestic hot and cold water distribution systems (Ref. Directive 2014/68/EU, art. 13). For special uses (in compliance with the pressures set out for these valves and the compatibility of the different fluids with the materials making up the valve) see chemical compatibility chart in the technical annexes of the current catalogue.

The CW617N-DW brass, the Teflon (P.T.F.E.), and the O-Rings in EPDM Peroxidic in contact with the fluid, are in compliance with the Italian Ministerial Decree n. 174 (dated 06/04/2004).

GP 2140
BIBCOCK



Female-swivel nut straight ball bibcock, with blue aluminum lever handle.



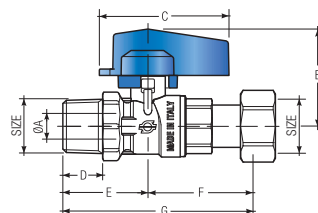
CODE	Size	øA mm	B mm	C mm	D mm	E mm	F mm	G mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8124R076	1/2"F x 1/2"D	10	37.6	48	17	28	39	67	167	20	160	9,78

Body threads: Rp (UNI EN 10226-1)
Swivel nut threads: G (UNI EN ISO 228-1)

GP 2140
BIBCOCK



Male-swivel nut straight ball bibcock, with blue aluminum lever handle.



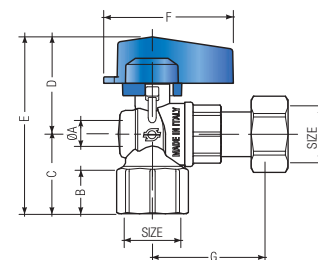
CODE	Size	øA mm	B mm	C mm	D mm	E mm	F mm	G mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8125R076	1/2"M x 1/2"D	10	37.6	48	14.8	31.75	39	70.75	171	20	160	9,92

Body threads: R (UNI EN 10226-1)
Swivel nut threads: G (UNI EN ISO 228-1)

GP 2140
BIBCOCK



Female-swivel nut angle ball bibcock, with blue aluminum lever handle.



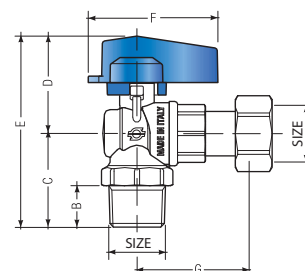
CODE	Size	øA mm	B mm	C mm	D mm	E mm	F mm	G mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8130R076	1/2"F x 1/2"D	10	17	31	37.6	68.6	48	39	174	20	160	11,48

Body threads: Rp (UNI EN 10226-1)
Swivel nut threads: G (UNI EN ISO 228-1)

GP 2140
BIBCOCK

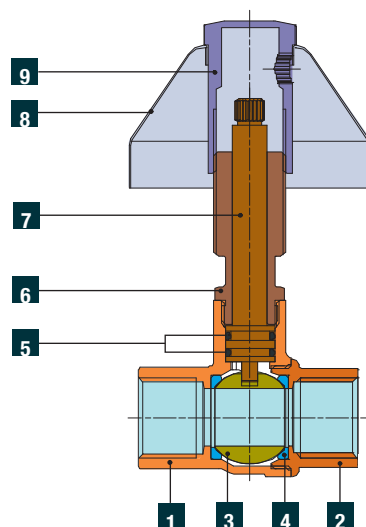


Male-swivel nut angle ball bibcock, with blue aluminum lever handle.



CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8131R076	1/2"M x 1/2"D	10	14.8	34.5	37.6	72.1	48	39	177	20	160	11,73

Body threads: R (UNI EN 10226-1)
Swivel nut threads: G (UNI EN ISO 228-1)



Components	Pcs	Material
1 Body	1	UNI EN 12165 CW617N - DW
2 End sleeve	1	UNI EN 12165 CW617N - DW
3 Ball	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
4 Ball seal seats	2	P.T.F.E.
5 Stem seal O-Ring	2	EPDM 70 Sh A (ASTM D2240)
6 Stem press	1	UNI EN 12164 CW617N - DW
7 Stem	1	UNI EN 12164 CW617N - DW
8 Bell	1	Cromed-plated brass
9 Cap	1	Cromed-plated brass
Lever or Knob	1	Cromed-plated zamak
* Screw	1	Zinc-plated steel
* Coloured plug or Ring	1	ABS
* Knob plaque	1	Cromed-plated ABS

EN GENERAL CHARACTERISTICS

Bore: Total
 Range: From 1/2" to 3/4"
 Female fitting: Thread UNI EN 10226 (UNI EN ISO 7/1 Rp) (DIN 2999)
 Functioning: 90° degrees rotation of operating device.
 Operating device: Cap, Lever.

OPERATING CONDITIONS

Flow direction: Both ways.
 Minimum and maximum operating temperature: -20 °C/+90 °C **
 Maximum pressure (T=90 °C): 10 bar
 Nominal pressure (T=20 °C): See tables below
 ** In absence of steam; for temperatures below 0 °C use mixes of water and glycol.

Valves must be used in fully open or fully closed position.

These valves must be used with the pressure set forth in the catalogue and are suitable for domestic hot and cold water distribution systems (Ref. Directive 2014/68/EU, art. 13).

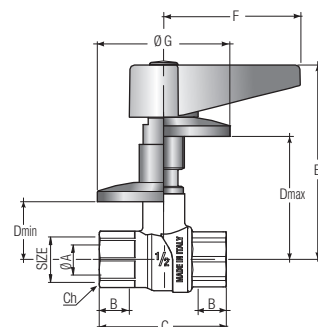
For special uses (in compliance with the pressures set out for these valves and the compatibility of the different fluids with the materials making up the valve) see chemical compatibility chart in the technical annexes of the current catalogue.

The CW617N-DW brass, the Teflon (P.T.F.E.), and the O-Rings in EPDM Peroxidic in contact with the fluid, are in compliance with the Italian Ministerial Decree n. 174 (dated 06/04/2004).

GP 2240
INCASSO



Ball valve with F-F fittings for built-in installation, sandblasted yellow, with chromed lever and rosette

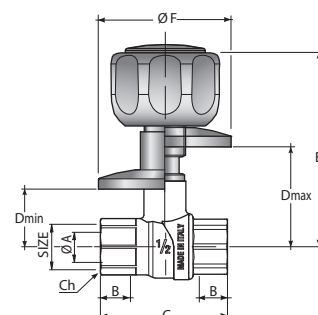


CODE	Size	A mm	B mm	C mm	Dmin mm	Dmax mm	E mm	F mm	ØG mm	Ch mm	PN	gr	Pack pcs/box	Master pcs/box	Price €/pc
7360S104	1/2"	15	17	58	27	56,5	91,5	62	68	25	40	351	12	48	27,26
7360S105	3/4"	20	18,3	68	30,5	60	95	62	68	31	40	456	12	48	33,38

GP 2240
INCASSO



Ball valve with F-F fittings for built-in installation, sandblasted yellow, with chromed handle and rosette.

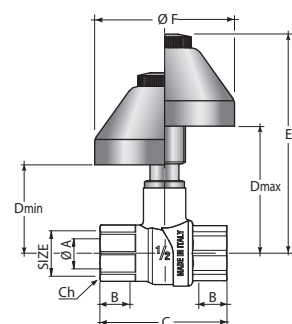


CODE	Size	A mm	B mm	C mm	Dmin mm	Dmax mm	E mm	F mm	Ch mm	PN	gr	Pack pcs/box	Master pcs/box	Price €/pc
7361S104	1/2"	15	17	58	27	47	95,2	68	25	40	398	10	40	28,95
7361S105	3/4"	20	18,3	68	30,5	50,5	99	68	31	40	503	8	32	33,11

GP 2240
INCASSO



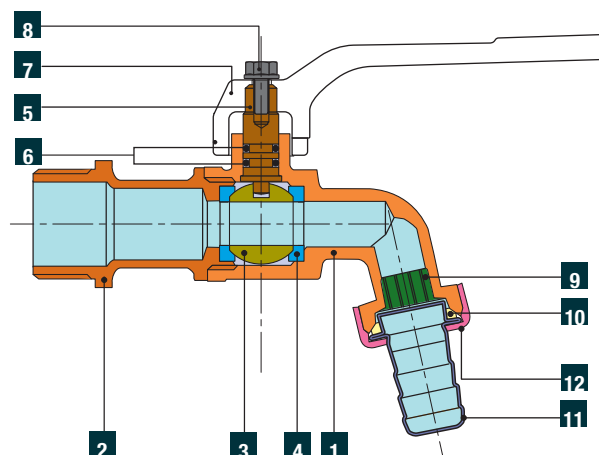
Ball valve with F-F fittings for built-in installation, sandblasted yellow, with chromed cap and bell.



CODE	Size	A mm	B mm	C mm	Dmin mm	Dmax mm	Emin mm	Emax mm	F mm	Ch mm	PN	gr	Pack pcs/box	Master pcs/box	Price €/pc
7362S104	1/2"	15	17	58	41,5	60	85,5	103,5	63	25	40	300	10	40	24,47
7362S105	3/4"	20	18,3	68	45	63,5	88,5	107	63	31	40	405	12	48	29,51

GARDEN Export - Pesante

BALL BIBCOCKS



Components

	Components	Pcs	Material
1	Body	1	UNI EN 12165 CW617N - DW
2	End sleeve	1	UNI EN 12165 CW617N - DW
3	Ball	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
4	Ball seal seats	2	P.T.F.E.
5	Stem	1	UNI EN 12164 CW617N - DW
6	Stem seal O-Ring	2	EPDM Peroxidic70 Sh A (ASTM D2240)
7	Lever handle	1	Aluminium, painted
	Butterfly handle	1	Aluminium, painted
8	Screw	1	Zinc-plated steel
9	Flow straightener	1	Nylon
10	Washer	1	EPDM peroxidic 70 Sh A (ASTM D2240)
11	Hose end	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW AISI 304 stainless steel
12	Nut	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW

EN GENERAL CHARACTERISTICS

Range: From 3/8" to 1"

Male fitting : Thread UNI EN ISO 228/1 (DIN 259)

Functioning : 90° degrees rotation of operating device.

Operating device : Aluminium lever handles, aluminium Butterfly.

OPERATING CONDITIONS

Flow direction: Both ways.

Minimum and maximum operating temperature: -20 °C/+90 °C **

Maximum pressure (T=90 °C): 10 bar

Nominal pressure (T=20 °C): See tables below

** In absence of steam; for temperatures below 0 °C use mixes of water and glycol.

Valves must be used in fully open or fully closed position.

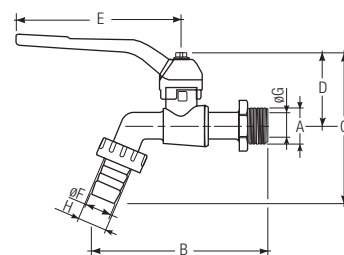
These valves must be used with the pressure set forth in the catalogue and are suitable for domestic hot and cold water distribution systems (Ref. Directive 2014/68/EU, art. 13). For special uses (in compliance with the pressures set out for these valves and the compatibility of the different fluids with the materials making up the valve) see chemical compatibility chart in the technical annexes of the current catalogue.

The CW617N-DW brass, the Teflon (P.T.F.E.), and the O-Rings in EPDM Peroxidic in contact with the fluid, are in compliance with the Italian Ministerial Decree n. 174 (dated 06/04/2004).

GP 2110
GARDEN EXPORT



Ball bibcocks with hose end, aluminium Lever handle.



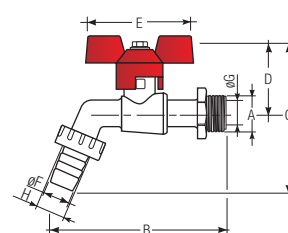
CODE	Size (A)	B mm	C mm	D mm	E mm	øF mm	øG mm	Connection (H)	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
BLUE VERSION													
08113038	3/8"	95	82	30	80	15	10	3/4"	200	15	20	80	11,52
08113012	1/2"	100	82	30	80	15	10	3/4"	186	15	20	80	10,30
08113036	3/4"	112	94	38	85	20	12	1"	310	15	12	48	14,63
08113106	1"	122	105	40	85	25	12	1"1/4	418	15	8	32	21,14

RED VERSION													
08003038	3/8"	95	82	30	80	15	10	3/4"	200	15	20	80	11,52
08003012	1/2"	100	82	30	80	15	10	3/4"	186	15	20	80	10,82
08003036	3/4"	112	94	38	85	20	12	1"	310	15	12	48	15,36
08003106	1"	122	105	40	85	25	12	1"1/4	418	15	8	32	21,05

GP 2110
GARDEN EXPORT



Ball bibcocks with hose end, aluminium Butterfly handle.

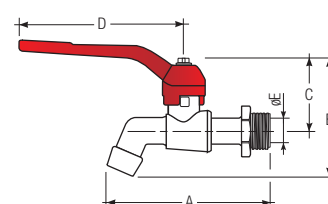


CODE	Size (A)	B mm	C mm	D mm	E mm	øF mm	øG mm	Connection (H)	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
08003039	3/8"	95	82	30	50	15	10	3/4"	200	15	20	80	11,52
08003013	1/2"	100	82	30	50	15	10	3/4"	180	15	20	80	10,71
08003037	3/4"	112	94	38	60	20	12	1"	292	15	12	48	15,42
08003107	1"	122	105	40	60	25	12	1"1/4	425	15	8	32	21,11

GP 2110
GARDEN EXPORT



Ball bibcocks with Plain end, aluminium Lever handle.



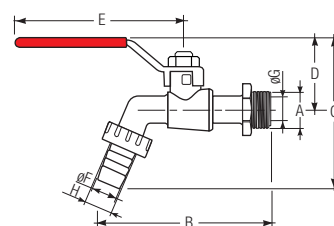
Available only on request.

CODE	Size	A mm	B mm	C mm	D mm	øE mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
08003112	1/2"	93	56	30	80	10	156	15	20	80	9,83

GP 2110
GARDEN EXPORT



Ball bibcocks with hose end with red plastic-coated steel lever.

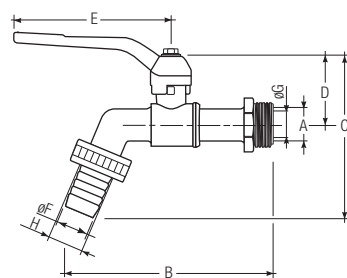


CODE	Size (A)	B mm	C mm	D mm	E mm	øF mm	øG mm	Connection (H)	PN	gr	Pack pcs/box	Master pcs/box	Price €/pc
6048R004	1/2"	100	80	28	86,2	15	10	3/4"	15	208	20	80	11,08

GP 2100
GARDEN PESANTE



Ball bibcocks with hose end, aluminium Lever handle.

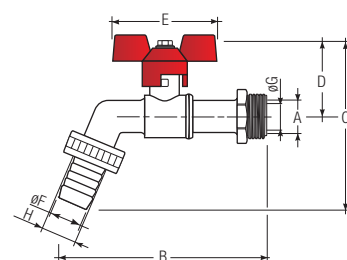


CODE	Size (A)	B mm	C mm	D mm	E mm	øF mm	øG mm	Connection (H)	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
BLUE VERSION													
08112038	3/8"	108	93	40	85	15	10	3/4"	260	20	20	80	14,48
08112012	1/2"	108	93	40	85	15	10	3/4"	260	20	20	80	13,36
08112034	3/4"	119	98	40	85	20	12	1"	338	20	12	48	15,57
08112100	1"	146	115	43	85	25	15	1"1/4	507	20	8	32	24,82
RED VERSION													
08002038	3/8"	108	93	40	85	15	10	3/4"	260	20	20	80	14,40
08002012	1/2"	108	93	40	85	15	10	3/4"	260	20	20	80	14,03
08002034	3/4"	119	98	40	85	20	12	1"	338	20	12	48	16,20
08002100	1"	146	115	43	85	25	15	1"1/4	507	20	8	32	25,66

GP 2100
GARDEN PESANTE



Ball bibcocks with hose end, aluminium Butterfly handle.

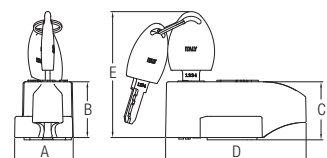


CODE	Size (A)	B mm	C mm	D mm	E mm	øF mm	øG mm	Connection (H)	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
08002039	3/8"	108	91	38	60	15	10	3/4"	255	20	20	80	14,48
08002013	1/2"	108	91	38	60	15	10	3/4"	248	20	20	80	13,86
08002035	3/4"	119	96	38	60	20	12	1"	330	20	12	48	17,00
08002101	1"	146	113	41	60	25	15	1"1/4	502	20	8	32	26,72

GP 2000
ACCESSORIES



Blue butterfly with a safety lock.



CODE	Size	A mm	B mm	C mm	D mm	E mm	Pack pcs/box	Price €
4405R004	1/2" - 3/4" (*)	31	29,5	31	74	67	1	22,16
4405R006	1" (**)	31	29,5	31	74	67	1	22,17

(*) Compatible with GARDEN PESANTE bibcocks sizes 1/2" and 3/4".

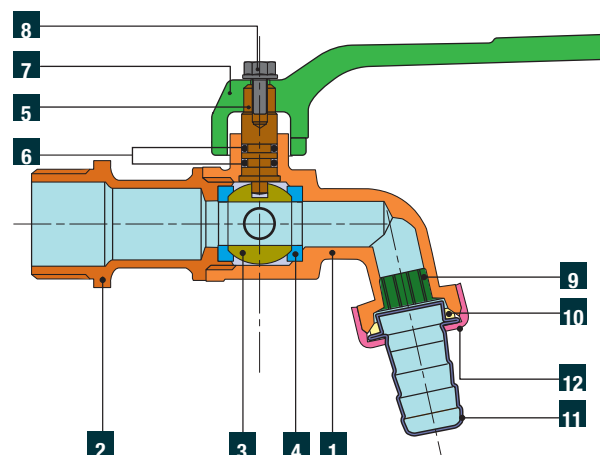
(**) Compatible with GARDEN PESANTE bibcocks size 1".

Articles not compatible with GARDEN EXPORT.



GARDEN ANTI-FREEZE

BALL BIBCOCKS WITH ANTI-FREEZE SAFETY DEVICE



Components	Pcs	Material
1 Body	1	UNI EN 12165 CW617N - DW
2 End sleeve	1	UNI EN 12165 CW617N - DW
3 Ball	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
4 Ball seal seats	2	P.T.F.E.
5 Stem	1	UNI EN 12164 CW617N - DW
6 Stem seal O-Ring	2	EPDM Peroxidic 70 Sh A (ASTM D2240)
7 Lever handle	1	Aluminium, painted
8 Screw	1	Zinc-plated steel
9 Flow straightener	1	Nylon
10 Washer	1	EPDM Peroxidic 70 Sh A (ASTM D2240)
11 Hose end	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW AISI 304 stainless steel
12 Nut	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW

EN GENERAL CHARACTERISTICS

Range: From 1/2" to 3/4"

Male fitting: Thread UNI EN ISO 228/1 (DIN 259)

Functioning: 90° degrees rotation of operating device.

Operating device: Aluminium lever handles.

OPERATING CONDITIONS

Flow direction: Both ways.

Minimum and maximum operating temperature: -20 °C/+90 °C **

Maximum pressure (T=90 °C): 10 bar

Nominal pressure (T=20 °C): See tables below

** In absence of steam; for temperatures below 0 °C use mixes of water and glycol.

Valves must be used in fully open or fully closed position.

These valves must be used with the pressure set forth in the catalogue and are suitable for domestic hot and cold water distribution systems (Ref. Directive 2014/68/EU, art. 13). For special uses (in compliance with the pressures set out for these valves and the compatibility of the different fluids with the materials making up the valve) see chemical compatibility chart in the technical annexes of the current catalogue.

The CW617N-DW brass, the Teflon (P.T.F.E.), and the O-Rings in EPDM Peroxidic in contact with the fluid, are in compliance with the Italian Ministerial Decree n. 174 (dated 06/04/2004).

GARDEN VALVE WITH SAFETY FREEZE PREVENTION FUNCTION

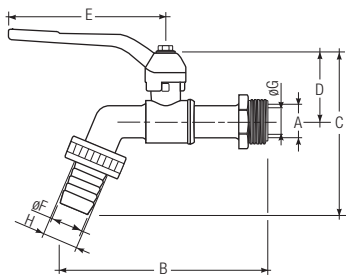
Water features a special property when it passes from the liquid to the solid state, as a matter of fact, when it solidifies, it increases its volume. To avoid damages to the mechanical part of the valve, FIV Freeze Prevention Garden valve possesses a special safety hole placed on the ball, which allows the ice to expand towards the water main when the valve is closed.



GP 2100
BIBCOCK ANTI-FREEZE



Ball bibcock with high freeze resistance, including hose end and lever handle in green aluminium.

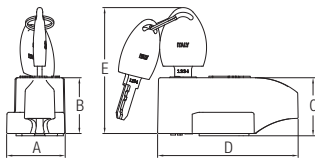


CODE	Size (A)	B mm	C mm	D mm	E mm	øF mm	øG mm	Connection (H)	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
6242R004	1/2"	108	93	40	85	15	10	3/4"	260	20	20	80	14,08
6242R005	3/4"	119	98	40	85	20	12	1"	338	20	12	48	16,00

GP 2000
ACCESSORIES



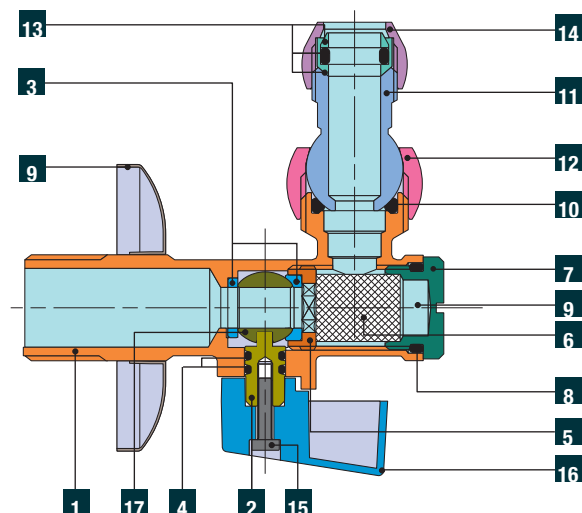
Blue butterfly with a safety lock.



CODE	Size	A mm	B mm	C mm	D mm	E mm	Pack pcs/box	Price €
4405R004	1/2" - 3/4"	31	29,5	31	74	67	1	22,16

FILTER KING

ANGLE BIBCOCK



Components

	Components	Pcs	Material
1	Body	1	UNI EN 12165 CW617N - DW
2	Stem	1	UNI EN 12165 CW617N - DW
3	Ball seal seats	2	P.T.F.E.
4	Stem-ball seal O-ring	2	EPDM peroxidic 70 Sh A (ASTM D2240)
5	Ring nut sleeve	1	UNI EN 12164 CW617N - DW
6	Filter	1	AISI 304/L stainless steel
7	Filter plug	1	UNI EN 12164 CW617N - DW
8	Plug seal O-ring	1	EPDM peroxidic 70 Sh A (ASTM D2240)
9	Rosette	1	Stainless steel
10	Swivel joint seal O-ring	1	EPDM peroxidic 70 Sh A (ASTM D2240)
11	Swivel joint	1	UNI EN 12164 CW617N - DW
12	Swivel nut	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
13	3-piece cartridge seal	1	Brass + Daplen + EPDM
14	Nut	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
15	Screw	1	Zinc-plated steel
16	Lever	1	Chromed-plated ABS
17	Ball	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW

EN GENERAL CHARACTERISTICS

Range: From 3/8" to 1/2"

Male fitting: Threading UNI EN ISO 228/1 (DIN 259)

Functioning: 90° degrees rotation of operating device.

Operating device: Gloss chromed ABS lever.

OPERATING CONDITIONS

Flow direction: Both ways.

Minimum and maximum operating temperature: -20 °C/+90 °C **

Maximum pressure (T=90 °C): 10 bar

Nominal pressure (T=20 °C): 10 bar

** In absence of steam; for temperatures below 0 °C use mixes of water and glycol.

Valves must be used in fully open or fully closed position.

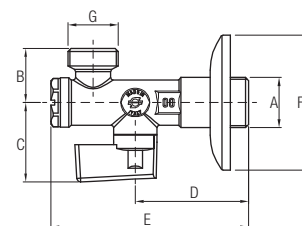
These valves must be used with the pressure set forth in the catalogue and are suitable for domestic hot and cold water distribution systems (Ref. Directive 2014/68/EU, art. 13). For special uses (in compliance with the pressures set out for these valves and the compatibility of the different fluids with the materials making up the valve) see chemical compatibility chart in the technical annexes of the current catalogue.

The CW617N-DW brass, the Teflon (P.T.F.E.), and the O-Rings in EPDM Peroxidic in contact with the fluid, are in compliance with the Italian Ministerial Decree n. 174 (dated 06/04/2004).

GP 2150
FILTER KING



Chromed ball-valve bibcock under sink with male-male filter, lever, rosette and flat seal.

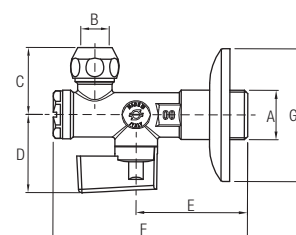


CODE	Size (A)	B mm	C mm	D mm	E mm	F mm	Connection (G)	gr	DN	Pack pcs/box	Master pcs/box	Price €/pc
8914C023	1/2"	22,5	33	47	82	56	3/8"	128	15	24	96	10,33
8914C025	1/2"	22,5	33	47	82	56	1/2"	135	15	24	96	10,33

GP 2150
FILTER KING



Chromed ball-valve bibcock under sink with male filter, lever, rosette, nut and seal cartridge.

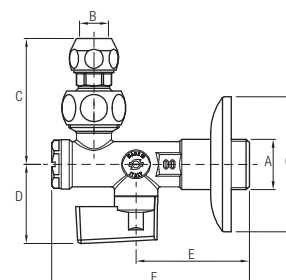


CODE	Size (A)	B mm	C mm	D mm	E mm	F mm	G mm	gr	DN	Pack pcs/box	Master pcs/box	Price €/pc
8915C310	1/2"	10	31,5	33	47	82	56	138	15	24	96	11,38

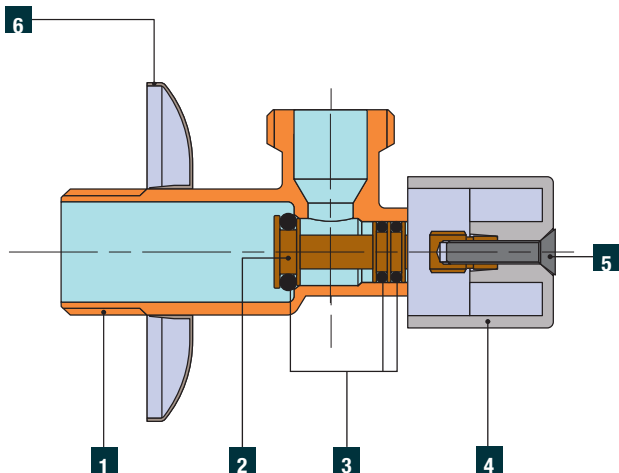
GP 2150
FILTER KING



Chromed ball-valve bibcock under sink with male filter with swivel joint, lever, rosette, nut and seal cartridge.



CODE	Size (A)	B mm	C mm	D mm	E mm	F mm	G mm	gr	DN	Pack pcs/box	Master pcs/box	Price €/pc
8916C310	1/2"	10	56	33	47	82	56	190	15	24	96	15,11



Components

		Pcs	Material
1	Body	1	UNI EN 12165 CW617N - DW
2	Stem	1	UNI EN 12164 CW617N - DW
3	Stem seal O-Ring	3	EPDM peroxidic 70 Sh A (ASTM D2240)
4	Lever	1	Chromed-plated ABS
5	screw	1	Zinc-plated steel
6	Rosette	1	Steel
*	Ogive seal cartridge	1	Brass + Daplen + NBR
*	Nut	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW

EN GENERAL CHARACTERISTICS

Range: From 3/8" to 1/2"
Male fitting: Threading UNI EN ISO 228/1 (DIN 259)
Functioning: rotation of lever all the way down.
Operating device: Lever in chromed ABS with open/closed indicators.

OPERATING CONDITIONS

Flow direction: Both ways.
Minimum and maximum operating temperature: -20 °C/+90 °C **
Maximum pressure (T=90 °C): 10 bar
Nominal pressure (T=20 °C): 10 bar
** In absence of steam; for temperatures below 0 °C use mixes of water and glycol.

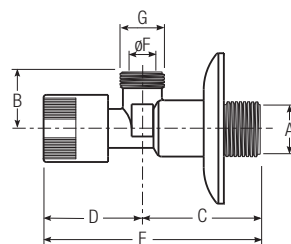
Valves must be used in fully open or fully closed position.

These valves must be used with the pressure set forth in the catalogue and are suitable for domestic hot and cold water distribution systems (Ref. Directive 2014/68/EU, art. 13). For special uses (in compliance with the pressures set out for these valves and the compatibility of the different fluids with the materials making up the valve) see chemical compatibility chart in the technical annexes of the current catalogue.
The CW617N-DW brass, the Teflon (P.T.F.E.), and the O-Rings in EPDM Peroxidic in contact with the fluid, are in compliance with the Italian Ministerial Decree n. 174 (dated 06/04/2004).

GP 2150
TWISTER

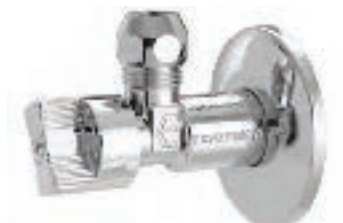


Chromed angle bibcock under sink, male-male, with lever, rosette and flat seal.

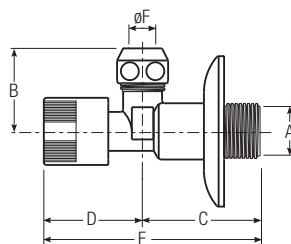


CODE	Size (A)	B mm	C mm	D mm	E mm	ØF mm	Connection (G)	gr	Pack pcs/box	Master pcs/box	Price €/pc
08100010	1/2"	22	44,5	37	81,5	10	3/8"	105	30	120	7,15
08100020	1/2"	25	44,5	37	81,5	12	1/2"	116	30	120	7,26

GP 2150
TWISTER



Chromed angle bibcock under sink, male, with lever, rosette and flat seal.



CODE	Size (A)	B mm	C mm	D mm	E mm	ØF mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
08100012	1/2"	31	44,5	37	81,5	10	112	30	120	8,09



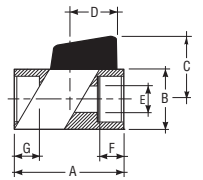
Components	Material
Body	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
Ball pressure ring	UNI EN 12164 CW617N - DW
Ball	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
Ball seal gasket	P.T.F.E.
Stem seal O-Ring	NBR 70 Sh A (ASTM D 2240)
Stem	UNI EN 12164 CW617N - DW
Handle	Fibreglass-reinforced 66 nylon
Screw	Zinc-plated steel
Thread	UNI EN ISO 228/1 (DIN 259)
Temperature limit	From -10 °C to +90 °C
Max. working pressure	From 10 bar to 70 bar

EN These valves must be used respecting the pressures and temperatures indicated in the catalogue.
For particular uses, in compliance with the indicated pressures, and for the compatibility of the different fluids with the materials constituting the valve, see the chemical compatibility table in the technical annexes of the current catalogue.
These valves are suitable for the distribution of hot and cold water for heating systems and are manufactured in accordance with the Sound Engineering Practice (Art. 4, Par. 3) of Directive 2014/68/EU.

GP 2020
MIGNON



Chrome-plated ball valves with Female-Female fittings, with black lever.

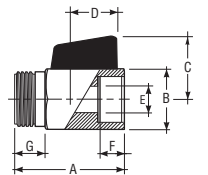


CODE	Size	A mm	B mm	C mm	D mm	øE mm	F mm	G mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
08012018	1/8"	39	21	27	22	6	9	9	90	35	280	8,28
08012014	1/4"	39	21	27	22	8	9	9	93	35	280	8,44
08012038	3/8"	42	21	27	22	8	9	10	86	35	280	8,28
08012012	1/2"	47	25	29	22	10	10,5	10,5	130	35	280	8,74
08012034	3/4"	54	30	31,5	22	12	13,5	13,5	20	20	160	12,90

GP 2020
MIGNON



Chrome-plated ball valves with Male-Female fittings, with black lever.



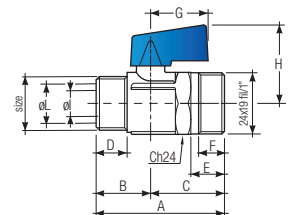
THE VALVE CAN BE FITTED WITH A BOLT AND CAP.

CODE	Size	A mm	B mm	C mm	D mm	øE mm	F mm	G mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
08013018	1/8"(x6)	39	21	27	22	6	9	9	77	35	280	8,28
08013014	1/4"(x8)	39	21	27	22	8	9	9	75	35	280	8,44
08013038	3/8"(x12)	40	21	27	22	8	9	9	76	35	280	7,95
08013012	1/2"(x15)	45	25	29	22	10	10,5	10,5	115	35	280	8,74
08013034	3/4"(x18)	51	30	31,5	22	12	13,5	13,5	178	20	160	12,90

GP 2020
MIGNON



Ball valve with Male-Male fittings, M (gas) x M (24x19) version with blue lever.



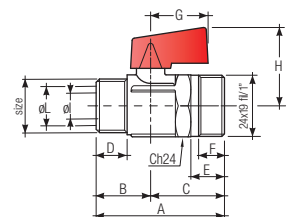
NB - Suitable for Monoblocco seals (see section Heating Fittings).

CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	øI mm	øL mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
7903C954	1/2"	48	21	27	12	13	11,5	22	30	10	15,2	102	35	280	10,11

GP 2020
MIGNON



Ball valve with Male-Male fittings, M (gas) x M (24x19) version with red lever.



NB - Suitable for Monoblocco seal (see section Heating Fittings).

CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	øI mm	øL mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
7904C954	1/2"	48	21	27	12	13	11,5	22	30	10	15,2	102	35	280	10,11

GATE VALVES



Components	Material
Body - Disk - Stem support	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
Body for BRONZE VERSION	UNI EN 1982
Stem - Gland packing	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
Gasket for Stem support and Body	GUARNITAL fibre
Stem seal gland	EPDM 90
Handwheel	Painted steel
Nut	Zinc-plated steel
Threads	UNI EN ISO 228/1
Temperature limit	From -10 °C to +90 °C
Max. working pressure	See PN in the article tables

EN OPERATING CONDITIONS

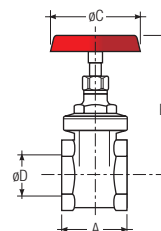
These shutters are suitable for hot and cold water domestic distribution plants (Ref. Directive 2014/68/EU Art. 13) for special uses (in accordance with the pressures set out for these items and the compatibility of the different fluids with the materials making up the specific item) see chemical compatibility chart in the technical annexes.

GP 2025
GATE VALVE



Brass gate valves, female-female, sandblasted, with handwheel.

(*) Available only on request.



CODE	Size	A mm	B mm	øC mm	øD mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
08016038	3/8"	33	67	45	13	160	16	20	120	13,46
08016012	1/2"	35	68	45	13,5	160	10	20	120	12,49
08016034	3/4"	39	68	45	15,5	190	10	20	120	14,14
08016100	1"	43	80	50	19	270	10	20	60	21,31
08016114	1"1/4	48	86	55	27	415	10	10	40	29,31
08016112	1"1/2	54	107	60	33	545	10	10	30	38,06
08016200	2"	58	134	70	45	830	10	5	20	55,92
08016212	2"1/2	64	175	100	60	1680	16	1	12	101,70
08016300	3"	74	200	100	72	2350	16	1	8	133,50
08016400	4"	84	235	120	93	4150	16	1	4	231,70
08016500	5" (*)	107	300	140	117	8500	16	1	2	622,40
08016600	6" (*)	113	350	170	143	13000	16	1	2	931,60

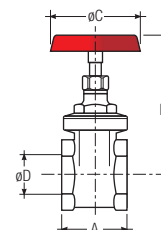
GP 2025
GATE VALVE

NPT



NPT brass gate valves, female-female, sandblasted, with handwheel.

Available only on request.



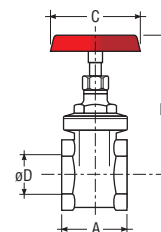
CODE	Size	A mm	B mm	øC mm	øD mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
08116012	1/2"	35	68	45	13,5	160	10	20	120	13,01
08116034	3/4"	39	68	45	15,5	190	10	20	120	14,28
08116100	1"	43	80	50	19	270	10	20	60	22,26
08116114	1"1/4	48	86	55	27	410	10	10	40	27,33
08116200	2"	58	134	70	45	840	10	5	20	58,28
08116112	1"1/2	54	107	60	33	530	10	10	30	39,65
08116212	2"1/2	64	175	100	60	1680	16	1	12	104,70
08116300	3"	74	200	100	72	2300	16	1	8	138,10
08116400	4"	84	235	120	93	4150	16	1	4	240,00

GP 2025
GATE VALVE

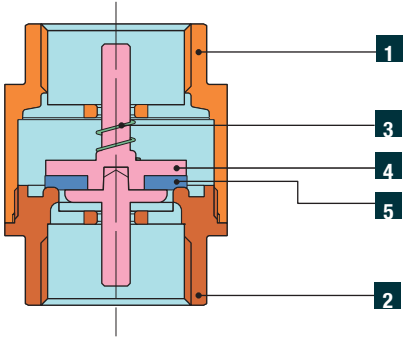


Bronze gate valves, female-female, sandblasted, with handwheel.

Articles available while stocks last.



CODE	Size	A mm	B mm	øC mm	øD mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
08017038	3/8"	38	66	45	13	160	16	20	120	14,41
08017012	1/2"	38	68	45	15	200	16	20	120	21,41
08017114	1"1/4	51	108	60	32	570	16	10	40	52,39
08017212	2"1/2	76	175	100	60	2100	16	1	12	167,10



Components

	Components	Pcs	Material
1	Body	1	UNI EN 12165 CW617N - DW
2	End sleeve	1	UNI EN 12165 CW617N - DW
3	Spring	1	AISI 302 stainless steel
4	Shutter with double central guide	1	Hostaform
5	Seal gasket	1	NBR 70 Sh A (ASTM 2240)

EN GENERAL CHARACTERISTICS

Passage: Total
Range: From 3/8" to 4"
Female fitting: Thread UNI EN ISO 228/1 (DIN 259)
Male fitting: Thread UNI EN ISO 228/1 (DIN 259)
Open pressure: 0.02 bar

OPERATING CONDITIONS

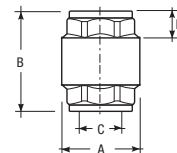
Flow direction: In the direction of the arrow.
Max. operating temperature: 90 °C, continuous use. 110 °C peak.
Max. operating pressure: see following tables.
Can be installed in any position: horizontal, vertical or diagonal.

These valves are suitable for hot and cold water domestic distribution plants (Ref. Directive 2014/68/EU Art. 13) for special uses (in accordance with the pressures set out for these items and the compatibility of the different fluids with the materials making up the specific item) see chemical compatibility chart in the technical annexes.

GP 2500
EURA EXPORT



No-return valve, female-female, sandblasted.

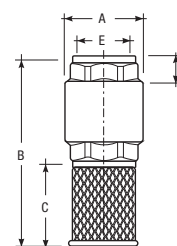


CODE	Size	øA mm	B mm	øC mm	D mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
08030038	3/8"	28	44	15	10	100	10	30	180	10,28
08030012	1/2"	32	44	15	10	110	10	20	160	7,48
08030034	3/4"	39	49	20	11	193	10	12	96	11,12
08030100	1"	46	57	26	13	262	10	8	64	15,03
08030114	1"1/4	56	66	33	16	405	10	8	64	23,41
08030112	1"1/2	66	70	40	15	590	10	5	40	35,51
08030200	2"	83	77	50	16	875	10	2	16	48,28
08030212	2"1/2	100	90	68	20	1295	10	1	20	86,68
08030300	3"	110	105	75	25	1510	10	1	16	114,20
08030400	4"	140	110	100	25	2750	10	1	10	197,30

GP 2052
FOOT VALVE



Female foot valve with filter, sandblasted (1000-micron filtering).

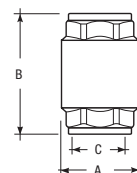


CODE	Size	øA mm	B mm	C mm	D mm	øE mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
08031012	1/2"	32	80	35	10	15	80	50	200	9,73
08031034	3/4"	39	87	40	10	20	127	48	192	12,07
08031100	1"	46	95	41	14	26	200	24	96	15,53
08031114	1"1/4	56	107	50	15	33	285	15	60	23,57
08031112	1"1/2	69	124	62	16	40	375	6	24	30,36
08031200	2"	84	140	71	18	50	610	4	16	47,44

GP 2055
EURA HEAVY



No-return valve, female-female, sandblasted.

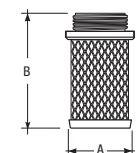


CODE	Size	øA mm	B mm	øC mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
08018038	3/8"	29	52	15	110	15	24	240	13,20
08018012	1/2"	32	58	15	151	15	20	200	14,55
08018034	3/4"	39	65	20	225	15	12	120	19,79
08018100	1"	48	75	26	335	15	8	80	27,61
08018114	1"1/4	60	80	33	550	15	8	32	45,20
08018112	1"1/2	67	85	40	695	15	6	24	57,51
08018200	2"	84	94	50	1015	15	5	20	81,48
08018212	2"1/2	103	93	68	1225	8	1	15	120,10
08018300	3"	121	102	75	1830	8	1	12	166,30
08018400	4"	155	119	100	3175	8	1	5	273,30

GP 2058
FILTER



Male filter in steel for no-return valves (1000-micron filtering).



CODE	Size	øA mm	B mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
08019038	3/8"	19	49	9	50	400	2,09
08019012	1/2"	22	51	11	50	400	2,40
08019034	3/4"	28	57	17	30	240	3,23
08019100	1"	36	58,5	25	20	160	3,23
08019114	1"1/4	43	68	34	20	80	3,95
08019112	1"1/2	49	79	46	15	60	5,23
08019200	2"	61	95	67	10	40	7,03
08019212	2"1/2	80	99	98	1	24	11,11
08019300	3"	91	114	122	1	18	12,59
08019400	4"	110	130	188	1	10	15,91

CLAPET CHECK VALVE SIFT FILTER FOOT VALVE



Components	Pcs	Material
Body	1	UNI EN 12165 CW617N - DW
Plug	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
Shutter	1	UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
Sift filter		Stainless steel
Filter for foot valve		UNI EN 12165 CW617N - DW UNI EN 12164 CW617N - DW
Seal		NBR 70 Sh A (ASTM D 2240)
Female thread		UNI EN ISO 228/1 (DIN 259)
Max. working temperature		90 °C
Max. working pressure		See PN in the article tables
Compliant fluids		Air / Water

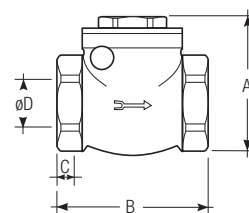
EN OPERATING CONDITIONS

These valves are suitable for hot and cold water domestic distribution plants (Ref. Directive 2014/68/EU Art. 13) for special uses (in accordance with the pressures set out for these items and the compatibility of the different fluids with the materials making up the specific item) see chemical compatibility chart in the technical annexes.

GP 2056
CHECK VALVE



Clapet check valve, female-female, sandblasted, with rubber seal.

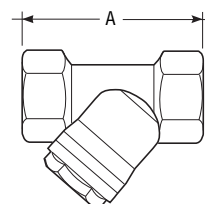


CODE	Size	øA mm	B mm	C mm	øD mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
08028012	1/2"	46	47	8	15	166	10	60	180	12,06
08028034	3/4"	51	53	8	20	230	10	40	120	16,47
08028100	1"	61	63	10	25	350	10	20	80	24,93
08028114	1"1/4	78	70	10	33	445	10	16	64	33,84
08028112	1"1/2	93	88	10	57	730	10	8	32	50,87
08028200	2"	102	97	11	47	1045	10	4	16	65,92
08028212	2"1/2	110	120	16	55	1460	6	1	20	103,50
08028300	3"	128	135	16	70	2375	6	1	10	154,90
08028400	4"	180	180	20	90	3915	6	1	4	236,10

GP 2042
SIFT FILTER



Sift filter in stainless steel, female-female, sandblasted.

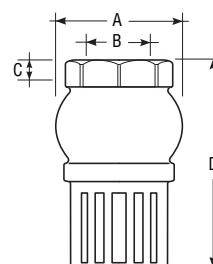


CODE	Size	A mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
08029012	1/2"	57	148	20	20	160	10,74
08029034	3/4"	66	245	20	20	80	17,35
08029100	1"	80	330	20	12	72	23,02
08029114	1"1/4	92	610	20	10	40	39,10
08029112	1"1/2	101	793	20	5	25	51,79
08029200	2"	123	1370	20	2	14	83,21

GP 2052
CLASSIC FOOT VALVE



Female classic foot valve, brass filter, sandblasted.



CODE	Size	øA mm	ØB mm	C mm	D mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
08032034	3/4"	45	24	9	72	195	10	30	120	17,44
08032100	1"	51	28	11	80	235	10	20	80	20,79
08032114	1"1/4	61	35	13	91	385	8	12	48	32,47
08032112	1"1/2	68	40	14	108	505	8	12	48	42,16
08032200	2"	80	50	16	120	770	8	6	24	54,08
08032212	2"1/2	102	62	16	141	1330	6	1	48	93,36
08032300	3"	117	73	16	150	1615	6	1	24	123,60
08032400	4"	146	110	16	185	3195	6	1	5	222,80



Ball valves **9**

FOR GAS



page 300

**Futurgas
ball valves**



page 315

**Gaslock
recessed ball
valve for gas**



page 306

**Futurgas
ball valves with
safety locks**



page 320

**Low pressure
regulator**



page 308

**Futurgas
Valve with first
inlet manifold**



page 321

**AISI 304
stainless steel
gas hoses**



page 309

**Norm-Gas
ball valves**

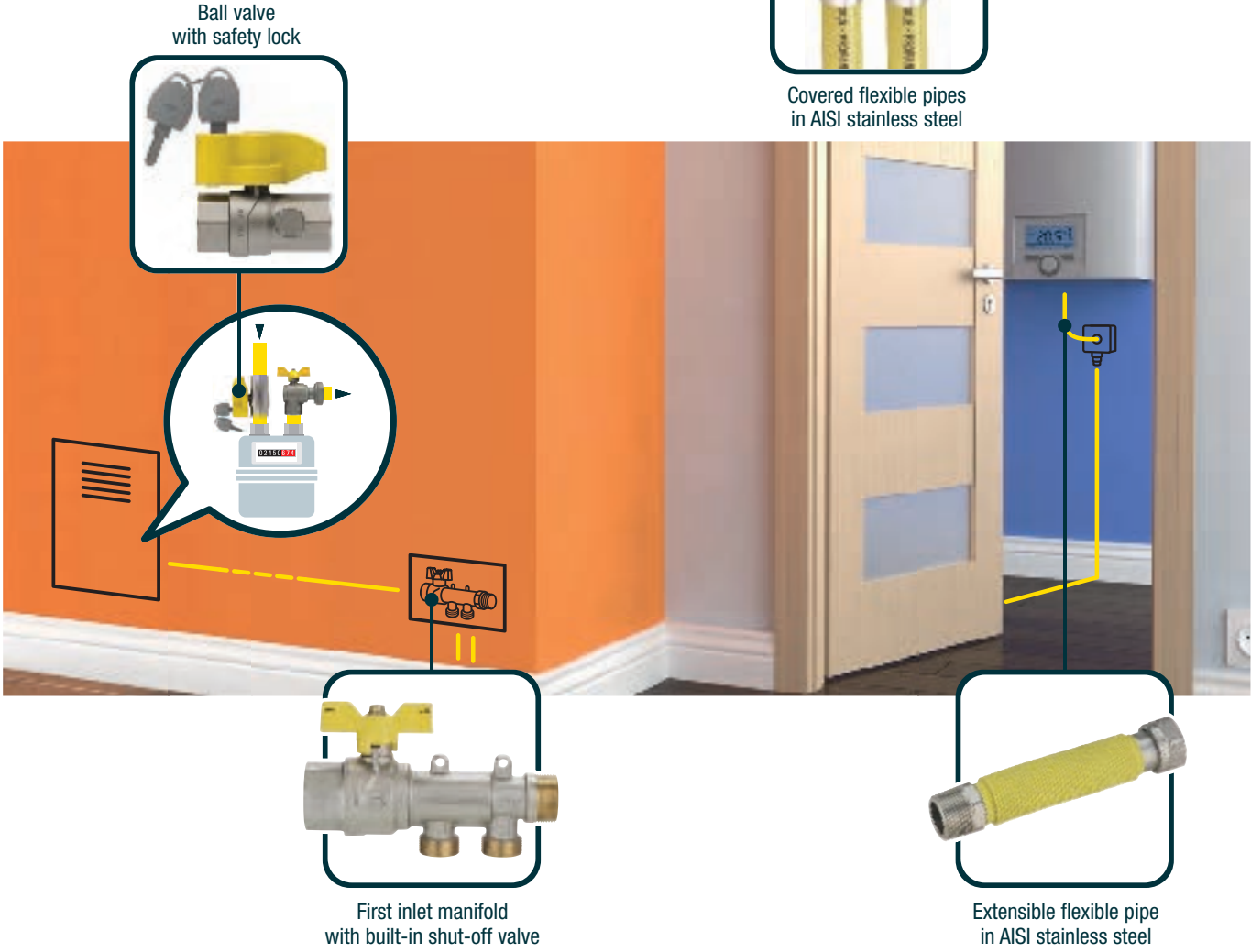


page 322

**Covered hoses
in AISI stainless
steel for gas**



Ball valve for gas



Reliability and safety, essential requirements in gas distribution

FIELDS OF APPLICATION

Gas distribution, in particular in residential areas, requires the utmost care for an installation where safety is a must. For years, FIV has produced a complete range of ball valves for gas, 100% tested internally and certified according to European standards.

Added to this are the gas manifolds and flush valves for gas, required for the new installations. Today, the latest regulations allow us to use a multilayer pipe and press fittings for gas, which are both produced by FIV with the utmost care.

BALL VALVES FOR GAS, TAPS FOR GAS, MANIFOLDS FOR GAS

Futurgas ball valves for gas represent for FIV the product in which it is essential to guarantee excellence in quality. This occurs thanks to the fully automated production and rigorous tests performed on 100% of the components during the preliminary stage and on 100% of the assembled finished products. The same goes for NormGas taps for gas, for which the DVGW certification represents another business card. Both products can be used with methane gas, town gas and LPG, both at low and medium pressure.

BALL VALVES FOR GAS WITH SAFETY LOCK

These valves, normally applied to the meter, are equipped with a safety lock with keys for the exclusive use of the user as required by Italian standard UNI 7129-1 Paragraph 4.1 and a key (sold separately) to be used by the manager/administrator.

It is possible, in case of an emergency, to close the gas flow without using the key, ensuring locking when closing. It is also possible, with the key of the manager/administrator, to prevent all actions by the user

FLUSH BALL VALVE FOR GAS WITH RETRACTABLE KNOB GASLOCK ACCORDING TO UNI 7129-1 AND UNI EN 331

The new retractable system and new design adopted for the Gaslock valve, ensure a perfect balance of practicality and aesthetics, while maintaining a high degree of safety in the general closure of the gas. A solution in perfect harmony with any type of furniture.

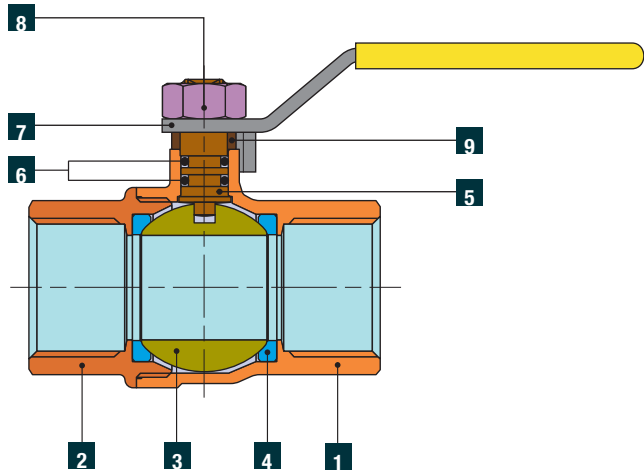
The valve is supplied with a chrome-plated door, while another two colours are available on request: White and Anthracite.

For installation, testing and maintenance of the pipes or the other equipment connected, refer to the specific instructions of these products, to Italian standard UNI 7129-1 or other applicable regulations.

Quality assurance of production

The highly automated system of all gas valves allows to achieve a high quality standard, ensuring the constancy of the construction and fluid-dynamic characteristics of an entire production lot, in accordance with the regulations in force.

In fact, to safeguard the elimination and prevention of danger, damage and risks, the law imposes very strict obligations, to ensure safety, respect for the environment and reliable performance.



Components

		Pcs	Material
1	Body	1	UNI EN 12165 CW617N
2	End sleeve	1	UNI EN 12165 CW617N
3	Ball	1	UNI EN 12165 CW617N UNI EN 12164 CW617N
4	Ball seal seats	2	Virgin P.T.F.E.
5	Stem	1	UNI EN 12164 CW617N
6	Stem seal O-Ring	2	NBR 70 Sh A (ASTM D 2240)
7	Lever	1	Zinc-plated steel, plastified
	Butterfly	1	Aluminium, painted
	Cap	1	UNI EN 12165 CW617N UNI EN 12164 CW617N
8	Nut	1	Zinc-plated steel
	Screw	1	Zinc-plated steel
9	Anti-friction ring	1	P.T.F.E.

GENERAL CHARACTERISTICS

Bore: Full
Range: From 1/4" to 2"
Female fitting: Thread UNI EN 10226-1 (UNI EN ISO 7/1 Rp) (DIN2999)
Male fitting: Thread UNI EN 10226-1 (UNI EN ISO 7/1 R) (DIN2999)
Tang and nut: Thread UNI EN ISO 228-1 (DIN 259)
Functioning: 90° degrees rotation of operating device.
Operating device: Plastified steel Lever handle, aluminium Butterfly, Cap.

OPERATING CONDITIONS

Operating temperature: from -20 °C to +60 °C
Operating pressure: MOP 5 Classe B0,1

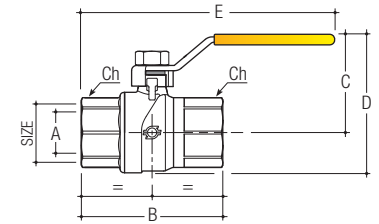
Valves must be used in fully open or fully closed position.

These valves are suitable for use with the three classes of gases (methane, gas mains, LPG), for low and medium pressure distribution mains and plants; for special uses (in compliance with the pressures set out for these valves) see chemical compatibility chart in the technical annexes of the applicable catalogue. Items included in the CE marking, as per Art. 4 Paragraph 3 of the Directive 2014/68/EU.

GP 2235
FUTURGAS



Ball valve for gas nickel-plated, Female-Female fitting,
with yellow plastified steel Lever handle.

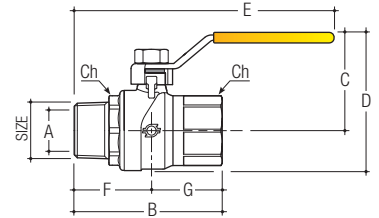


CODE	Size	A mm	B mm	C mm	D mm	E mm	DN mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8200R002	1/4"	10	45,6	39,6	52,4	107,3	8	20	154	36	144	8,74
8200R003	3/8"	10	47,2	39,6	52,4	108,2	10	20	158	36	144	7,74
8200R004	1/2"	15	56,7	43,2	58,6	112,9	15	25	195	36	144	10,25
8200R005	3/4"	20	66,9	47	66	118	20	31	297	24	96	15,22
8200R006	1"	25	81,3	57,6	80,4	151	25	38	495	12	48	24,77
8200R007	1"1/4	32	96	63,1	91,6	158,2	32	47	700	8	32	37,73
8200R008	1"1/2	40	104	74,2	108,3	192,4	40	53	1070	4	16	60,06
8200R009	2"	50	127	82,3	124,6	203,9	50	66	1755	4	16	88,39

GP 2235



Ball valve for gas nickel-plated, Male-Female fitting,
with yellow plastified steel Lever handle.

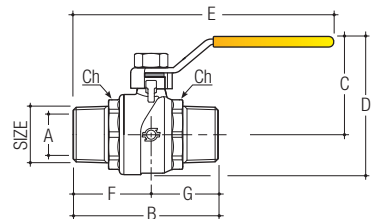


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	DN mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8201R002	1/4"	10	51,4	39,6	52,4	113,2	28,6	22,8	8	20	154	36	144	9,27
8201R003	3/8"	10	52,7	39,6	52,4	113,7	29,1	23,6	10	20	158	36	144	8,51
8201R004	1/2"	15	60,4	43,2	58,6	116,6	32,1	28,4	15	25	195	36	144	11,05
8201R005	3/4"	20	70,3	47,0	66,0	121,4	36,8	33,5	20	31	297	24	96	15,92
8201R006	1"	25	83,7	57,6	80,4	153,4	43,2	40,5	25	38	495	12	48	27,25
8201R007	1"1/4	32	98,2	63,1	91,6	160,4	50,2	48,0	32	47	700	8	32	39,29
8201R008	1"1/2	40	110,6	74,2	108,3	199,0	58,6	52,0	40	53	1070	4	16	60,06
8201R009	2"	50	135,1	82,3	124,6	212,0	71,6	63,5	50	66	1755	4	16	95,87

GP 2235
FUTURGAS



Ball valve for gas nickel-plated, Male-Male fitting,
with yellow plastified steel Lever handle.

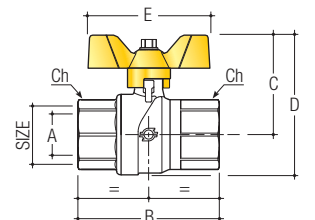


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	DN mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8202R004	1/2"	15	60,9	43,2	58,6	116,6	32,1	28,8	15	25	194	36	144	10,27
8202R005	3/4"	20	71,3	47,0	66,0	121,4	36,8	34,5	20	31	288	24	96	15,98
8202R006	1"	25	83,2	57,6	80,4	153,4	43,2	40,0	25	38	467	12	48	26,77

GP 2235
FUTURGAS



Ball valve for gas nickel-plated, Female-Female fitting,
with yellow painted aluminium Butterfly handle.

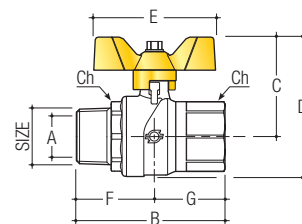


CODE	Size	A mm	B mm	C mm	D mm	E mm	DN mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8203R002	1/4"	10	45,6	42,3	55,1	60,2	8	20	159	36	144	8,74
8203R003	3/8"	10	47,2	42,3	55,1	60,2	10	20	152	36	144	7,74
8203R004	1/2"	15	56,7	44,8	60,2	60,2	15	25	175	36	144	9,88
8203R005	3/4"	20	66,9	48,6	67,7	60,2	20	31	275	24	96	14,43
8203R006	1"	25	81,3	54,5	77,3	65,0	25	38	470	12	48	23,98
8203R007	1"1/4	32	96,0	60,0	88,5	65,0	32	47	685	8	32	37,73

GP 2235
FUTURGAS



Ball valve for gas nickel-plated, Male-Female fitting,
with yellow painted aluminium Butterfly handle.

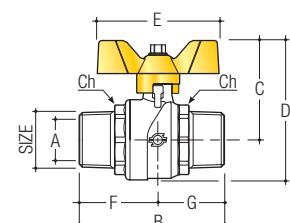


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	DN mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8204R002	1/4"	10	51,4	42,3	55,1	60,2	28,6	22,8	10	20	159	36	144	9,27
8204R003	3/8"	10	52,7	42,3	55,1	60,2	29,1	23,6	10	20	152	36	144	8,34
8204R004	1/2"	15	60,4	44,8	60,2	60,2	32,0	28,4	15	25	190	36	144	10,36
8204R005	3/4"	20	70,3	48,6	67,7	60,2	36,8	33,5	20	31	285	24	96	15,12
8204R006	1"	25	83,7	54,5	77,3	65,0	43,2	40,5	25	38	495	12	48	24,77
8204R007	1"1/4	32	98,2	60,0	88,5	65,0	50,2	48,0	32	47	710	8	32	39,29

GP 2235
FUTURGAS



Ball valve for gas nickel-plated, Male-Male fitting,
with yellow painted aluminium Butterfly handle.

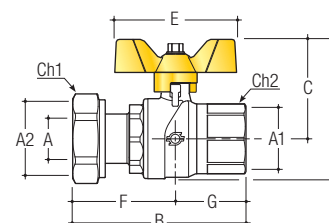


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	DN mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8205R004	1/2"	15	60,9	44,8	60,2	60,2	32,1	28,8	15	25	185	36	144	10,05
8205R005	3/4"	20	71,3	48,6	67,7	60,2	36,8	34,5	20	31	295	24	96	15,98
8205R006	1"	25	83,2	54,5	77,3	65,0	43,2	40,0	25	38	475	12	48	25,29

GP 2235
FUTURGAS



Ball valve for gas nickel-plated, Female-Revolving nut fitting,
with yellow painted aluminium Butterfly handle.

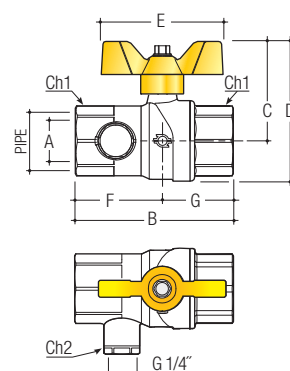


CODE	Size	A mm	A1	A2	B mm	C mm	D mm	E mm	F mm	G mm	DN mm	Ch1/2 mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8206R004	1/2"x3/4"	15	1/2"	3/4"	73,0	44,8	60,2	60,2	44,7	28,4	15	32/25	230	30	120	15,82
8206R105	3/4"x3/4"	20	3/4"	3/4"	81,8	48,6	67,7	60,2	48,3	33,5	20	32/31	327	18	72	21,20
8206R005	3/4"x1"	20	3/4"	1"	82,3	48,6	67,7	60,2	48,8	33,5	20	38/31	340	18	72	20,32
8206R006	1"x1"1/4	25	1"	1"1/4	94,0	54,5	77,3	65,0	53,5	40,5	25	47/38	535	12	48	31,20

GP 2235
FUTURGAS



Ball valve for gas nickel-plated, Female-Female fitting, with
pressure fittings, with yellow painted aluminium Butterfly handle.

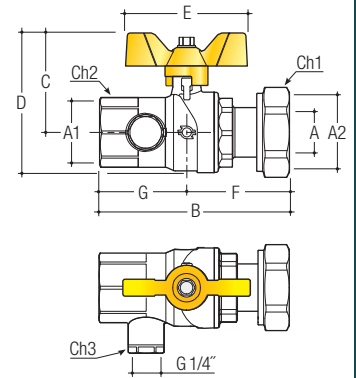


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	DN mm	Ch1/2 mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8207R004	1/2"	15	63,9	44,8	60,2	60,2	28,4	35,5	15	25/15	241	30	120	17,60
8207R005	3/4"	20	75,0	48,6	65,1	60,2	33,5	41,5	20	31/15	362	18	72	22,82
8207R006	1"	25	89,8	54,5	77,3	65,0	40,8	49,0	25	38/15	554	12	48	32,95

GP 2235
FUTURGAS



Ball valve for gas nickel-plated, Female-Revolving nut fitting, with pressure fittings, with yellow painted aluminium Butterfly handle.

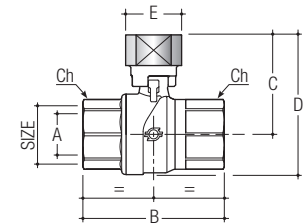


CODE	Size	A	A1 / A2	B mm	C mm	D mm	E mm	F mm	G mm	DN mm	Ch1/2/3 mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8208R005	3/4" x 1"	20	3/4" / 1"	90,3	48,6	67,7	60,2	48,8	41,5	20	38/31/15	410	18	72	29,67
8208R006	1" x 1" 1/4	25	1" / 1" 1/4	102,5	54,5	77,3	65	53,5	49,0	25	47/38/15	628	10	40	41,45

GP 2235
FUTURGAS



Ball valve for gas nickel-plated, Female-Female fitting, with safety cap and sealeable closing.

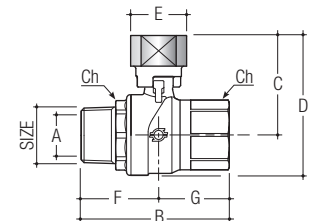


CODE	Size	A mm	B mm	C mm	D mm	E mm	DN mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8209R004	1/2"	15	56,7	39,9	55,3	26,0	15	25	209	36	144	14,02
8209R005	3/4"	20	66,9	43,7	62,8	26,0	20	31	311	24	96	19,76
8209R006	1"	25	81,3	53,4	76,2	26,0	25	38	490	12	48	27,31
8209R007	1" 1/4	32	96,0	58,9	87,4	26,0	32	47	695	8	32	42,70

GP 2235
FUTURGAS



Ball valve for gas nickel-plated, Male-Female fitting, with safety cap and sealeable closing.

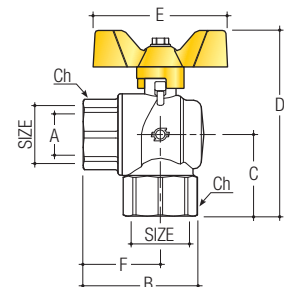


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	DN mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8210R004	1/2"	15	60,4	39,9	55,3	26,0	32,1	28,4	15	25	204	36	144	14,15
8210R005	3/4"	20	70,3	43,7	62,8	26,0	36,8	33,5	20	31	309	24	96	19,56
8210R006	1"	25	83,7	53,4	76,2	26,0	43,2	40,5	25	38	505	12	48	27,31
8210R007	1" 1/4	32	98,2	58,9	87,4	26,0	50,2	48,0	32	47	725	8	32	42,70

GP 2235
FUTURGAS



Female-Female ball angle valve for gas, with yellow painted aluminium Butterfly handle.

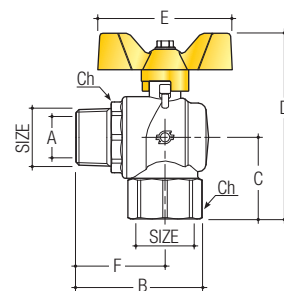


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	DN mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8213R004	1/2" x 1/2"	15	42,7	32,5	77,3	60,2	29,5	15	25	196	36	144	13,85
8213R005	3/4" x 3/4"	20	50,9	38,0	86,6	60,2	34,5	20	31	307	24	96	20,04
8213R006	1" x 1"	25	61,7	45,0	99,5	65,0	41,5	25	38	505	12	48	30,96

GP 2235
FUTURGAS



Female-Male ball angle valve for gas,
with yellow-painted aluminium Butterfly handle.

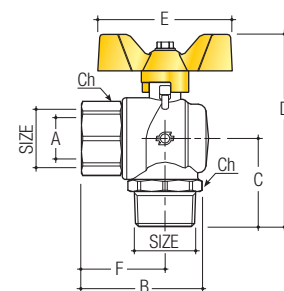


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	DN mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8214R004	1/2" x 1/2"	15	50,5	32,5	77,3	60,2	37,3	15	25	208	36	144	13,77
8214R005	3/4" x 3/4"	20	57,2	38,0	85,5	60,2	40,8	20	31	319	24	96	20,04
8214R006	1" x 1"	25	68,1	45,0	99,5	65,0	47,9	25	38	535	12	48	31,38

GP 2235
FUTURGAS



Male-Female ball angle valve for gas,
with yellow-painted aluminium Butterfly handle.

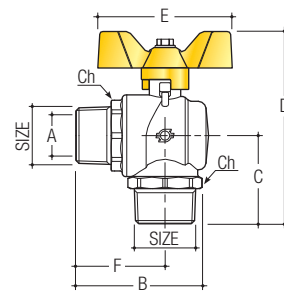


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	DN mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8215R004	1/2" x 1/2"	15	42,7	35,0	79,8	60,2	29,5	15	25	198	36	144	13,81
8215R005	3/4" x 3/4"	20	50,9	41,4	90,0	60,2	34,5	20	31	309	24	96	17,93
8215R006	1" x 1"	25	61,7	47,5	102,0	65,0	41,5	25	38	513	12	48	29,17

GP 2235
FUTURGAS



Male-Male ball angle valve for gas,
with yellow-painted aluminium Butterfly handle.

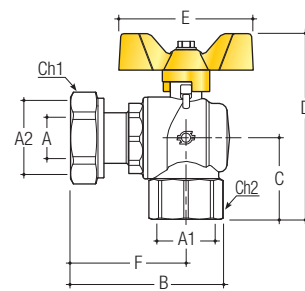


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	DN mm	Ch mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8216R004	1/2" x 1/2"	15	50,5	35,0	79,8	60,2	37,3	15	25	210	36	144	13,81
8216R005	3/4" x 3/4"	20	57,2	41,4	90,0	60,2	40,8	20	31	321	24	96	20,04
8216R006	1" x 1"	25	68,1	47,5	102,0	65,0	47,9	25	38	543	12	48	29,74

GP 2235
FUTURGAS



Female-Revolving nut ball angle valve for gas,
with yellow-painted aluminium Butterfly handle.

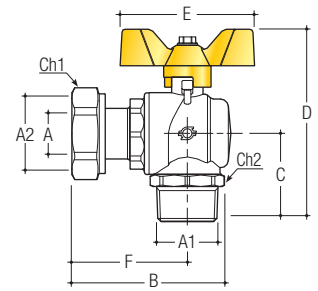


CODE	Size	A mm	A1	A2	B mm	C mm	D mm	E mm	F mm	DN mm	Ch1 mm	Ch2 mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8217R004	1/2"Fx3/4"D	15	1/2"	3/4"	61,0	32,5	77,3	60,2	47,8	15	32	25	253	30	120	17,60
8217R105	3/4"Fx3/4"D	20	3/4"	3/4"	68,7	38,0	86,8	60,2	52,3	20	32	31	361	18	72	23,54
8217R005	3/4"Fx1"D	20	3/4"	1"	69,2	38,0	86,6	60,2	52,8	20	38	31	370	18	72	22,57
8217R006	1"Fx1"1/4D	25	1"	1"1/4"	78,4	45,0	99,5	65,0	58,2	25	47	38	580	10	40	37,00

GP 2235
FUTURGAS



Male-Revolving nut ball angle valve for gas,
with yellow-painted aluminium Butterfly handle.

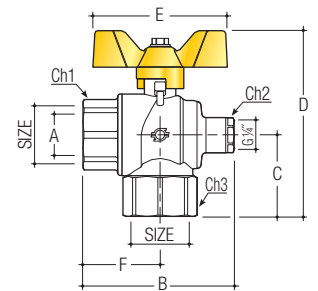


CODE	Size	A mm	A1	A2	B mm	C mm	D mm	E mm	F mm	DN mm	Ch1 mm	Ch2 mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8218R004	1/2"Mx3/4"D	15	1/2"	3/4"	61,0	35,0	79,8	60,2	47,8	15	32	25	253	30	120	18,52
8218R105	3/4"Mx3/4"D	20	3/4"	3/4"	68,7	41,4	90,0	60,2	52,3	20	32	31	364	18	72	21,63
8218R005	3/4"Mx1"D	20	3/4"	1"	69,2	41,4	90,0	60,2	53,0	20	38	31	374	18	72	23,98
8218R006	1"Mx1"1/4 D	25	1"	1"1/4	78,4	47,5	102,0	65,0	58,2	25	47	38	580	10	40	37,73

GP 2235
FUTURGAS



Ball angle valve for gas nickel-plated, Female-Female fitting, with
pressure attachment, with yellow-painted aluminium Butterfly handle.

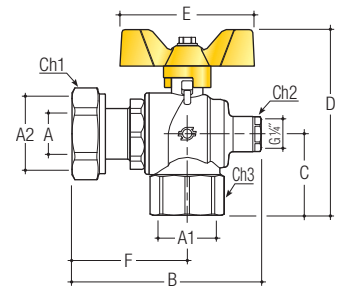


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	DN mm	Ch1/2/3 mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8219R005	3/4"	20	68,5	38,0	86,6	60,2	34,5	20	31/15/31	440	18	72	27,25
8219R006	1"	25	80,0	45,0	99,5	65,0	41,5	25	38/15/38	540	10	40	36,83

GP 2235
FUTURGAS



Ball angle valve for gas nickel-plated, Female-Female revolving nut fitting,
with pressure attachment, with yellow-painted aluminium Butterfly handle.



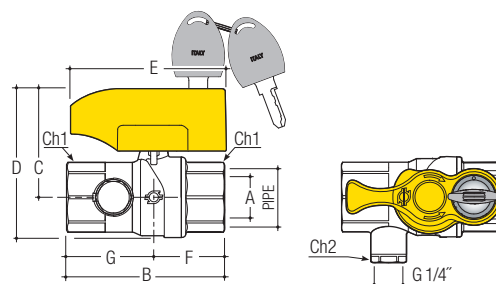
CODE	Size	A mm	A1	A2	B mm	C mm	D mm	E mm	F mm	DN mm	Ch1/2/3 mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8220R005	3/4" x 1"	20	3/4"	1"	86,8	38,0	86,6	60,2	52,8	20	38/15/31	383	16	64	31,98
8220R006	1" x 1"1/4	25	1"	1"1/4	96,7	45,0	99,5	65,0	58,2	25	47/15/38	612	8	32	43,77

BALL VALVES FOR GAS WITH SAFETY LOCK

GP 2235
FUTURGAS



Ball valve for gas nickel-plated,
Female-Female fitting,
with aluminium Butterfly handle
with lock and pressure fittings.



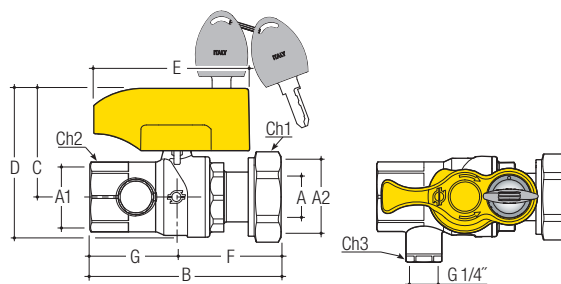
CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	DN mm	Ch1/2 mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8221R005	3/4"	20	75,0	51,1	70,2	74,4	33,5	41,5	20	31/15	454	10	40	45,36
8221R006	1"	25	89,8	57,3	80,1	74,4	40,8	49,0	25	38/15	638	8	32	54,26



GP 2235
FUTURGAS



Ball valve for gas nickel-plated,
Female-Revolving nut fitting,
with aluminium Butterfly handle
with lock and pressure fittings.



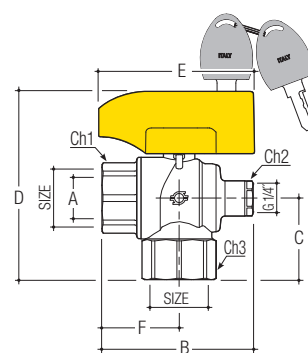
CODE	Size	A mm	A1/A2	B mm	C mm	D mm	E mm	F mm	G mm	DN mm	Ch1/2/3 mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8222R005	3/4"x1"	20	3/4"x1"	90,3	51,1	70,2	74,4	48,8	41,5	20	38/31/15	510	10	40	52,47
8222R006	1"x1 1/4"	25	1"x1 1/4"	102,5	57,3	80,1	74,4	53,5	49,0	25	47/38/15	730	8	32	63,43



GP 2235
FUTURGAS



Ball angle valve for gas nickel-plated, Female-Female fitting,
with aluminium butterfly handle with lock and pressure fitting.



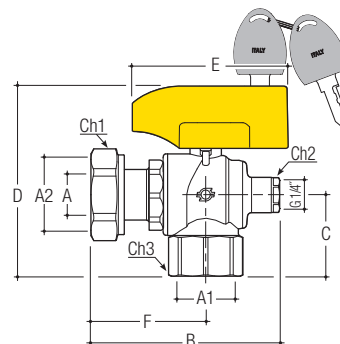
CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	DN mm	Ch1/2/3 mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8223R005	3/4"	20	68,5	38,0	89,1	74,4	34,5	20	31/15/31	414	10	40	47,51
8223R006	1"	25	80,0	45,0	102,3	74,4	41,5	25	38/15/38	584	8	32	56,51



GP 2235
FUTURGAS



Ball angle valve for gas nickel-plated, Female-Revolving nut fitting, with aluminium butterfly handle with lock and pressure fitting.

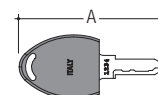


CODE	Size	A mm	A1 / A2	B mm	C mm	D mm	E mm	F mm	DN mm	Ch1/2/3 mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8224R005	3/4" x 1"	20	3/4" / 1"	86,8	38,0	89,1	74,4	52,8	20	38/15/31	492	10	40	52,46
8224R006	1" x 1 1/4"	25	1" / 1 1/4"	96,7	45,0	102,3	74,4	58,2	25	47/15/38	712	8	32	63,33

GP 2000
FUTURGAS



Master key for manager / administrator.

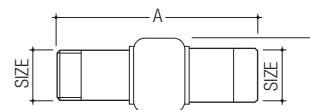


CODE	A mm	Pack pcs/box	Master pcs/box	Price €
6182X900	55	1	1	9,55

GP 2021
DIELECTRIC JOINT



Dielectric joint 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 pressure test for operating at 15 bar



CODE	Size	A mm	B mm	Pack pcs/box	Price €/pc
5322R004	1/2"	100	42	5	39,66
5322R005	3/4"	110	49	6	39,66
5322R006	1"	120	54	3	45,76
5322R007	1 1/4"	135	64	2	68,76
5322R008	1 1/2"	145	70	1	74,44
5322R009	2"	150	83	1	95,44

VALVE WITH FIRST INLET MANIFOLD

GP 2233
FUTURGAS

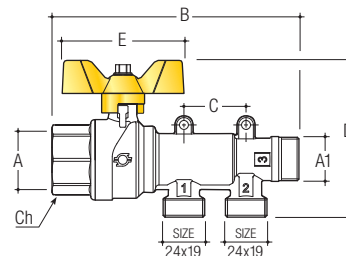


Valve with first inlet manifold.

Manifold with integrated shut-off valve with 1" F inlet / two 24x19M 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 **3** that can be used with the brass ogive **4** supplied for connection to copper piping Ø22 mm, or with the blind adapter D22 **2** and relative o-ring in HNBR 18x2.5 **1** provided in order to seal the outlet if not used.



Note: 24x19 fittings for copper pipe, see gas monobloc section.



CODE	Size	A	A1	B mm	C mm	D mm	E mm	DN mm	Ch mm	gr	Pack pcs/box	Price €
8225R006	1"	Rp 1"	M28x1,5	143,8	36,0	87,5	65,0	25	38	730	1	104,00

Lateral ends: 24x19 M

Head end: M 28x1.5

GP 2615
ACCESSORIES



Female plug 24x19 for gas.

CODE	Size	Pack pcs/box	Price €/pc
6047R524	24 x 19 F	20	3,29

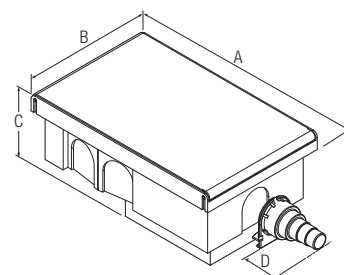
Fitting to be used to plug the 24x19 male takeoffs of the valve with the first gas inlet manifold.

GP 2233
FUTURGAS



Recessed box for valve with first inlet manifold.

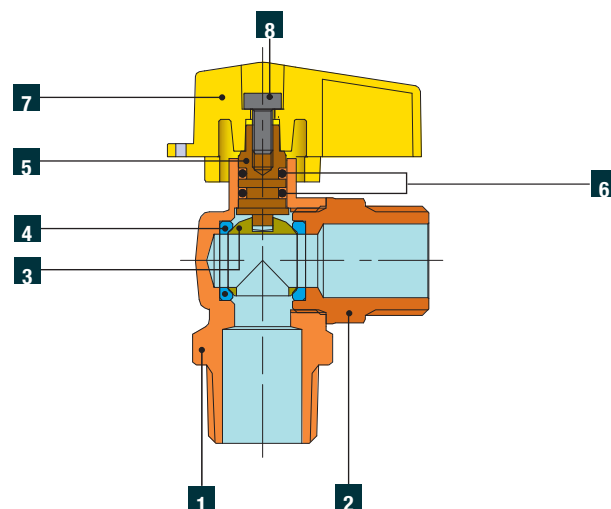
Inside the packaging there are 4 adjustable extension cables for DN16 - DN18 - DN20 - DN26 - DN32 pipes and 2 M4x50 screws with the relative washers and nuts.



CODE	Size	A mm	B mm	C mm	D mm	Pack pcs/box	Price €
13010000	264x164x111	264	164	111	68	1	33,96

NORM-GAS

BALL VALVES



Components	Pcs	Material
1 Body	1	UNI EN 12165 CW617N
2 End sleeve	1	UNI EN 12165 CW617N
3 Ball	1	UNI EN 12165 CW617N UNI EN 12164 CW617N
4 Ball seal seats	2	Virgin P.T.F.E.
5 Stem	1	UNI EN 12164 CW617N
6 Stem seal O-Ring	2	NBR 70 Sh A (ASTM D 2240)
7 Lever	1	Aluminium, painted
8 Screw	1	Zinc-plated steel

EN GENERAL CHARACTERISTICS

Bore: Standard
 Range: 1/2"
 Body thread: UNI EN 10226-1 (UNI EN ISO 7/1 Rp and R) (DIN2999)
 Male end sleeve thread: UNI EN ISO 228-1 (DIN 259);
 Female end sleeve thread: UNI EN 10226-1 (UNI EN ISO 7/1 Rp) (DIN2999)
 Functioning: 90° degrees rotation of operating device.
 Operating device: Aluminium painted lever handle, sealable in closed position.

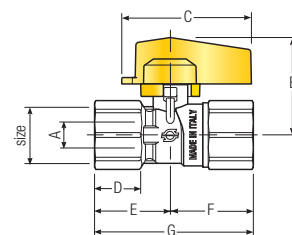
OPERATING CONDITIONS

Flow direction: for the angle valves, from the bottom to the side.
 Operating Temperature: from -20 °C to +60 °C
 Operating pressure: MOP 5
 Valves must be used in fully open or fully closed position.
 Thread hose end conform UNI 7141/91 for the connection of non-metallic flexible pipes (UNI 7140/93).

These valves are suitable for use with the three classes of gases (methane, gas mains, LPG), for low and medium pressure distribution mains and plants; for special uses (in compliance with the pressures set out for these valves) see chemical compatibility chart in the technical annexes of the applicable catalogue. Items included in the CE marking, as per Art. 4 Paragraph 3 of the Directive 2014/68/EU.

GP 2140
NORM-GAS

Female-Female ISO 7 straight ball cock,
with yellow aluminium lever handle.

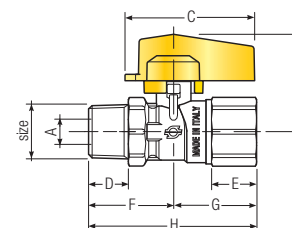


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8100R104	1/2"	10	37,6	48	17	28	30,75	58,75	141	20	160	8,97



GP 2140
NORM-GAS

Male-Female ISO 7 straight ball cock,
with yellow aluminium lever handle.

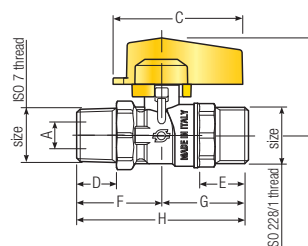


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8101R104	1/2"	10	37,6	48	14,8	17	31,75	30,75	62,5	143	20	160	8,97



GP 2140
NORM-GAS

Male ISO 7 - Male ISO 228 straight ball cock,
with yellow aluminium lever handle.

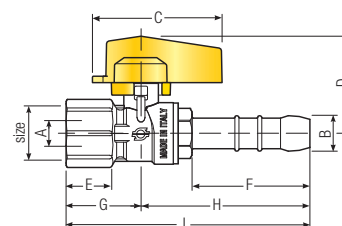


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8103R076	1/2"	10	37,6	48	14,8	17	31,75	30,75	62,5	143	20	160	8,97



GP 2140
NORM-GAS

Female ISO 7-Hose holder GAS UNI 7141 straight ball cock,
with yellow aluminium lever handle.



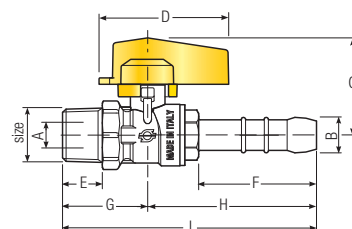
CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8104R104	1/2"	10	14	48	37,6	17	44	28	63	91	145	20	160	9,78



GP 2140
NORM-GAS



Male ISO 7-Hose holder GAS UNI 7141 straight ball cock,
with yellow aluminium lever handle.

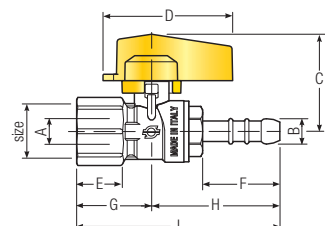


CODE	Size	øA mm	øB mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8105R104	1/2"	10	14	37,6	48	14,8	44	31,75	63	94,75	148	20	160	9,92

GP 2140
NORM-GAS



Female ISO 7-Hose holder LPG UNI 7141 straight ball cock,
with yellow aluminium lever handle.

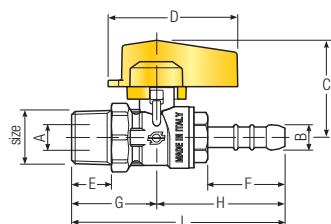


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8106R104	1/2"	10	9,8	37,6	48	17	29	28	48	76	131	20	160	8,97

GP 2140
NORM-GAS



Male ISO 7-Hose holder LPG UNI 7141 straight ball cock,
with yellow aluminium lever handle.

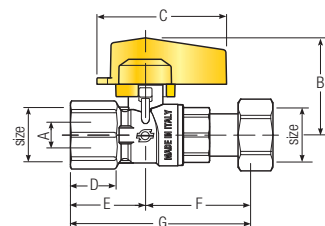


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	gr	PN	Pack pcs/box	Master pcs/box	Price €/pc
8107R104	1/2"	10	9,8	37,6	48	14,8	29	31,75	48	79,75	136	4	20	160	8,97

GP 2140
NORM-GAS



Female ISO 7-Female revolving nut ISO 228 straight ball cock,
with yellow aluminium lever handle.

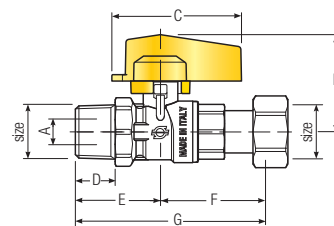


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8108R076	1/2"Fx1/2"D	10	37,6	48	17	28	39	67	167	20	160	11,50
8108R077	1/2"Fx3/4"D	10	37,6	48	17	28	39	67	171	20	160	11,50

GP 2140
NORM-GAS



Male ISO 7-Female revolving nut ISO 228 straight ball cock,
with yellow aluminium lever handle.

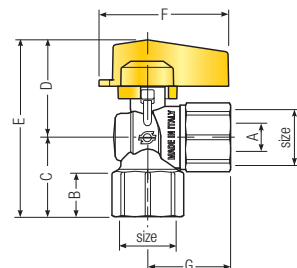


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8109R076	1/2" Mx 1/2" D	10	37,6	48	14,8	31,75	39	70,75	171	20	160	11,50
8109R077	1/2" Mx 3/4" D	10	37,6	48	14,8	31,75	39	70,75	175	20	160	11,62

GP 2140
NORM-GAS



Female-Female ISO 7 angle ball cock,
with yellow aluminium lever handle.

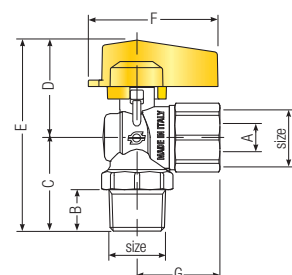


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8110R104	1/2" x 1/2"	10	17	31	37,6	68,6	48	30,75	147	20	160	11,50

GP 2140
NORM-GAS



Male-Female ISO 7 angle ball cock,
with yellow aluminium lever handle.

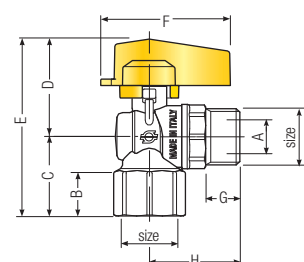


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8111R104	1/2" x 1/2"	10	14,8	34,5	37,6	72,1	48	30,75	152	20	160	11,50

GP 2140
NORM-GAS



Female ISO 7-Male ISO 228 angle ball cock,
with yellow aluminium lever handle.

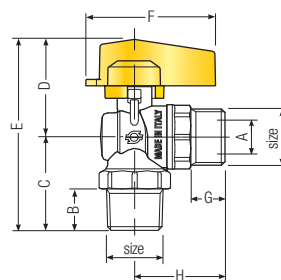


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8112R076	1/2" x 1/2"	10	17	31	37,6	68,6	48	12	31,5	145	20	160	11,50

GP 2140
NORM-GAS



Male ISO 7 - Male ISO 228 angle ball cock,
with yellow aluminium lever handle.

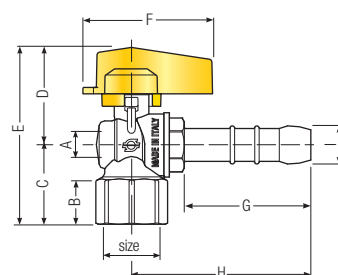


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8113R076	1/2"x1/2"	10	14,8	34,5	37,6	72,1	48	12	31,5	149	20	160	11,50

GP 2140
NORM-GAS



Female ISO 7-Hose holder GAS UNI 7141 angle ball cock,
with yellow aluminium lever handle.

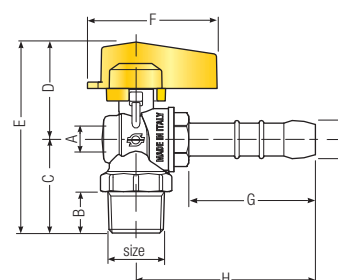


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	øI mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8114R104	1/2"	10	17	31	37,6	68,6	48	44	63	14	152	20	160	11,73

GP 2140
NORM-GAS



Male ISO 7-Hose holder GAS UNI 7141 angle ball cock,
with yellow aluminium lever handle.

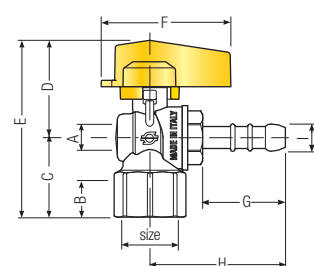


CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8115R104	1/2"	10	14,8	31	37,6	68,6	48	44	63	14	157	20	160	11,50

GP 2140
NORM-GAS



Female ISO 7-Hose holder LPG UNI 7141 angle ball cock,
with yellow aluminium lever handle.



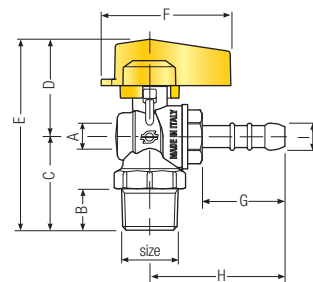
CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8116R104	1/2"	10	17	31	37,6	68,6	48	29	48	9,8	139	20	160	9,78

GP 2140
NORM-GAS



[UNI EN 331]

Male ISO 7-Hose holder LPG UNI 7141 angle ball cock,
with yellow aluminium lever handle.



CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8117R104	1/2"	10	15	35	37,6	72,1	48	29	48	9,8	142	20	160	11,50

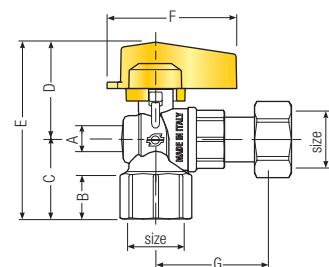
GP 2140
NORM-GAS



[UNI EN 331]



Female ISO 7-Female revolving nut ISO 228 angle ball cock,
with yellow aluminium lever handle.



CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8118R076	1/2"Fx1/2"D	10	17	31	37,6	68,6	48	39	174	20	160	11,84
8118R077	1/2"Fx3/4"D	10	17	31	37,6	68,6	48	39	178	20	160	12,09

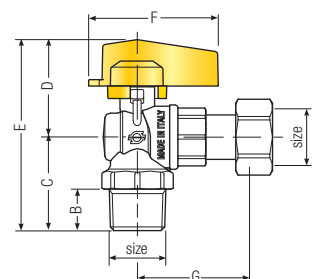
GP 2140
NORM-GAS



[UNI EN 331]



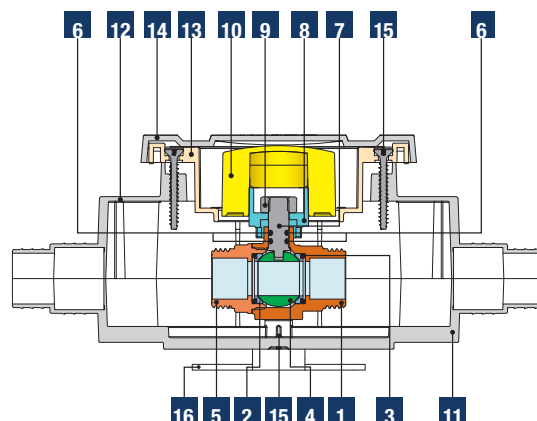
Male ISO 7-Female revolving nut ISO 228 angle ball cock,
with yellow aluminium lever handle.



CODE	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	gr	Pack pcs/box	Master pcs/box	Price €/pc
8119R076	1/2"Mx1/2"D	10	14,8	34,5	37,6	72,1	48	39	177	20	160	11,96
8119R077	1/2"Mx3/4"D	10	14,8	34,5	37,6	72,1	48	39	181	20	160	12,33

GASLOCK

RECESSED BALL VALVE FOR GAS



COMPLIANCE: The CE marking (according to UNI EN 331) and the DVGW certificate refer to the ball valve.
SUITABILITY FOR USE: UNI 7129-1.

Components	Pcs	Material
1 Body	1	UNI EN 12165 CW617N UNI EN 12164 CW617N
2 Side gasket	2	P.T.F.E.
3 O-ring	1	NBR EN 549 homologated
4 Ball	1	UNI EN 12165 CW617N UNI EN 12164 CW617N
5 End sleeve	2	UNI EN 12165 CW617N UNI EN 12164 CW617N
6 O-ring	1	NBR EN 549 homologated
7 Stem	1	UNI EN 12164 CW617N
8 Cap	1	UNI EN 12165 CW617N UNI EN 12164 CW617N
9 Nut	1	Zinc-plated steel
10 Knob	1	PS AU yellow
11 Lower shell	1	ABS grey
12 Upper shell	1	ABS grey
13 Plate support	1	PS AU yellow
14 Plate	1	ABS chromed
15 Screw	1	Zinc-plated steel
16 Fixing and adjustment brackets	2	DD11 EN 10111

EN GENERAL CHARACTERISTICS

1/2" gas valve (passage DN15) with 3/4" male flat seal connections.
 Prepared for installation with copper pipes and welded fittings (sizes Ø12, 14, 16, 18 mm) suitable for capillary welding or brazing compliant with UNI EN 1254-1 standard, or multilayer pipes and press fittings.

OPERATING CONDITIONS

Operating pressure: MOP 5
 High temperature resistance class: B0.1
 Operating temperature: -20 ÷ +60 °C

Gaslock is suitable for use with the three classes of gases (methane, gas mains, LPG), for low and medium pressure distribution mains and plants.
 Item included in the CE marking, as per Art. 4 Paragraph 3 of the Directive 2014/68/EU.

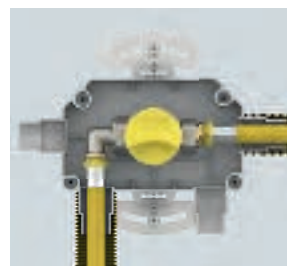
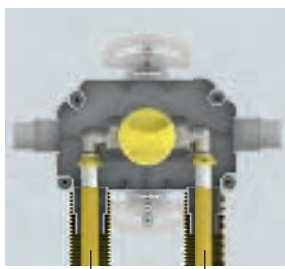
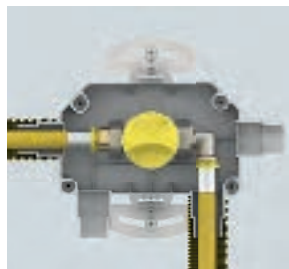
Many good reasons to choose Gaslock

1 ONE VALVE, MULTIPLE TYPES OF INSTALLATION

Copper pipe and welded fittings, straight connection



Multilayer pipe and press fittings: four possible connections



100 mm

2 SIMPLE AND QUICK INSTALLATION



Hydraulic connections outside the box



Positioning inside the box



Upper shell fixing



Assembly of protective cover

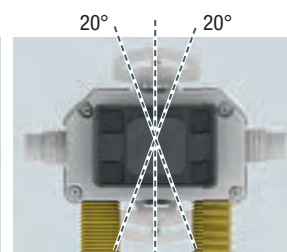
3 VERSATILE ADJUSTMENT



Min 82 mm



Max 123 mm



Depth and inclination adjustment

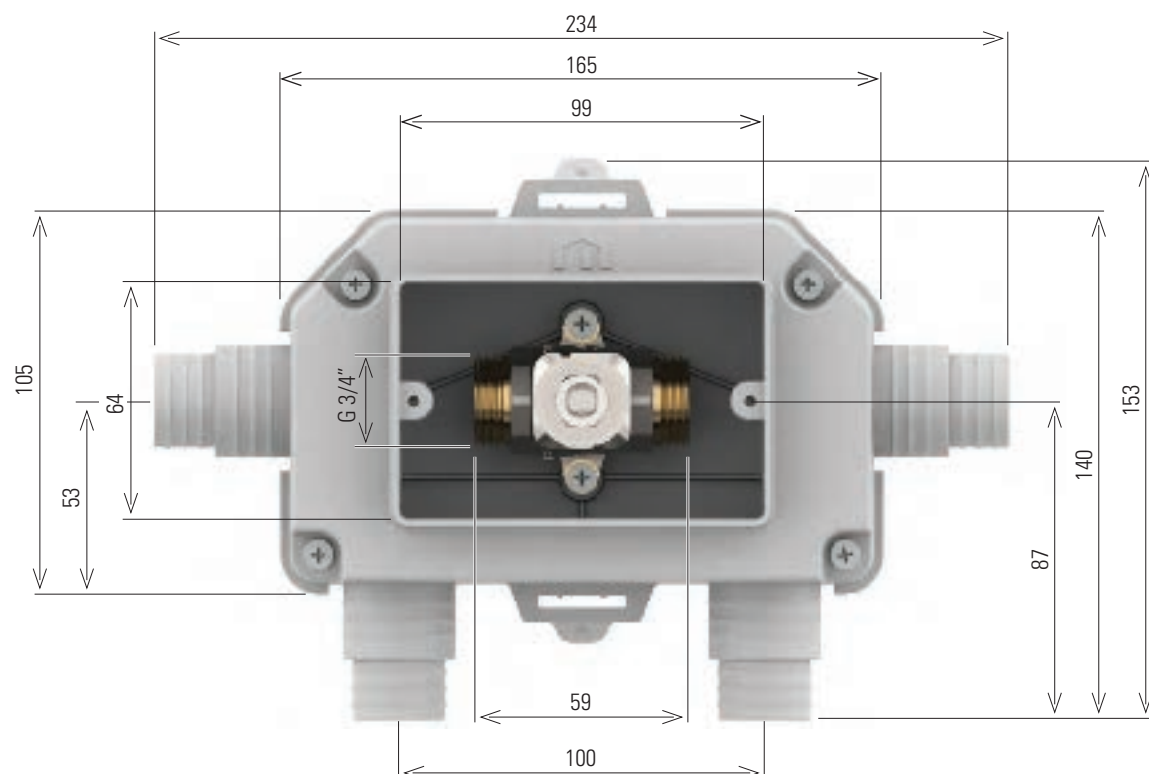
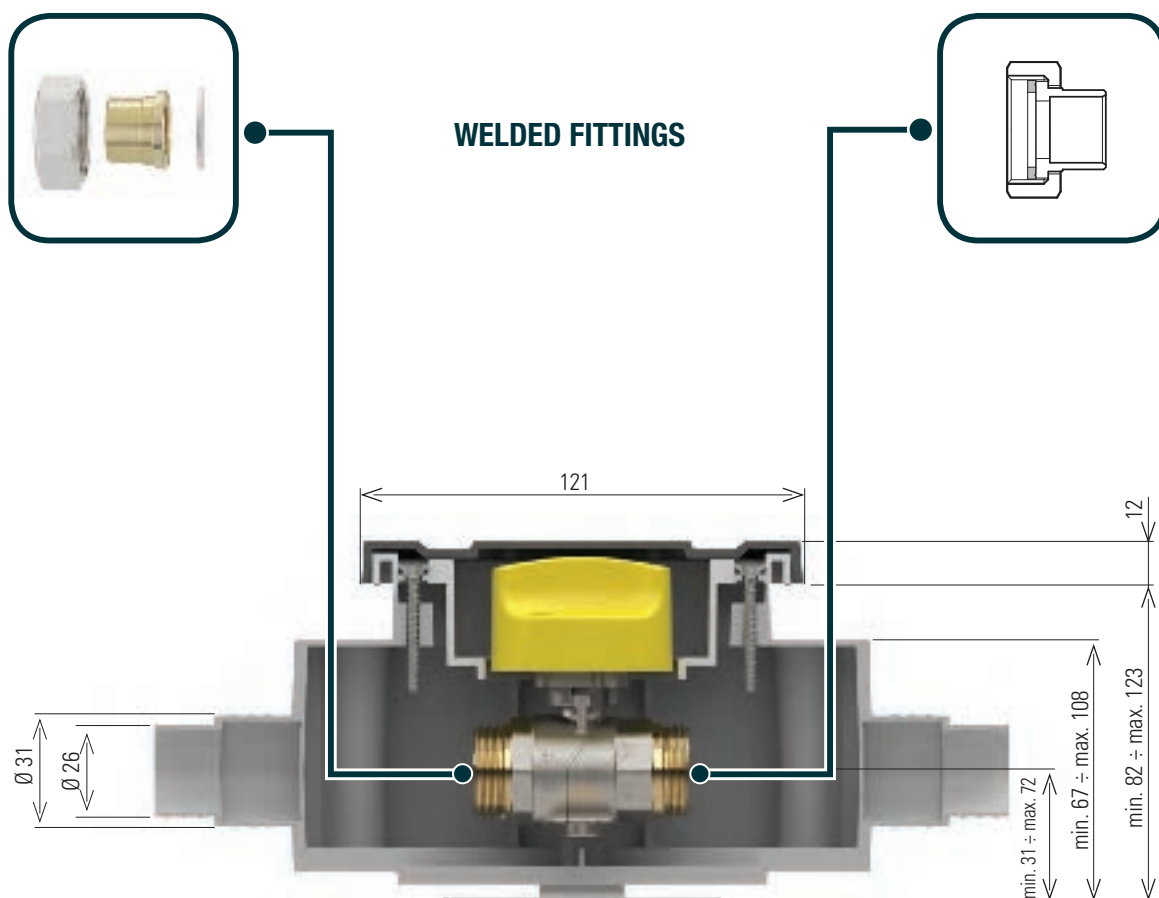
4 INNOVATIVE DESIGN WITH TRENDY FINISHES



Standard with chrome-plated finish plate



Available on request:
White, Anthracite



GP 2233
GASLOCK

Recessed ball valve for Gas.



CODE	Connection	Pack pcs/box	Master pcs/box	Price €
8230R904	3/4" M-M	1	4	63,71

ACCESSORIES FOR GASLOCK RECESSED VALVE

GP 2000
GASLOCK

Welded fitting kit, composed of brass nut and tang + aluminium gasket.



CODE	Size	Connection	Pack pcs/box	Price €/pc
7373S512	12	3/4"	10	6,93
7373S514	14	3/4"	10	6,93
7373S516	16	3/4"	10	6,21
7373S518	18	3/4"	10	8,69

GP 2000
GASLOCK



Plate kit for Gaslock recessed valve (5 pieces of the same colour are supplied with every pack).

CODE	Color	Pack pcs/box	Price €/pack
6192P001	White	5	11,77
6192P002	Anthracite	5	20,31
6192P003	Chromed (*)	5	20,26

(*) Spare part.

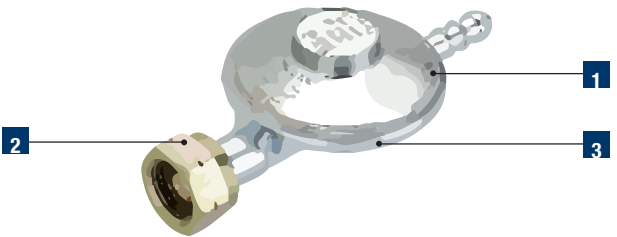
GP 2000
GASLOCK



Spare plate support kit with a knob for Gaslock recessed valve.

CODE	Pack pcs/box	Price €
6192P004	1	4,69

LOW PRESSURE REGULATOR



[UNI EN 16129]

Components		Pcs	Material
1	Body	1	Zama (ZL5) in accordance with EN 1774
2	Nut	1	UNI EN 12165 CW617N
3	Membrane	1	NBR (EN 549)

APPLICATION

Low pressure regulator for LPG tanks for domestic and industrial use.
Suitable for gaseous fluids, butane gas, propane, natural gases, compressed air (and their mixtures).

The Regulators can be used as Single stage:
- Single stage: the regulator is mounted directly to the cylinder or tank and reduces the pressure of the vessel directly to the pressure of the appliance.

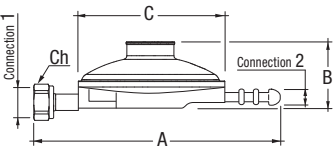
EN GENERAL CHARACTERISTICS
Swivel connection: CH 25 W20x1/14 Left
Flow rate: 1 Kg/h

OPERATING CONDITIONS
Flow direction: In the direction of the arrow
Guaranteed flow rate (Mg): 1,0 kg/h
Supply pressure (P): 0,3 ÷ 7,5 bar (Butane)
1 ÷ 16 bar (Propane) / 0,3 ÷ 16 bar (LPG)
Nominal outlet pressure (Pd): 29 mbar
Operating temperature: 0 °C ÷ +50 °C (Butane)
-20 °C ÷ +50 °C (Propane) / -20 °C ÷ +50 °C (LPG)
Design pressure drops: ΔP2 (2 mbar)

GP 2029

Low pressure regulator 1 Kg/h fixed calibration 29 mbar.

LOW PRESSURE REGULATOR



CODE	Range	Calibration	Connection 1	Connection 2	A mm	B mm	C mm	Ch mm	Pack pcs/box	Master pcs/box	Price €/pc
6146R001	1 kg/h	29 mbar	W20x1/14 Left	PTG GPL	118	34	65	25	8	64	10,32

AISI 304 STAINLESS STEEL GAS HOSES



Description	Material
Pipe	PVC blue
Braiding	Plait in AISI 304 stainless steel
Hose holder	Zinc-plated steel
Nuts	Zinc-plated steel
Bushings	Aluminium
Key	Zinc-plated iron

EN GENERAL CHARACTERISTICS

Pipe 8x13 mm, blue PVC.
Plait in AISI 304 stainless steel.
Thread: W20x1/14 Left in zinc-plated steel.
Press-fit bushings.
Key with expiry date.

OPERATING CONDITIONS

Suitable for natural gas (methane), propane, butane, LPG.
Maximum operating temperature: from -20 to +50 °C

Compliant with directive UNI 7140:1993 + A1:1995

GP 2040
FLEXIBLE GAS

AISI 304 stainless steel flexible pipes Female-Female for GAS.



CODE	Length cm	Connections	Pack pcs/box	Price €/pc
6150R050	50	W20x1/14 Left	10	10,78
6150R070	70	W20x1/14 Left	10	12,09
6150R100	100	W20x1/14 Left	10	13,84



COVERED HOSES IN AISI STAINLESS STEEL FOR GAS

Description	Material
Fittings	AISI 303 stainless steel
Internal pipe	AISI 321 stainless steel (for extensible pipe AISI 316L)
Covering	Yellow PVC
Seals	NBR UNI EN 549

Temperature limit	From -10 °C to +90 °C
Nominal pressure	6 bar

- EN

GENERAL CHARACTERISTICS

Flexible pipe in stainless steel AISI 321

Stainless steel braid AISI 304

Sheath in PVC

It includes two sheaths in NBR (UNI EN 549).

Female fittings: Thead UNI EN ISO 228-1 (DIN 259)

Male fittings: Thread UNI EN 10226-1 (UNI EN ISO 7/1 R) (DIN 2999)

- OPERATING CONDITIONS**

Suitable for natural gas (methane), propane, butane, LPG.

Marking compliant with European directive 89/106/CE.

Flexible pipe type-approved UNI EN 14800.

Extensible flexible pipe type-approved UNI EN 11353.

GP 2040
FLEXIBLE GAS PIPES



Flexible pipe in AISI 321 stainless steel for gas, compliant with UNI EN 14800, Female-Female unions.



CODE	Size	Length cm	Pack pcs/box	Price €/pc
6116P100	1/2"	100	12	43,39
6116P150	1/2"	150	12	57,75
6116P200	1/2"	200	12	59,20

GP 2040
FLEXIBLE GAS PIPES



Flexible pipe in AISI 321 stainless steel for gas, compliant with UNI EN 14800, Male-Female unions.



CODE	Size	Length cm	Pack pcs/box	Price €/pc
6117P100	1/2"	100	12	43,39
6117P150	1/2"	150	12	57,75
6117P200	1/2"	200	12	59,20

GP 2330
FLEXIBLE GAS PIPES



Extensible flexible pipe in AISI 316L stainless steel for gas, compliant with UNI EN 11353, Male-Female unions. Maximum operating pressure 0.5 bar.



CODE	Size	Length cm	Pack pcs/box	Price €/pc
6118P124	1/2"	10-20	18	20,12
6118P244	1/2"	20-40	18	23,32
6118P125	3/4"	10-20	18	30,94
6118P245	3/4"	20-40	18	38,89

35 bar

20 °C

44 Nm

Technical ATTACHMENTS **10**

Technical attachments index

ALPHABETICAL SORTING OF CATALOG PRODUCTS

AUTOMATIC FILLING VALVE Pag. 364

Pressure drops and calibration

BALL VALVES Pag. 365 - 367

Pressure drops and pressure/temperature diagrams

BASIC - INSULATING PANEL Pag. 335

Panel size and minimum system clearances for civil buildings

BASIC WIRING BOX 6T Pag. 355

Electronic system for electrothermic heads

CIRCULATION PUMPS WILO Pag. 354

Circulation pump hydraulic performance diagrams

COMPENSATED PRESSURE REDUCERS Pag. 363

Pressure drops

CONNECTIONS FOR POLYETHYLENE PIPE Pag. 364

Pressure/temperature diagram

CONTROLLER Pag. 347 - 350

Distribution Brass manifold

CONTROLLER S Pag. 347 - 350

Distribution Steel manifold

ELECTRICAL BOXES Pag. 356

Application diagrams

EURA EXPORT / EURA PESANTE Pag. 368

Non-return valve - Pressure drops

EXPORT / PRESSURE REDUCER Pag. 363

Pressure drops

FIVPert - MULTILAYER PIPE Pag. 327 - 333

Application classes and pressure drops

FIVPex - MULTILAYER PIPE Pag. 327 - 333

Application classes and pressure drops

FIVPress - PRESS FITTINGS Pag. 334

Pressure drops

FIV TOUCH EVO Pag. 357

Touch screen thermostat and chronothermostat

FIV TOUCH Wi-Fi Pag. 357

Touch screen chronothermostat

FLOOR MIXING CONTROLLER S Pag. 353 - 354

Preassembled regulation group

FUTURGAS WITH SAFETY LOCK Pag. 368

Ball valves for gas with safety lock

GASLOCK Pag. 369

Recessed ball valve for gas

GHIBLI Pag. 360

Manual / thermostatable / thermostatic regulation valves

GHIBLI-D Pag. 361

Thermostatic regulation valves

HUMIDISTAT Pag. 358

Electronic humidistat

INTERSET Pag. 351

Steel complanar manifold - Pressure drops and diagrams of use

ISTANT Pag. 351

Brass manifold with isolating taps - Pressure drops

KLETTJET - INSULATING PANEL Pag. 339 - 340

Panel size and minimum system clearances for civil buildings

LOW-THICK - INSULATING PANEL Pag. 334

Panel size and minimum system clearances for civil buildings

MODULAR MIXING GROUP Pag. 354

Distribution modules

MOTORVALV Pag. 352

Motor driven ball valve - Pressure drops and wiring diagram

OASI Pag. 361 - 362

Manual / thermostatable / thermostatic regulation valves

OASI PLUS Pag. 361

Thermostatic regulation valves

PE-RT TYPE II 5 LAYERS EVOH PIPE Pag. 345 - 346

Pressure drops, linear expansion, regression curves, application classes

PE-Xa 5 LAYERS EVOH PIPE Pag. 343 - 344

Pressure drops, linear expansion, regression curves, application classes

PE-Xc PENTA EVOH PIPE Pag. 341 - 342

Pressure drops, linear expansion, regression curves, application classes

PEXPENTA KLETT PIPE Pag. 340

Application classes multilayer pipe for Klettjet system

PHONO-TERM - SOUND-ABSORBENT PANEL Pag. 335

Panel size and minimum system clearances for civil buildings

RCE - CLIMATIC REGULATOR KIT Pag. 359

Climatic regulator kit for mixing units

RECESSED BOX Pag. 369

For valve with first gas inlet manifold

REGOLO EVO Pag. 358
Mechanical thermostat

ROLL-PLAN - INSULATING PANEL Pag. 339
Panel size and minimum system clearances for civil buildings

SECURITY Pag. 364
Safety valves - Technical characteristics

SPECIAL - INSULATING PANEL Pag. 337
Panel size and minimum system clearances for civil buildings

SPECIAL 2 - INSULATING PANEL Pag. 336 - 337
Panel size and minimum system clearances for civil buildings

SPECIAL G - INSULATING PANEL Pag. 338
Panel size and minimum system clearances for civil buildings

TEF 08 Pag. 350
Electrothermic heads

TERMINAL KIT WITH BY-PASS Pag. 350
Overpressure valve diagram

THERMODAY Pag. 351
Pressed brass manifold - Pressure drops

UFH MIXING CONTROLLER Pag. 354
Preassembled regulation group

WIND PLUS / WIND Pag. 363
Automatic air vent valves - Performance diagram

EXAMPLE OF CALCULATION DIAGRAMS Pag. 370

TABLE OF CHEMICAL RESISTANCE Pag. 371 - 372

INTERNATIONAL SYSTEM UNITS (SI) Pag. 373

CONVERSION TABLE Pag. 374

FIVPex and FIVPert pipes application classes

MULTILAYER PIPES

Conditions of use according to the application classes in compliance with standard UNI EN ISO 21003-1

Application class	Design temperature T_D (°C)	Time ^b at T_D (years)	T_{max} (°C)	Time at T_{max} (years)	T_{mal} (°C)	Time at T_{mal} (hours)	Typical field of application
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	2,5	70	2,5	100	100	Underfloor heating and low temperature radiators
	40	20					
	60	25					
5 ^b	20	14	90	1	100	100	High temperature radiators
	60	25					
	80	10					

Notes:

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, the symbol "+" indicates that a sum must be made. For example, the design temperature profile for 50 years for class 5 should be read as follows: 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 hours.

FIVPex and FIVPert pressure drops

FIVPex and FIVPert pipes - distributed pressure drops - Water at 10 °C

NOTE: 1 bar = 0.1 N/mm² = 100 kPa = 10 m w.c.

DN 16x2		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
120	0,29	158
130	0,32	182
140	0,34	208
150	0,37	234
160	0,39	262
170	0,42	291
180	0,44	322
190	0,47	354
200	0,49	387
210	0,52	422
220	0,54	458
230	0,56	495
240	0,59	533
250	0,61	572
260	0,64	613
270	0,66	655
280	0,69	698
290	0,71	742
300	0,74	788
310	0,76	834
320	0,79	882
330	0,81	930
340	0,84	980
350	0,86	1031
360	0,88	1084
370	0,91	1137
380	0,93	1191
390	0,96	1246
400	0,98	1303
410	1,01	1360
420	1,03	1419
430	1,06	1479
440	1,08	1539
450	1,11	1601
460	1,13	1664
470	1,15	1728
480	1,18	1793
490	1,20	1858
500	1,23	1925
510	1,25	1993
520	1,28	2062
530	1,30	2132
540	1,33	2203
550	1,35	2275
560	1,38	2348
570	1,40	2422
580	1,42	2496
590	1,45	2572
600	1,47	2649
610	1,50	2727
620	1,52	2805

DN 20x2		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
150	0,21	60
170	0,23	74
190	0,26	90
210	0,29	108
230	0,32	126
250	0,35	146
270	0,37	167
290	0,40	189
310	0,43	213
330	0,46	237
350	0,48	263
370	0,51	290
390	0,54	318
410	0,57	347
430	0,59	377
450	0,62	408
470	0,65	441
490	0,68	474
510	0,70	508
530	0,73	544
550	0,76	580
570	0,79	617
590	0,82	656
610	0,84	695
630	0,87	736
650	0,90	777
670	0,93	819
690	0,95	863
710	0,98	907
730	1,01	952
750	1,04	998
770	1,06	1045
790	1,09	1093
810	1,12	1142
830	1,15	1192
850	1,17	1243
870	1,20	1294
890	1,23	1347
910	1,26	1400
930	1,28	1454
950	1,31	1510
970	1,34	1566
990	1,37	1623
1010	1,40	1680
1030	1,42	1739
1050	1,45	1799
1070	1,48	1859
1090	1,51	1920
1110	1,53	1982
1130	1,56	2045
1150	1,59	2109

DN 26x3		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
400	0,35	115
440	0,39	136
480	0,42	158
520	0,46	182
560	0,50	207
600	0,53	234
640	0,57	262
680	0,60	291
720	0,64	322
760	0,67	354
800	0,71	387
840	0,74	422
880	0,78	457
920	0,81	494
960	0,85	533
1000	0,88	572
1040	0,92	613
1080	0,95	655
1120	0,99	698
1160	1,03	742
1200	1,06	787
1240	1,10	834
1280	1,13	881
1320	1,17	930
1360	1,20	980
1400	1,24	1031
1440	1,27	1083
1480	1,31	1136
1520	1,34	1191
1560	1,38	1246
1600	1,41	1302
1640	1,45	1360
1680	1,49	1418
1720	1,52	1478
1760	1,56	1539
1800	1,59	1600
1840	1,63	1663
1880	1,66	1727
1920	1,70	1792
1960	1,73	1858
2000	1,77	1925
2040	1,80	1992
2080	1,84	2061
2120	1,87	2131
2160	1,91	2202
2200	1,95	2274
2240	1,98	2347
2280	2,02	2421
2320	2,05	2495
2360	2,09	2571
2400	2,12	2648

DN 32x3		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
800	0,42	111
860	0,45	126
920	0,48	142
980	0,51	159
1040	0,54	176
1100	0,58	194
1160	0,61	213
1220	0,64	233
1280	0,67	253
1340	0,70	275
1400	0,73	296
1460	0,76	319
1520	0,80	342
1580	0,83	366
1640	0,86	391
1700	0,89	416
1760	0,92	443
1820	0,95	469
1880	0,98	497
1940	1,01	525
2000	1,05	553
2060	1,08	583
2120	1,11	613
2180	1,14	644
2240	1,17	675
2300	1,20	707
2360	1,23	739
2420	1,27	773
2480	1,30	806
2540	1,33	841
2600	1,36	876
2660	1,39	912
2720	1,42	948
2780	1,45	985
2840	1,49	1022
2900	1,52	1060
2960	1,55	1099
3020	1,58	1138
3080	1,61	1178
3140	1,64	1219
3200	1,67	1260
3260	1,71	1301
3320	1,74	1344
3380	1,77	1386
3440	1,80	1430
3500	1,83	1474
3560	1,86	1518
3620	1,89	1563
3680	1,93	1609
3740	1,96	1655
3800	1,99	1702

FIVPex and FIVPert pressure drops

FIVPex and FIVPert pipes - distributed pressure drops - Water at 10 °C

NOTE: 1 bar = 0.1 N/mm² = 100 kPa = 10 m w.c.

DN 40x3,5		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
1000	0,32	53
1100	0,36	63
1200	0,39	73
1300	0,42	84
1400	0,45	96
1500	0,49	108
1600	0,52	121
1700	0,55	134
1800	0,58	148
1900	0,62	163
2000	0,65	178
2100	0,68	194
2200	0,71	211
2300	0,75	228
2400	0,78	245
2500	0,81	264
2600	0,84	282
2700	0,88	302
2800	0,91	321
2900	0,94	342
3000	0,97	363
3100	1,01	384
3200	1,04	406
3300	1,07	428
3400	1,10	451
3500	1,14	475
3600	1,17	499
3700	1,20	523
3800	1,23	548
3900	1,27	574
4000	1,30	600
4100	1,33	626
4200	1,36	653
4300	1,40	681
4400	1,43	709
4500	1,46	737
4600	1,49	766
4700	1,53	796
4800	1,56	825
4900	1,59	856
5000	1,62	886
5100	1,66	918
5200	1,69	949
5300	1,72	982
5400	1,75	1014
5500	1,79	1047
5600	1,82	1081
5700	1,85	1115
5800	1,88	1149
5900	1,92	1184
6000	1,95	1220

DN 50x4		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
2000	0,40	57
2200	0,44	67
2400	0,48	78
2600	0,52	90
2800	0,56	102
3000	0,60	115
3200	0,64	129
3400	0,68	144
3600	0,72	159
3800	0,76	174
4000	0,80	191
4200	0,84	208
4400	0,88	225
4600	0,92	244
4800	0,96	263
5000	1,00	282
5200	1,04	302
5400	1,08	323
5600	1,12	344
5800	1,16	366
6000	1,20	388
6200	1,24	411
6400	1,28	434
6600	1,32	458
6800	1,36	483
7000	1,40	508
7200	1,44	534
7400	1,48	560
7600	1,52	587
7800	1,56	614
8000	1,60	642
8200	1,64	670
8400	1,68	699
8600	1,72	728
8800	1,76	758
9000	1,80	789
9200	1,84	820
9400	1,88	851
9600	1,92	883
9800	1,96	915
10000	2,00	948
10200	2,05	982
10400	2,09	1016
10600	2,13	1050
10800	2,17	1085
11000	2,21	1121
11200	2,25	1156
11400	2,29	1193
11600	2,33	1230
11800	2,37	1267
11950	2,40	1295

DN 63x4,5		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
3000	0,36	35
3500	0,42	46
4000	0,49	58
4500	0,55	71
5000	0,61	85
5500	0,67	101
6000	0,73	118
6500	0,79	135
7000	0,85	154
7500	0,91	174
8000	0,97	195
8500	1,03	216
9000	1,09	239
9500	1,15	263
10000	1,21	287
10500	1,27	313
11000	1,33	340
11500	1,39	367
12000	1,46	395
12500	1,52	425
13000	1,58	455
13500	1,64	486
14000	1,70	518
14500	1,76	551
15000	1,82	584
15500	1,88	619
16000	1,94	654
16500	2,00	690
17000	2,06	727
17500	2,12	765
18000	2,18	804
18500	2,24	844
19000	2,30	884
19500	2,37	925
20000	2,43	967
20500	2,49	1010
21000	2,55	1053
21500	2,61	1097
22000	2,67	1142
22500	2,73	1188
23000	2,79	1235
23500	2,85	1282
24000	2,91	1330
24500	2,97	1379
25000	3,03	1429
25500	3,09	1479
26000	3,15	1530
26500	3,21	1582
27000	3,27	1635
27500	3,34	1688
28000	3,40	1742

DN 75x5		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
5000	0,42	35
5500	0,46	42
6000	0,50	49
6500	0,54	56
7000	0,59	64
7500	0,63	72
8000	0,67	81
8500	0,71	90
9000	0,75	99
9500	0,80	109
10000	0,84	119
10500	0,88	130
11000	0,92	141
11500	0,96	152
12000	1,00	164
12500	1,05	176
13000	1,09	189
13500	1,13	201
14000	1,17	215
14500	1,21	228
15000	1,26	242
15500	1,30	257
16000	1,34	271
16500	1,38	286
17000	1,42	302
17500	1,46	317
18000	1,51	333
18500	1,55	350
19000	1,59	366
19500	1,63	383
20000	1,67	401
20500	1,72	418
21000	1,76	436
21500	1,80	455
22000	1,84	473
22500	1,88	492
23000	1,93	512
23500	1,97	531
24000	2,01	551
24500	2,05	572
25000	2,09	592
25500	2,13	613
26000	2,18	634
26500	2,22	656
27000	2,26	678
27500	2,30	700
28000	2,34	722
28500	2,39	745
29000	2,43	768
29500	2,47	791
30000	2,51	815

FIVPex and FIVPert pressure drops

FIVPex and FIVPert pipes - distributed pressure drops - Water at 50 °C

NOTE: 1 bar = 0.1 N/mm² = 100 kPa = 10 m w.c.

DN 16x2		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
120	0,29	126
130	0,32	145
140	0,34	165
150	0,37	186
160	0,39	208
170	0,42	231
180	0,44	256
190	0,47	281
200	0,49	308
210	0,52	335
220	0,54	363
230	0,56	393
240	0,59	423
250	0,61	454
260	0,64	487
270	0,66	520
280	0,69	554
290	0,71	589
300	0,74	625
310	0,76	662
320	0,79	700
330	0,81	739
340	0,84	778
350	0,86	819
360	0,88	860
370	0,91	903
380	0,93	946
390	0,96	990
400	0,98	1035
410	1,01	1080
420	1,03	1127
430	1,06	1174
440	1,08	1222
450	1,11	1271
460	1,13	1321
470	1,15	1372
480	1,18	1423
490	1,20	1476
500	1,23	1529
510	1,25	1583
520	1,28	1637
530	1,30	1693
540	1,33	1749
550	1,35	1806
560	1,38	1864
570	1,40	1923
580	1,42	1982
590	1,45	2042
600	1,47	2103
610	1,50	2165
620	1,52	2227

DN 20x2		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
150	0,21	47
170	0,23	59
190	0,26	72
210	0,29	85
230	0,32	100
250	0,35	116
270	0,37	133
290	0,40	150
310	0,43	169
330	0,46	188
350	0,48	209
370	0,51	230
390	0,54	252
410	0,57	275
430	0,59	299
450	0,62	324
470	0,65	350
490	0,68	376
510	0,70	404
530	0,73	432
550	0,76	461
570	0,79	490
590	0,82	521
610	0,84	552
630	0,87	584
650	0,90	617
670	0,93	651
690	0,95	685
710	0,98	720
730	1,01	756
750	1,04	793
770	1,06	830
790	1,09	868
810	1,12	907
830	1,15	946
850	1,17	987
870	1,20	1028
890	1,23	1069
910	1,26	1112
930	1,28	1155
950	1,31	1199
970	1,34	1243
990	1,37	1288
1010	1,40	1334
1030	1,42	1381
1050	1,45	1428
1070	1,48	1476
1090	1,51	1525
1110	1,53	1574
1130	1,56	1624
1150	1,59	1675

DN 26x3		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
400	0,35	91
440	0,39	108
480	0,42	126
520	0,46	145
560	0,50	165
600	0,53	186
640	0,57	208
680	0,60	231
720	0,64	256
760	0,67	281
800	0,71	307
840	0,74	335
880	0,78	363
920	0,81	393
960	0,85	423
1000	0,88	454
1040	0,92	487
1080	0,95	520
1120	0,99	554
1160	1,03	589
1200	1,06	625
1240	1,10	662
1280	1,13	700
1320	1,17	739
1360	1,20	778
1400	1,24	819
1440	1,27	860
1480	1,31	902
1520	1,34	945
1560	1,38	989
1600	1,41	1034
1640	1,45	1080
1680	1,49	1126
1720	1,52	1174
1760	1,56	1222
1800	1,59	1271
1840	1,63	1321
1880	1,66	1371
1920	1,70	1423
1960	1,73	1475
2000	1,77	1528
2040	1,80	1582
2080	1,84	1637
2120	1,87	1692
2160	1,91	1748
2200	1,95	1805
2240	1,98	1863
2280	2,02	1922
2320	2,05	1981
2360	2,09	2041
2400	2,12	2102

DN 32x3		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
800	0,42	88
860	0,45	100
920	0,48	113
980	0,51	126
1040	0,54	140
1100	0,58	154
1160	0,61	169
1220	0,64	185
1280	0,67	201
1340	0,70	218
1400	0,73	235
1460	0,76	253
1520	0,80	272
1580	0,83	291
1640	0,86	311
1700	0,89	331
1760	0,92	351
1820	0,95	373
1880	0,98	394
1940	1,01	417
2000	1,05	439
2060	1,08	463
2120	1,11	487
2180	1,14	511
2240	1,17	536
2300	1,20	561
2360	1,23	587
2420	1,27	613
2480	1,30	640
2540	1,33	668
2600	1,36	696
2660	1,39	724
2720	1,42	753
2780	1,45	782
2840	1,49	812
2900	1,52	842
2960	1,55	873
3020	1,58	904
3080	1,61	936
3140	1,64	968
3200	1,67	1000
3260	1,71	1033
3320	1,74	1067
3380	1,77	1101
3440	1,80	1135
3500	1,83	1170
3560	1,86	1205
3620	1,89	1241
3680	1,93	1277
3740	1,96	1314
3800	1,99	1351

FIVPex and FIVPert pressure drops

FIVPex and FIVPert pipes - distributed pressure drops - Water at 50 °C

NOTE: 1 bar = 0.1 N/mm² = 100 kPa = 10 m w.c.

DN 40x3,5		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
1000	0,32	42
1100	0,36	50
1200	0,39	58
1300	0,42	67
1400	0,45	76
1500	0,49	86
1600	0,52	96
1700	0,55	107
1800	0,58	118
1900	0,62	129
2000	0,65	142
2100	0,68	154
2200	0,71	167
2300	0,75	181
2400	0,78	195
2500	0,81	209
2600	0,84	224
2700	0,88	239
2800	0,91	255
2900	0,94	271
3000	0,97	288
3100	1,01	305
3200	1,04	322
3300	1,07	340
3400	1,10	358
3500	1,14	377
3600	1,17	396
3700	1,20	416
3800	1,23	435
3900	1,27	456
4000	1,30	476
4100	1,33	497
4200	1,36	519
4300	1,40	541
4400	1,43	563
4500	1,46	585
4600	1,49	608
4700	1,53	632
4800	1,56	655
4900	1,59	679
5000	1,62	704
5100	1,66	729
5200	1,69	754
5300	1,72	779
5400	1,75	805
5500	1,79	832
5600	1,82	858
5700	1,85	885
5800	1,88	913
5900	1,92	940
6000	1,95	968

DN 50x4		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
2000	0,40	45
2200	0,44	53
2400	0,48	62
2600	0,52	71
2800	0,56	81
3000	0,60	92
3200	0,64	103
3400	0,68	114
3600	0,72	126
3800	0,76	138
4000	0,80	152
4200	0,84	165
4400	0,88	179
4600	0,92	193
4800	0,96	208
5000	1,00	224
5200	1,04	240
5400	1,08	256
5600	1,12	273
5800	1,16	290
6000	1,20	308
6200	1,24	326
6400	1,28	345
6600	1,32	364
6800	1,36	383
7000	1,40	403
7200	1,44	424
7400	1,48	445
7600	1,52	466
7800	1,56	487
8000	1,60	510
8200	1,64	532
8400	1,68	555
8600	1,72	578
8800	1,76	602
9000	1,80	626
9200	1,84	651
9400	1,88	676
9600	1,92	701
9800	1,96	727
10000	2,00	753
10200	2,05	780
10400	2,09	807
10600	2,13	834
10800	2,17	862
11000	2,21	890
11200	2,25	918
11400	2,29	947
11600	2,33	976
11800	2,37	1006
12000	2,41	1036

DN 63x4,5		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
3000	0,36	28
3500	0,42	36
4000	0,49	46
4500	0,55	56
5000	0,61	68
5500	0,67	80
6000	0,73	93
6500	0,79	107
7000	0,85	122
7500	0,91	138
8000	0,97	154
8500	1,03	172
9000	1,09	190
9500	1,15	209
10000	1,21	228
10500	1,27	249
11000	1,33	270
11500	1,39	291
12000	1,46	314
12500	1,52	337
13000	1,58	361
13500	1,64	386
14000	1,70	411
14500	1,76	437
15000	1,82	464
15500	1,88	491
16000	1,94	519
16500	2,00	548
17000	2,06	578
17500	2,12	608
18000	2,18	638
18500	2,24	670
19000	2,30	702
19500	2,37	734
20000	2,43	768
20500	2,49	802
21000	2,55	836
21500	2,61	871
22000	2,67	907
22500	2,73	943
23000	2,79	980
23500	2,85	1018
24000	2,91	1056
24500	2,97	1095
25000	3,03	1134
25500	3,09	1174
26000	3,15	1215
26500	3,21	1256
27000	3,27	1298
27500	3,34	1340
28000	3,40	1383

DN 75x5		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
5000	0,42	28
5500	0,46	33
6000	0,50	39
6500	0,54	45
7000	0,59	51
7500	0,63	57
8000	0,67	64
8500	0,71	71
9000	0,75	79
9500	0,80	86
10000	0,84	95
10500	0,88	103
11000	0,92	112
11500	0,96	121
12000	1,00	130
12500	1,05	140
13000	1,09	150
13500	1,13	160
14000	1,17	170
14500	1,21	181
15000	1,26	192
15500	1,30	204
16000	1,34	215
16500	1,38	227
17000	1,42	239
17500	1,46	252
18000	1,51	265
18500	1,55	278
19000	1,59	291
19500	1,63	304
20000	1,67	318
20500	1,72	332
21000	1,76	347
21500	1,80	361
22000	1,84	376
22500	1,88	391
23000	1,93	406
23500	1,97	422
24000	2,01	438
24500	2,05	454
25000	2,09	470
25500	2,13	487
26000	2,18	504
26500	2,22	521
27000	2,26	538
27500	2,30	556
28000	2,34	573
28500	2,39	591
29000	2,43	610
29500	2,47	628
30000	2,51	647

FIVPex and FIVPert pressure drops

FIVPex and FIVPert pipes - distributed pressure drops - Water at 80 °C

NOTE: 1 bar = 0.1 N/mm² = 100 kPa = 10 m w.c.

DN 16x2		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
120	0,29	117
130	0,32	135
140	0,34	154
150	0,37	173
160	0,39	194
170	0,42	216
180	0,44	238
190	0,47	262
200	0,49	287
210	0,52	312
220	0,54	339
230	0,56	366
240	0,59	394
250	0,61	424
260	0,64	454
270	0,66	485
280	0,69	517
290	0,71	549
300	0,74	583
310	0,76	617
320	0,79	653
330	0,81	689
340	0,84	726
350	0,86	763
360	0,88	802
370	0,91	841
380	0,93	881
390	0,96	922
400	0,98	964
410	1,01	1007
420	1,03	1050
430	1,06	1094
440	1,08	1139
450	1,11	1185
460	1,13	1231
470	1,15	1279
480	1,18	1327
490	1,20	1375
500	1,23	1425
510	1,25	1475
520	1,28	1526
530	1,30	1578
540	1,33	1630
550	1,35	1684
560	1,38	1737
570	1,40	1792
580	1,42	1848
590	1,45	1904
600	1,47	1960
610	1,50	2018
620	1,52	2076

DN 20x2		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
150	0,21	44
170	0,23	55
190	0,26	67
210	0,29	80
230	0,32	93
250	0,35	108
270	0,37	124
290	0,40	140
310	0,43	157
330	0,46	176
350	0,48	195
370	0,51	215
390	0,54	235
410	0,57	257
430	0,59	279
450	0,62	302
470	0,65	326
490	0,68	351
510	0,70	376
530	0,73	402
550	0,76	429
570	0,79	457
590	0,82	485
610	0,84	515
630	0,87	544
650	0,90	575
670	0,93	606
690	0,95	638
710	0,98	671
730	1,01	705
750	1,04	739
770	1,06	774
790	1,09	809
810	1,12	845
830	1,15	882
850	1,17	920
870	1,20	958
890	1,23	997
910	1,26	1036
930	1,28	1076
950	1,31	1117
970	1,34	1159
990	1,37	1201
1010	1,40	1244
1030	1,42	1287
1050	1,45	1331
1070	1,48	1376
1090	1,51	1421
1110	1,53	1467
1130	1,56	1514
1150	1,59	1561

DN 26x3		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
400	0,35	85
440	0,39	101
480	0,42	117
520	0,46	135
560	0,50	154
600	0,53	173
640	0,57	194
680	0,60	216
720	0,64	238
760	0,67	262
800	0,71	287
840	0,74	312
880	0,78	339
920	0,81	366
960	0,85	394
1000	0,88	423
1040	0,92	454
1080	0,95	485
1120	0,99	516
1160	1,03	549
1200	1,06	583
1240	1,10	617
1280	1,13	652
1320	1,17	688
1360	1,20	725
1400	1,24	763
1440	1,27	802
1480	1,31	841
1520	1,34	881
1560	1,38	922
1600	1,41	964
1640	1,45	1006
1680	1,49	1050
1720	1,52	1094
1760	1,56	1139
1800	1,59	1185
1840	1,63	1231
1880	1,66	1278
1920	1,70	1326
1960	1,73	1375
2000	1,77	1424
2040	1,80	1475
2080	1,84	1526
2120	1,87	1577
2160	1,91	1630
2200	1,95	1683
2240	1,98	1737
2280	2,02	1791
2320	2,05	1847
2360	2,09	1903
2400	2,12	1960

DN 32x3		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
800	0,42	82
860	0,45	94
920	0,48	105
980	0,51	118
1040	0,54	130
1100	0,58	144
1160	0,61	158
1220	0,64	172
1280	0,67	188
1340	0,70	203
1400	0,73	219
1460	0,76	236
1520	0,80	253
1580	0,83	271
1640	0,86	289
1700	0,89	308
1760	0,92	328
1820	0,95	347
1880	0,98	368
1940	1,01	388
2000	1,05	410
2060	1,08	431
2120	1,11	454
2180	1,14	476
2240	1,17	499
2300	1,20	523
2360	1,23	547
2420	1,27	572
2480	1,30	597
2540	1,33	622
2600	1,36	648
2660	1,39	675
2720	1,42	702
2780	1,45	729
2840	1,49	757
2900	1,52	785
2960	1,55	813
3020	1,58	843
3080	1,61	872
3140	1,64	902
3200	1,67	932
3260	1,71	963
3320	1,74	994
3380	1,77	1026
3440	1,80	1058
3500	1,83	1091
3560	1,86	1124
3620	1,89	1157
3680	1,93	1191
3740	1,96	1225
3800	1,99	1260

FIVPex and FIVPert pressure drops

FIVPex and FIVPert pipes - distributed pressure drops - Water at 80 °C

NOTE: 1 bar = 0.1 N/mm² = 100 kPa = 10 m w.c.

DN 40x3,5		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
1000	0,32	39
1100	0,36	46
1200	0,39	54
1300	0,42	62
1400	0,45	71
1500	0,49	80
1600	0,52	89
1700	0,55	99
1800	0,58	110
1900	0,62	121
2000	0,65	132
2100	0,68	144
2200	0,71	156
2300	0,75	169
2400	0,78	182
2500	0,81	195
2600	0,84	209
2700	0,88	223
2800	0,91	238
2900	0,94	253
3000	0,97	268
3100	1,01	284
3200	1,04	300
3300	1,07	317
3400	1,10	334
3500	1,14	351
3600	1,17	369
3700	1,20	387
3800	1,23	406
3900	1,27	425
4000	1,30	444
4100	1,33	464
4200	1,36	484
4300	1,40	504
4400	1,43	525
4500	1,46	546
4600	1,49	567
4700	1,53	589
4800	1,56	611
4900	1,59	633
5000	1,62	656
5100	1,66	679
5200	1,69	703
5300	1,72	727
5400	1,75	751
5500	1,79	775
5600	1,82	800
5700	1,85	825
5800	1,88	851
5900	1,92	877
6000	1,95	903

DN 50x4		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
2000	0,40	42
2200	0,44	50
2400	0,48	58
2600	0,52	66
2800	0,56	76
3000	0,60	85
3200	0,64	96
3400	0,68	106
3600	0,72	117
3800	0,76	129
4000	0,80	141
4200	0,84	154
4400	0,88	167
4600	0,92	180
4800	0,96	194
5000	1,00	209
5200	1,04	223
5400	1,08	239
5600	1,12	254
5800	1,16	271
6000	1,20	287
6200	1,24	304
6400	1,28	321
6600	1,32	339
6800	1,36	357
7000	1,40	376
7200	1,44	395
7400	1,48	414
7600	1,52	434
7800	1,56	454
8000	1,60	475
8200	1,64	496
8400	1,68	517
8600	1,72	539
8800	1,76	561
9000	1,80	584
9200	1,84	607
9400	1,88	630
9600	1,92	653
9800	1,96	678
10000	2,00	702
10200	2,05	727
10400	2,09	752
10600	2,13	777
10800	2,17	803
11000	2,21	829
11200	2,25	856
11400	2,29	883
11600	2,33	910
11800	2,37	938
12000	2,41	966

DN 63x4,5		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
3000	0,36	26
3500	0,42	34
4000	0,49	43
4500	0,55	53
5000	0,61	63
5500	0,67	75
6000	0,73	87
6500	0,79	100
7000	0,85	114
7500	0,91	129
8000	0,97	144
8500	1,03	160
9000	1,09	177
9500	1,15	194
10000	1,21	213
10500	1,27	232
11000	1,33	251
11500	1,39	272
12000	1,46	293
12500	1,52	314
13000	1,58	337
13500	1,64	360
14000	1,70	383
14500	1,76	408
15000	1,82	433
15500	1,88	458
16000	1,94	484
16500	2,00	511
17000	2,06	538
17500	2,12	566
18000	2,18	595
18500	2,24	624
19000	2,30	654
19500	2,37	685
20000	2,43	716
20500	2,49	747
21000	2,55	779
21500	2,61	812
22000	2,67	845
22500	2,73	879
23000	2,79	914
23500	2,85	949
24000	2,91	984
24500	2,97	1021
25000	3,03	1057
25500	3,09	1095
26000	3,15	1132
26500	3,21	1171
27000	3,27	1210
27500	3,34	1249
28000	3,40	1289

DN 75x5		
G (ℓ/h)	V (m/s)	Δp/m (Pa/m)
5000	0,42	26
5500	0,46	31
6000	0,50	36
6500	0,54	41
7000	0,59	47
7500	0,63	53
8000	0,67	60
8500	0,71	66
9000	0,75	73
9500	0,80	81
10000	0,84	88
10500	0,88	96
11000	0,92	104
11500	0,96	113
12000	1,00	121
12500	1,05	130
13000	1,09	140
13500	1,13	149
14000	1,17	159
14500	1,21	169
15000	1,26	179
15500	1,30	190
16000	1,34	201
16500	1,38	212
17000	1,42	223
17500	1,46	235
18000	1,51	247
18500	1,55	259
19000	1,59	271
19500	1,63	284
20000	1,67	297
20500	1,72	310
21000	1,76	323
21500	1,80	337
22000	1,84	350
22500	1,88	364
23000	1,93	379
23500	1,97	393
24000	2,01	408
24500	2,05	423
25000	2,09	438
25500	2,13	454
26000	2,18	469
26500	2,22	485
27000	2,26	501
27500	2,30	518
28000	2,34	534
28500	2,39	551
29000	2,43	568
29500	2,47	586
30000	2,51	603

Localised pressure drops of the fittings

FIVPress FITTINGS

To determine localised pressure drops of plants with FIVPress fittings, it is possible to refer to the following values for the loss coefficient (ζ), which can be obtained from technical literature.

$$\Delta p = \zeta \frac{\rho v^2}{2}$$

Δp = pressure drop (Pa)

ζ = loss coefficient

ρ = volume mass of the fluid (kg/m³)
for water:
 $\rho_{20^\circ\text{C}} = 0.9982$;
 $\rho_{40^\circ\text{C}} = 0.9922$;
 $\rho_{60^\circ\text{C}} = 0.99832$;
 $\rho_{80^\circ\text{C}} = 0.9718$

v = fluid speed (m/s)

Fitting figure	ξ
	1,8
	1,6
	2,4
	2,2
	2,4

Fitting figure	ξ
	2,2
	1,8
	3,2
	3,0

Low-Thick panel

Insulating panel with graphite interval 100 mm

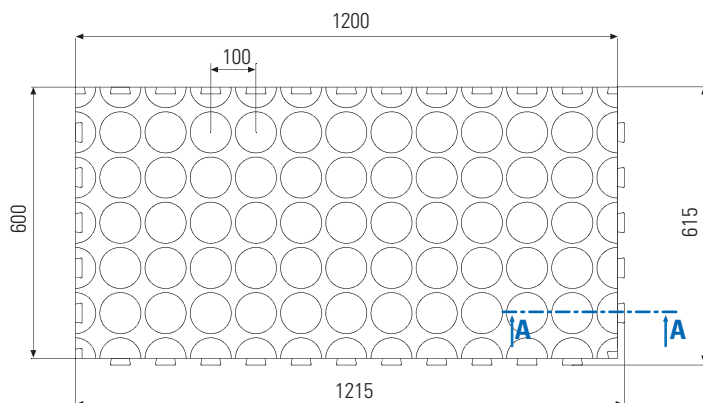
Panel size and minimum system clearances for civil buildings (mm)

(*) Self-levelling screed

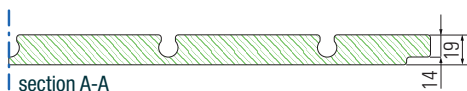
(**) Low thickness fluid screed Knauf Autolivellina NE 425

(***) Low thickness fluid screed Knauf Superlivellina NE 499

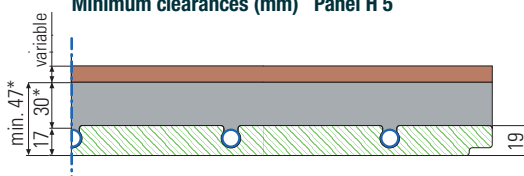
Dimensions (mm) Panel H 5 mm



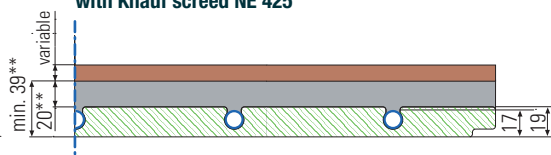
Section (mm) Panel H 5



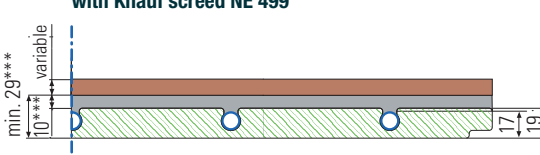
Minimum clearances (mm) Panel H 5



Minimum clearances (mm) Panel H 5 with Knauf screed NE 425



Minimum clearances (mm) Panel H 5 with Knauf screed NE 499



Note: screeds are not supplied by FIV.

The actual thickness of the screed and the implementation mode of the same are to be defined with the manufacturer/supplier of the same according to its specifications, depending on installation conditions (size and type of laying surface, floor type, etc.) and the type of screed chosen.

Basic panel

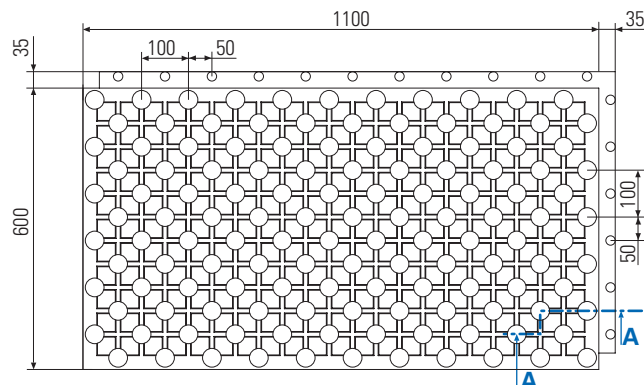
Insulating covered panel interval 50 mm

Panel size and minimum system clearances for civil buildings (mm)

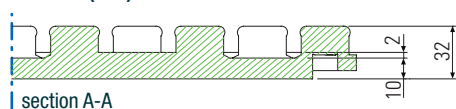
(*) Traditional cement screed

(**) Self-levelling screed or reinforced screed

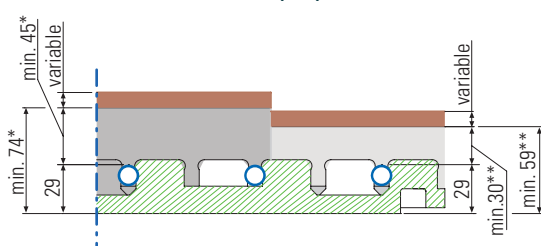
Dimensions (mm) Panel H 10 mm



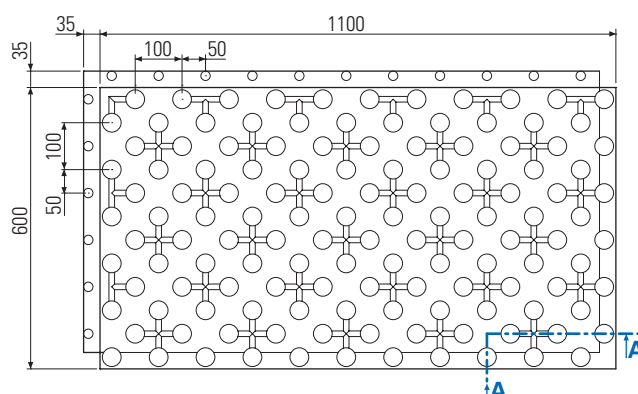
Sections (mm) Panel H 10 mm



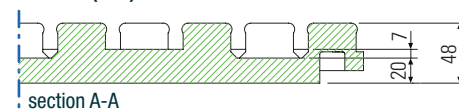
Minimum clearances (mm) Panel H 10 mm



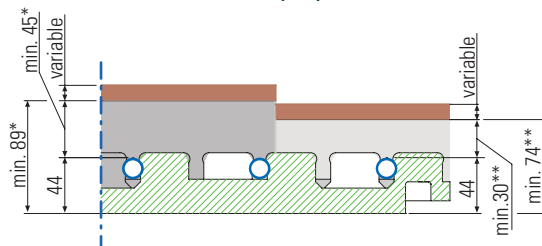
Dimensions (mm) Panel H 20 mm



Sections (mm) Panel H 20 mm



Minimum clearances (mm) Panel H 20 mm



Note: screeds are not supplied by FIV.

The actual thickness of the screed and the implementation mode of the same are to be defined with the manufacturer/supplier of the same according to its specifications, depending on installation conditions (size and type of laying surface, floor type, etc.) and the type of screed chosen.

Phono-Term panel

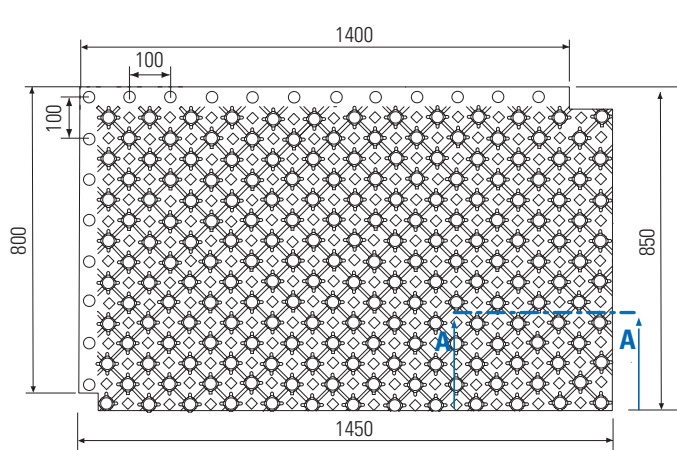
Sound-absorbent panel interval 50 mm

Panel size and minimum system clearances for civil buildings (mm)

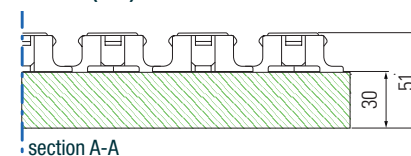
(*) Traditional cement screed

(**) Self-levelling screed or reinforced screed

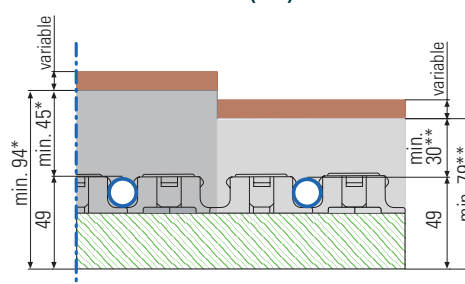
Dimensions (mm) Panel H 30 mm



Sections (mm) Panel H 30 mm



Minimum clearances (mm) Panel H 30 mm



Note: screeds are not supplied by FIV.

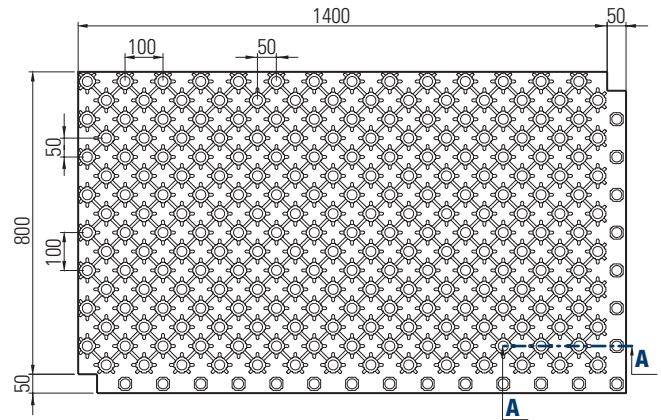
The actual thickness of the screed and the implementation mode of the same are to be defined with the manufacturer/supplier of the same according to its specifications, depending on installation conditions (size and type of laying surface, floor type, etc.) and the type of screed chosen.

Special 2 panel

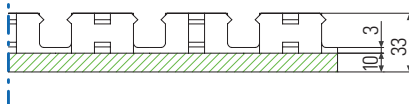
Insulating panel interval 50 mm

Panel size and minimum system clearances for civil buildings (mm)

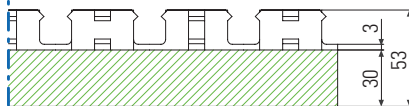
- (1) Traditional cement screed
- (2) Self-levelling screed or reinforced screed
- (3) Low thickness fluid screed Knauf Autolivellina NE 425
- (4) Low thickness fluid screed Knauf Superlivellina NE 499



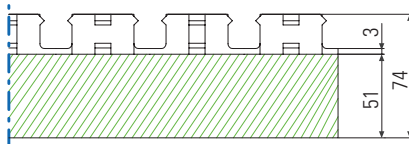
Section A-A (mm) Panel H 10 mm



Section A-A (mm) Panel H 30 mm



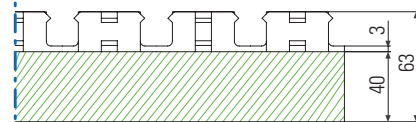
Section A-A (mm) Panel H 51 mm



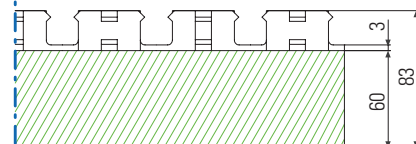
Section A-A (mm) Panel H 20 mm



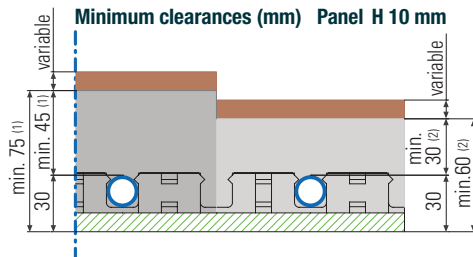
Section A-A (mm) Panel H 40 mm



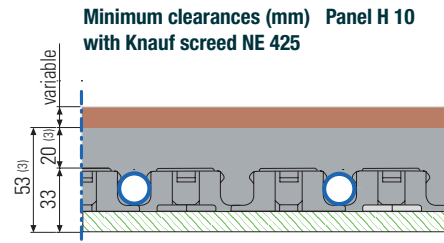
Section A-A (mm) Panel H 60 mm



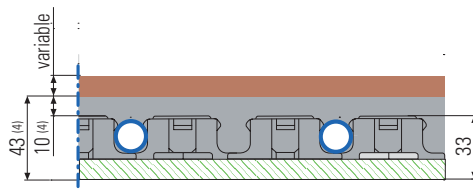
Minimum clearances (mm) Panel H 10 mm



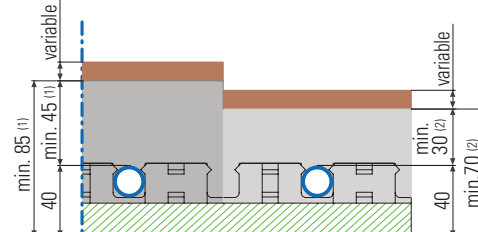
Minimum clearances (mm) Panel H 10 with Knauf screed NE 425



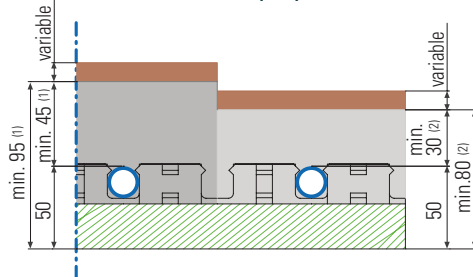
Minimum clearances (mm) Panel H 10 with Knauf screed NE 499



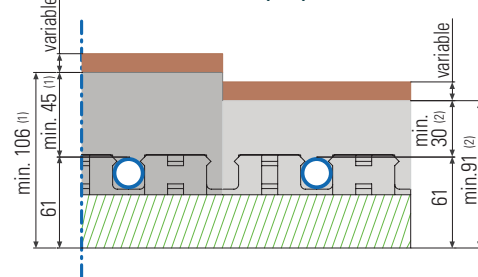
Minimum clearances (mm) Panel H 20 mm



Minimum clearances (mm) Panel H 30 mm



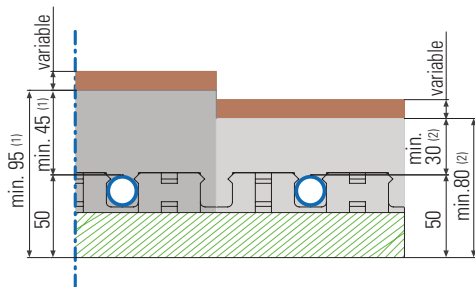
Minimum clearances (mm) Panel H 40 mm



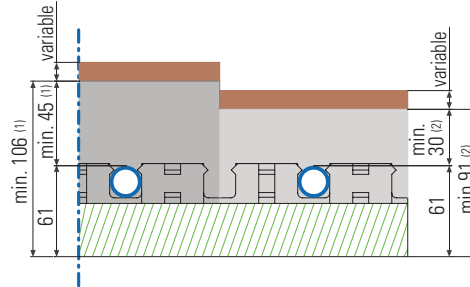
Note: screeds are not supplied by FIV.

The actual thickness of the screed and the implementation mode of the same are to be defined with the manufacturer/supplier of the same according to its specifications, depending on installation conditions (size and type of laying surface, floor type, etc.) and the type of screed chosen.

Minimum clearances (mm) Panel H 51 mm



Minimum clearances (mm) Panel H 60 mm



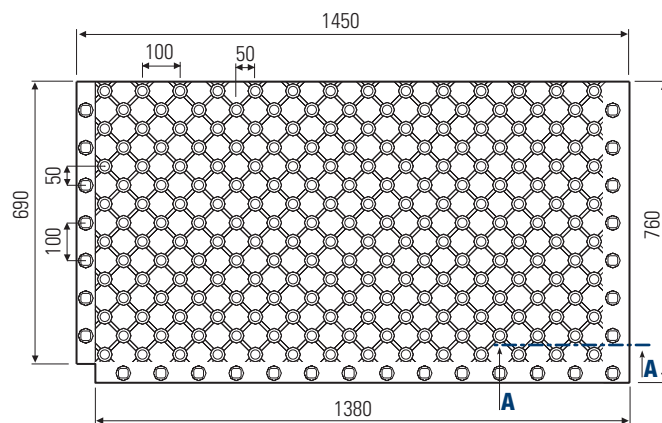
Special panel

Insulating panel interval 50 mm

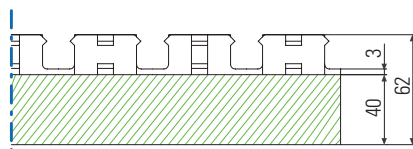
Panel size and minimum system clearances for civil buildings (mm)

(*) Traditional cement screed

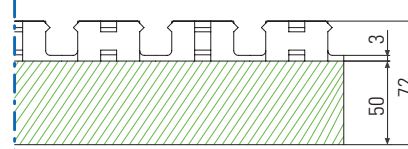
(**) Self-levelling screed or reinforced screed



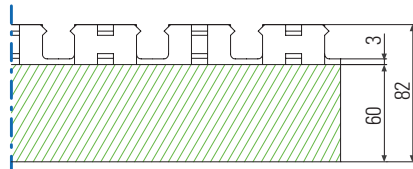
Section A-A (mm) Panel H 40 mm



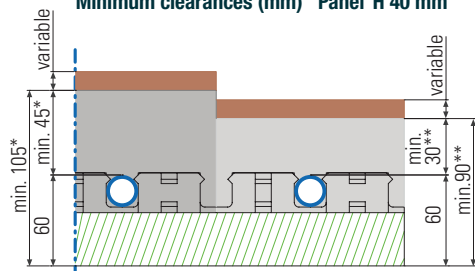
Section A-A (mm) Panel H 50 mm



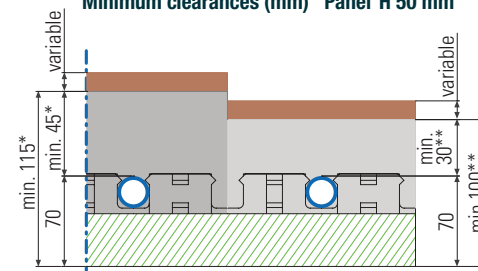
Section A-A (mm) Panel H 60 mm



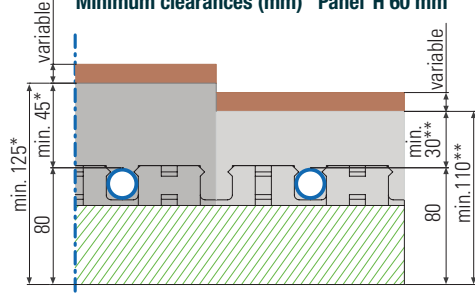
Minimum clearances (mm) Panel H 40 mm



Minimum clearances (mm) Panel H 50 mm



Minimum clearances (mm) Panel H 60 mm



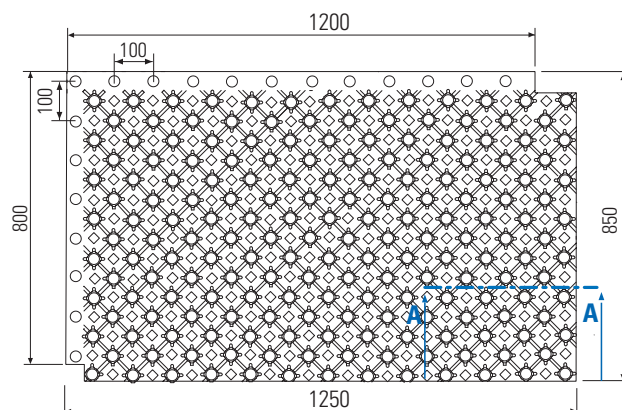
Note: screeds are not supplied by FIV.

The actual thickness of the screed and the implementation mode of the same are to be defined with the manufacturer/supplier of the same according to its specifications, depending on installation conditions (size and type of laying surface, floor type, etc.) and the type of screed chosen.

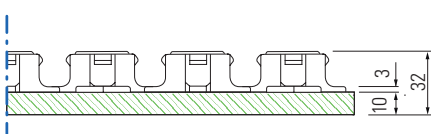
Special G panel Insulating panel interval 50 mm

Panel size and minimum system clearances for civil buildings (mm)

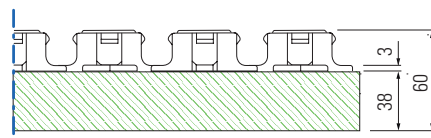
- (1) Traditional cement screed
- (2) Self-levelling screed
- (3) Low thickness fluid screed Knauf Autolivellina NE 425
- (4) Low thickness fluid screed Knauf Superlivellina NE 499



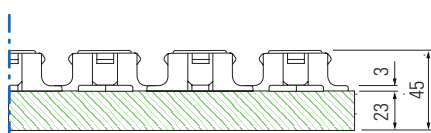
Section A-A (mm) Panel H 10



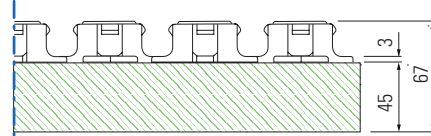
Section A-A (mm) Panel H 38



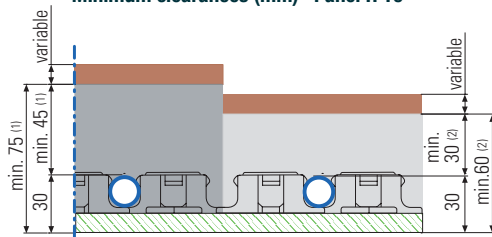
Section A-A (mm) Panel H 23



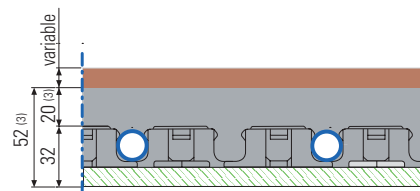
Section A-A (mm) Panel H 45



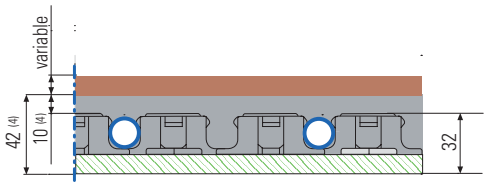
Minimum clearances (mm) Panel H 10



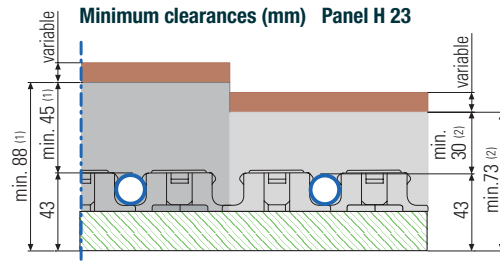
Minimum clearances (mm) Panel H 10 with Knauf screed NE 425



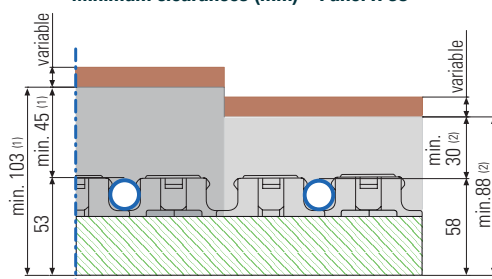
Minimum clearances (mm) Panel H 10 with Knauf screed NE 499



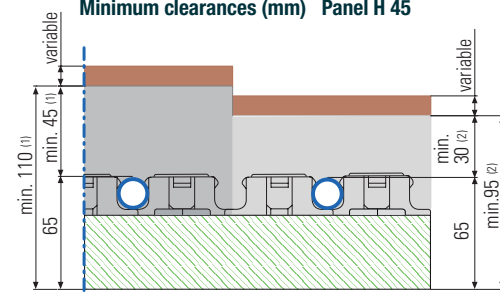
Minimum clearances (mm) Panel H 23



Minimum clearances (mm) Panel H 38



Minimum clearances (mm) Panel H 45



Note: screeds are not supplied by FIV.

The actual thickness of the screed and the implementation mode of the same are to be defined with the manufacturer/supplier of the same according to its specifications, depending on installation conditions (size and type of laying surface, floor type, etc.) and the type of screed chosen.

Roll-Plan panel

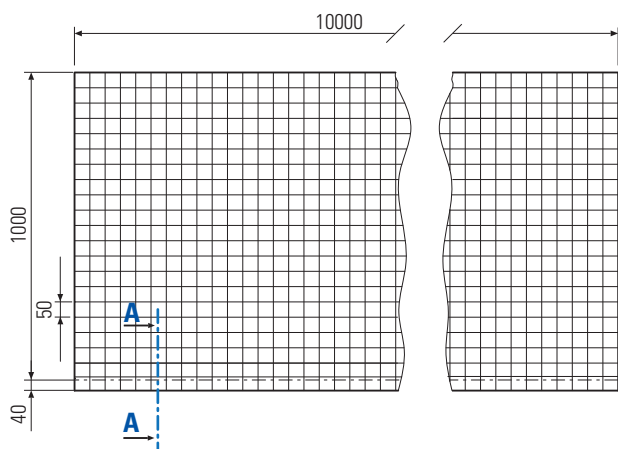
Smooth coated insulating panel

Panel size and minimum system clearances for civil buildings (mm)

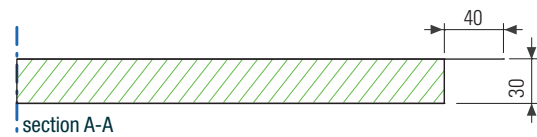
(*) Traditional cement screed

(**) Self-levelling screed or reinforced screed

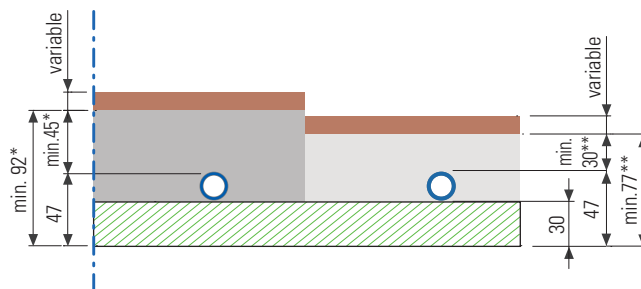
Dimensions (mm) Panel H 30 mm



Sections (mm) Panel H 30 mm



Minimum clearances (mm) Panel H 30 mm



Note: screeds are not supplied by FIV.

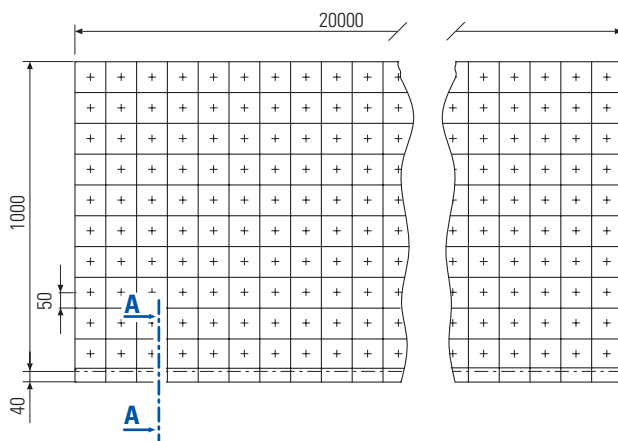
The actual thickness of the screed and the implementation mode of the same are to be defined with the manufacturer/supplier of the same according to its specifications, depending on installation conditions (size and type of laying surface, floor type, etc.) and the type of screed chosen.

Klettjet panel

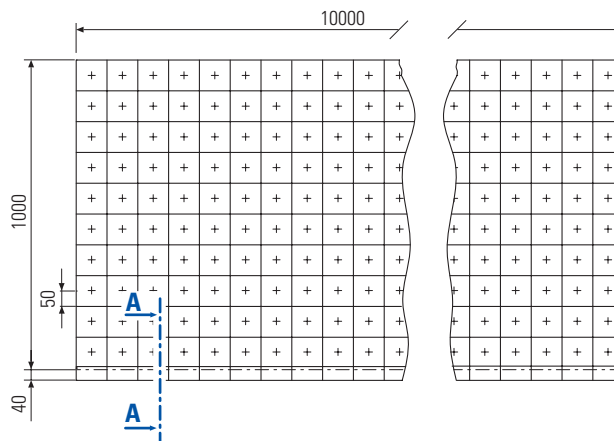
Insulating panel interval 50 mm

Panel size

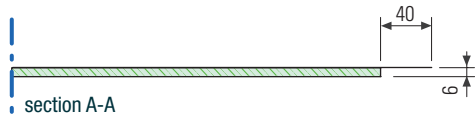
PE Klettjet R insulating panel model H 6 mm



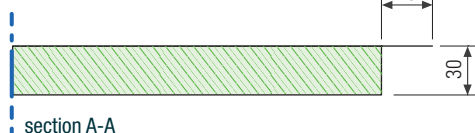
Klettjet EPS-150 insulating panel models H 20, H 30 mm



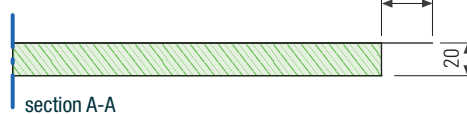
Sections (mm) Panel H 6 mm



Sections (mm) Panel H 30 mm



Sections (mm) Panel H 20 mm

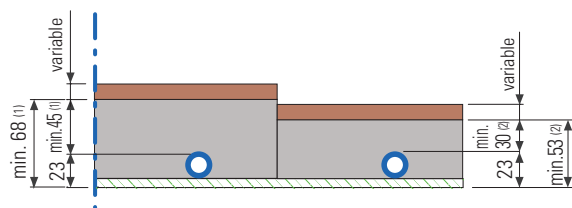


Klettjet panel

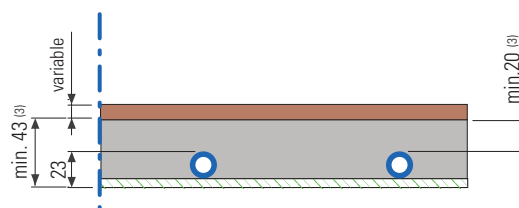
Minimum system clearances for civil buildings (mm)

- (1) Traditional cement screed
- (2) Self-levelling screed
- (3) Low thickness fluid screed Knauf Autolivellina NE 425
- (4) Low thickness fluid screed Knauf Superlivellina NE 499

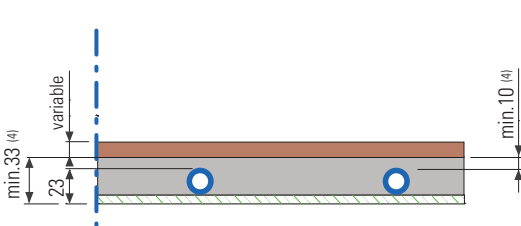
Panel 20000 x 1000 H 6



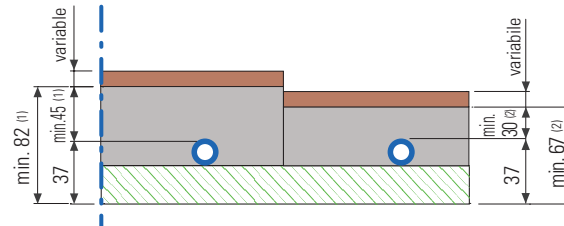
Panel 20000 x 1000 H 6 - with Knauf screed NE 425



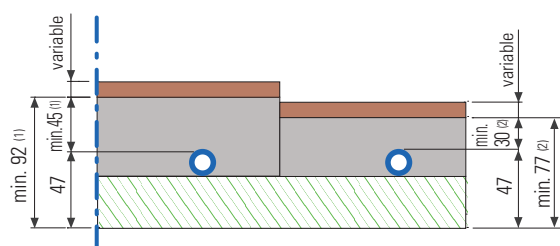
Panel 20000 x 1000 H 6 - with Knauf screed NE 499



Panel 10000 x 1000 H 20



Panel 12000 x 1000 H 30



Note: screeds are not supplied by FIV.

The actual thickness of the screed and the implementation mode of the same are to be defined with the manufacturer/supplier of the same according to its specifications, depending on installation conditions (size and type of laying surface, floor type, etc.) and the type of screed chosen.

PEXPENTA Klett pipe application classes

Classification of conditions of use (UNI EN ISO 21003-1)

Application class	Design temperature T_D (°C)	Time ^b at T_D (years)	T_{max} (°C)	Time at T_{max} (years)	T_{mal} (°C)	Time at T_{mal} (hours)	Typical field of application
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	2,5	70	2,5	100	100	Underfloor heating and low temperature radiators
	40	20					
	60	25					
5 ^b	20	14	90	1	100	100	High temperature radiators
	60	25					
	80	10					

Notes:

T_D design temperature
 T_{max} maximum design temperature for short periods
 T_{mal} malfunction temperature

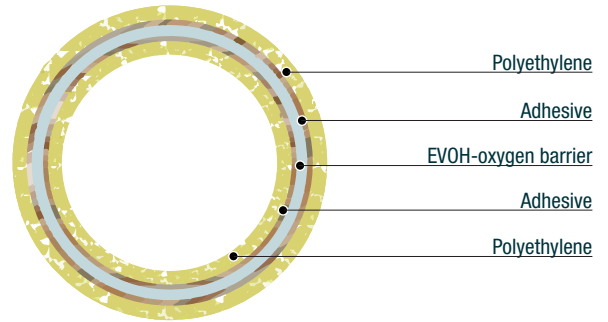
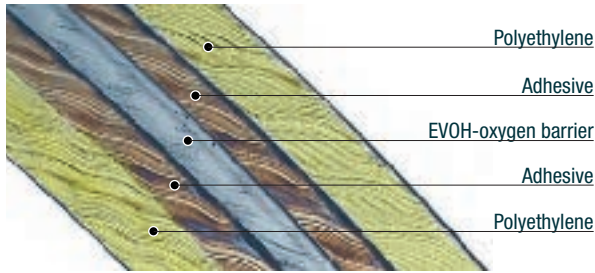
a) A Country may select either class 1 or class 2 in conformity with its national regulations.

b) Where more than one design temperature for time and associated temperature appears for any class, the symbol "+" indicates that a sum must be made. For example, the design temperature profile for 50 years for class 5 should be read as follows: 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 hours.

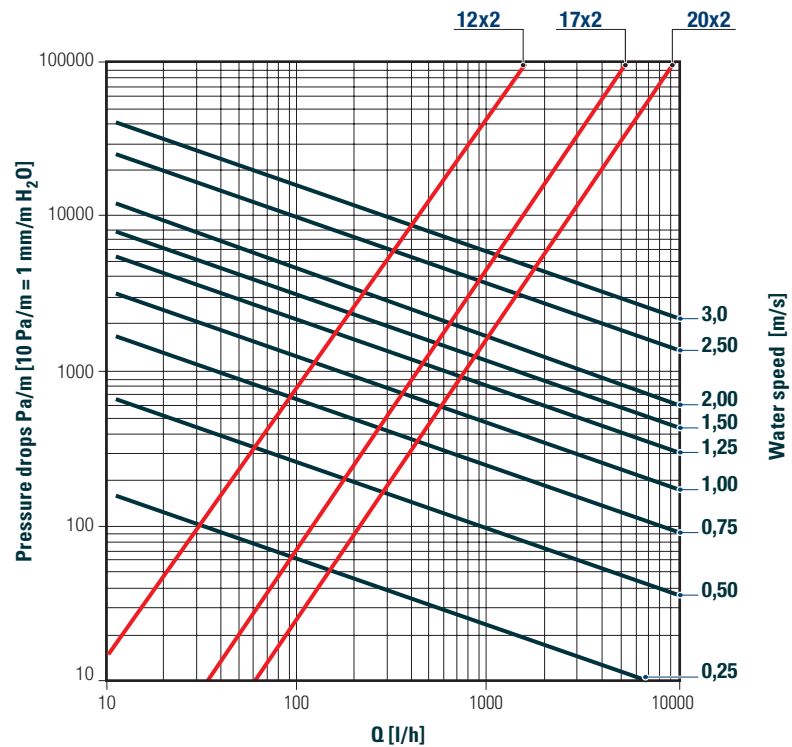
PE-Xc PENTA EVOH oxygen barrier pipe

OXYGEN PERMEABILITY OF PE-XC PENTA PIPES

Oxygen barrier: to prevent the diffusion of oxygen through the PE-Xc molecules, which would increase the aggressiveness of water towards the metal components of the system (e.g. boiler), a layer of ethylene-vinyl alcohol (EVOH) is applied externally to the inner pipe, such as to make it watertight, as required by the DIN 4726 standard. The EVOH layer is in turn protected by a layer of glue and by a PE-Xc outer layer of the same thickness as the outer layer.



Pressure drops with water at 20 °C



Linear expansion

The diagram shows the linear expansion of 1 m of pipe, due to the difference between the temperature of installation and that of use.

The linear expansion is calculated by the formula:

$$\Delta L = \alpha \times L_{\text{inst}} \times (T_{\text{oper}} - T_{\text{inst}})$$

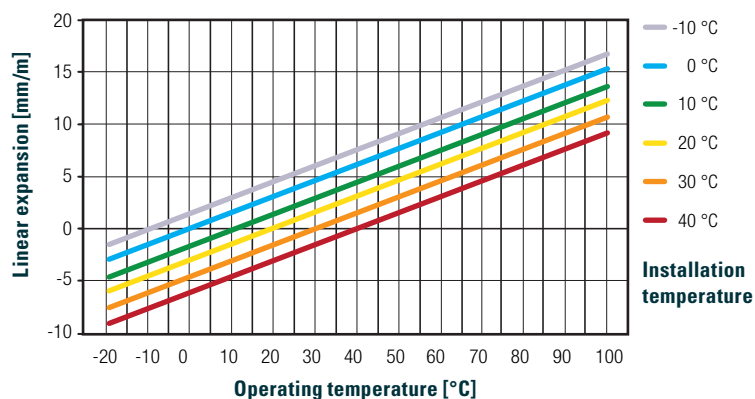
where:

α : coefficient of linear expansion, equal to 0.15 mm/(m °C)

L_{inst} : pipe length at the installation temperature [m]

T_{inst} : temperature at which the pipe is installed [°C]

T_{oper} : temperature at which the pipe is used [°C]



PE-Xc PENTA pipe regression curves

DIAGRAM READING

The maximum stress admitted ($\sigma_{\max}$) for a duration of 50 years at a certain temperature is identified by intersecting the straight line (vertical) pertaining to the 50 years with the straight line pertaining to the temperature.

The equivalent pressure value is obtained through:

$$p_{\max} (\text{bar}) = \frac{20 \times \sigma_{\max} \times S_p}{D - S_p}$$

where:
 $\sigma_{\max}$ = maximum admissible stress (MPa)
 S_p = pipe thickness (mm)
 D = external pipe $\varnothing$ (mm)

Once the operating pressure (p_{es}) is known, the safety coefficient will be equal to

$$K_s = p_{\max} / p_{es}$$

Example:

Fluid temperature = 60 °C

$D = 17 \text{ mm}$

$S_p = 2 \text{ mm}$

Duration = 50 years

$$p_{\max} (\text{bar}) = \frac{20 \times 6 \times 2}{17 - 2} = \frac{240}{15} = 16 \text{ bar}$$

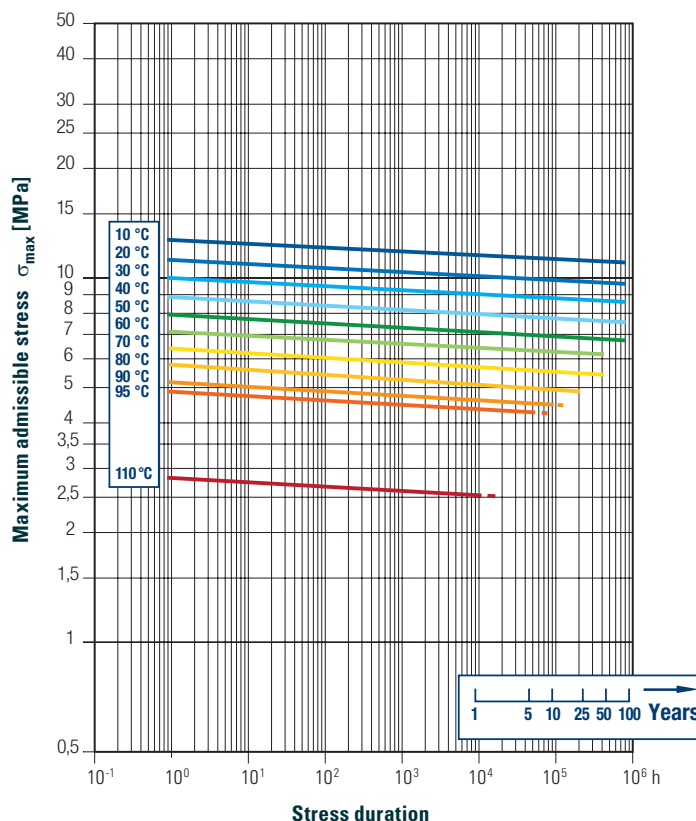


Diagram made according to UNI EN ISO 21003-2

PE-Xc PENTA pipe application classes

5 LAYERS PIPE PE-Xc / EVOH / PE-Xc

Classification of conditions of use (UNI EN ISO 21003-1)

Application class	Design temperature T_D (°C)	Time ^b at T_D (years)	$T_{\max}$ (°C)	Time at $T_{\max}$ (years)	T_{mal} (°C)	Time at T_{mal} (hours)	Typical field of application
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 +	2,5	70	2,5	100	100	Underfloor heating and low temperature radiators
	40 +	20					
	60	25					
5 ^b	20 +	14	90	1	100	100	High temperature radiators
	60 +	25					
	80	10					

Notes:

T_D design temperature

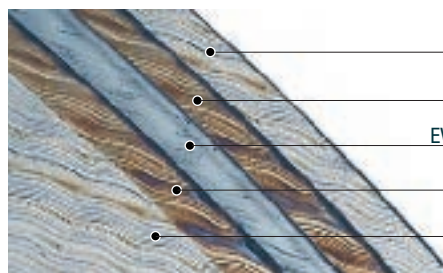
$T_{\max}$ maximum design temperature for short periods

T_{mal} malfunction temperature

a) A Country may select either class 1 or class 2 in conformity with its national regulations.

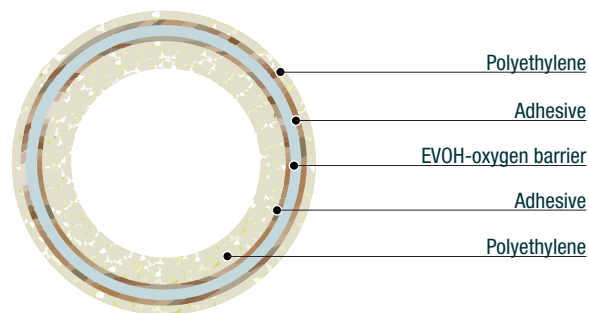
b) Where more than one design temperature for time and associated temperature appears for any class, the symbol "+" indicates that a sum must be made. For example, the design temperature profile for 50 years for class 5 should be read as follows: 20 °C for 14 years, followed by 60 °C for 25 years, 80 °C for 10 years, 90 °C for 1 year and 100 °C for 100 hours.

PE-Xa 5 layers EVOH oxygen barrier pipe

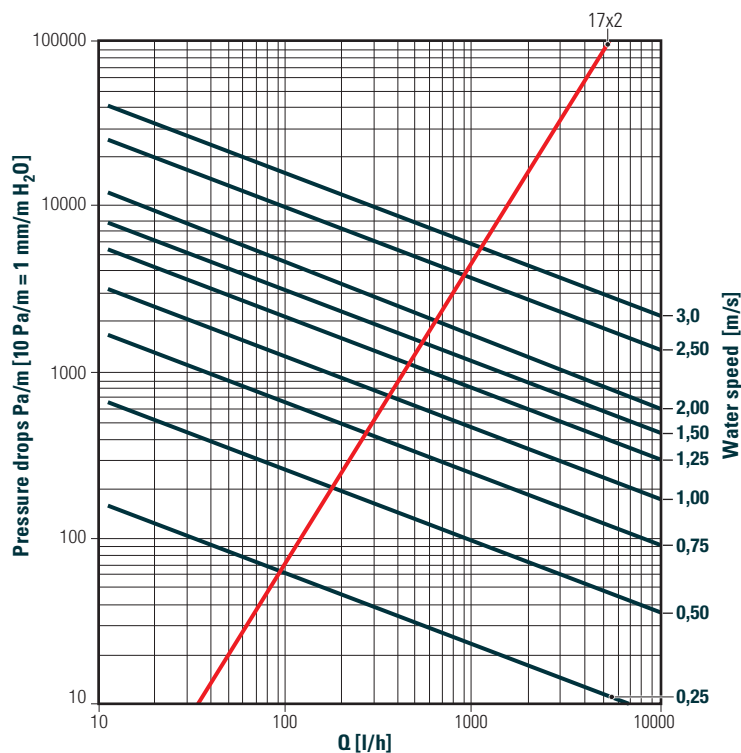


OXYGEN PERMEABILITY OF PE-Xa 5 LAYERS PIPES

Oxygen barrier: to prevent the diffusion of oxygen through the PE-Xa molecules, which would increase the aggressiveness of water towards the metal components of the system (e.g. boiler), a layer of ethylene-vinyl alcohol (EVOH) is applied externally to the pipe, such as to make it watertight, as required by the DIN 4726 standard. The EVOH layer is in turn protected by a layer of glue and by an outer layer of PE-Xa.



Pressure drops with water at 20 °C



Linear expansion

The diagram shows the linear expansion of 1 m of pipe, due to the difference between the temperature of installation and that of use.

The linear expansion is calculated by the formula:

$$\Delta L = \alpha \times L_{\text{inst}} \times (T_{\text{oper}} - T_{\text{inst}})$$

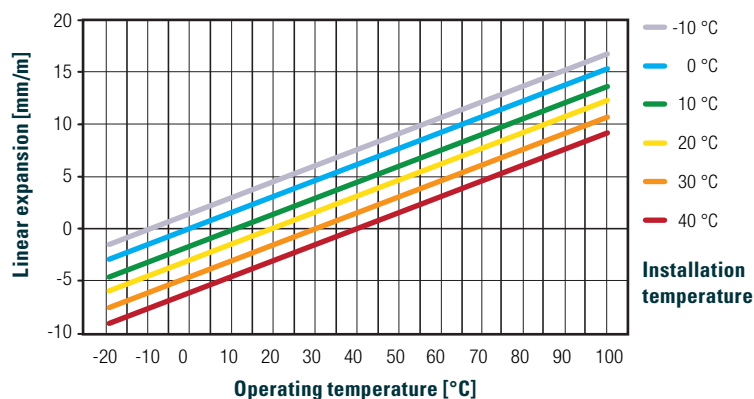
where:

α : coefficient of linear expansion, equal to 0.15 mm/(m °C)

L_{inst} : pipe length at the installation temperature [m]

T_{inst} : temperature at which the pipe is installed [°C]

T_{oper} : temperature at which the pipe is used [°C]



PE-Xa 5 layers regression curves

DIAGRAM READING

The maximum stress admitted ($\sigma_{\max}$) for a duration of 50 years at a certain temperature is identified by intersecting the straight line (vertical) pertaining to the 50 years with the straight line pertaining to the temperature. The equivalent pressure value is obtained through:

$$p_{\max} (\text{bar}) = \frac{20 \times \sigma_{\max} \times S_p}{D - S_p}$$

where:

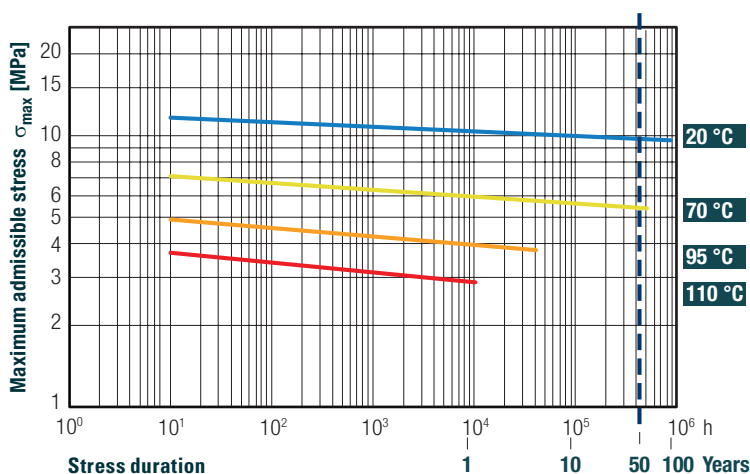
$\sigma_{\max}$ = maximum admissible stress (MPa)

S_p = pipe thickness (mm)

D = external pipe Ø (mm)

Once the operating pressure (p_{es}) is known, the safety coefficient will be equal to $K_s = p_{\max}/p_{es}$

Example:
Fluid temperature = 70 °C
D = 17 mm
 S_p = 2 mm
Duration = 50 years
 $p_{\max} (\text{bar}) = \frac{20 \times 5 \times 2}{17 - 2} = \frac{220}{15} = 13,3 \text{ bar}$



PE-Xa 5 layers pipe application classes

5 LAYERS PIPE PE-Xa / EVOH / PE-Xa Classification of conditions of use (UNI EN ISO 15875-2)

Application class	Design temperature T_D (°C)	Time ^b at T_D (years)	$T_{\max}$ (°C)	Time at $T_{\max}$ (years)	T_{mal} (°C)	Time at T_{mal} (hours)	Typical field of application
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 +	2,5	70	2,5	100	100	Underfloor heating and low temperature radiators
	40 +	20					
	60	25					
5 ^b	20 +	14	90	1	100	100	High temperature radiators
	60 +	25					
	80	10					

Notes:

T_D design temperature

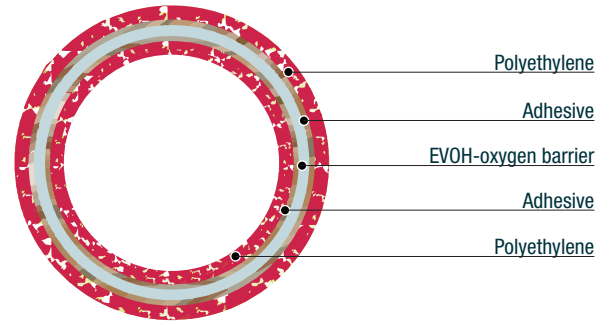
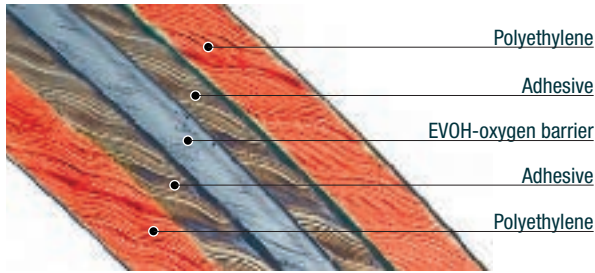
$T_{\max}$ maximum design temperature for short periods

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, the symbol "+" indicates that a sum must be made. For example, the design temperature profile for 50 years for class 5 should be read as follows: 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 hours.

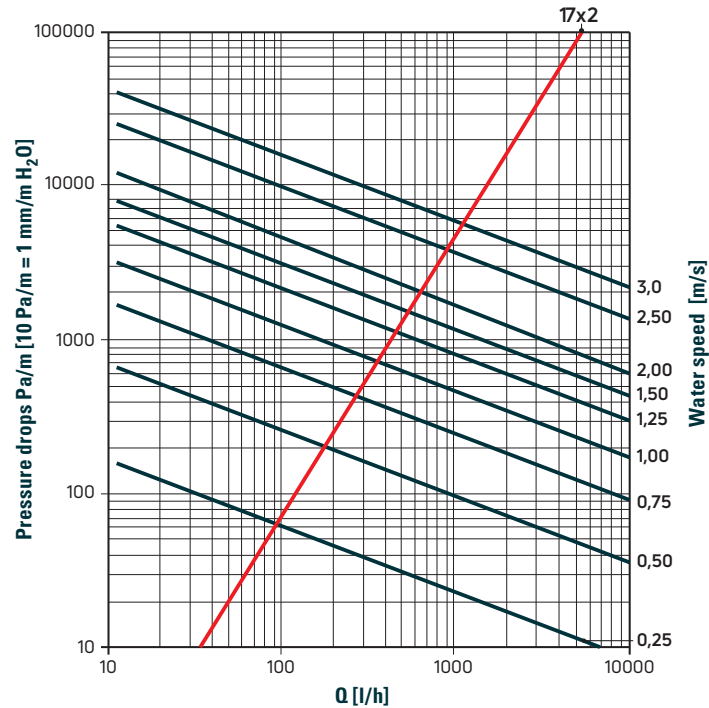
PE-RT Type II 5 layers EVOH oxygen barrier pipe



OXYGEN PERMEABILITY OF PE-Xc 5 LAYERS PIPES

Oxygen barrier: to prevent the diffusion of oxygen through the PE-RT molecules, which would increase the aggressiveness of water towards the metal components of the system (e.g. boiler), a layer of ethylene-vinyl alcohol (EVOH) is applied externally to the inner pipe, such as to make it watertight, as required by the DIN 4726 standard. The EVOH layer is in turn protected by a layer of glue and by a PE-RT outer layer of the same thickness as the outer layer.

Pressure drops with water at 20 °C



Linear expansion

The diagram shows the linear expansion of 1 m of pipe, due to the difference between the temperature of installation and that of use.

The linear expansion is calculated by the formula:

$$\Delta L = \alpha \times L_{\text{inst}} \times (T_{\text{oper}} - T_{\text{inst}})$$

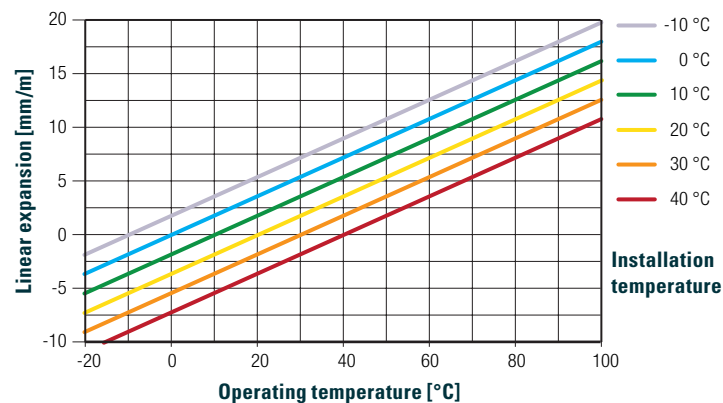
where:

α : coefficient of linear expansion, equal to 0.19 mm/(m °C)

L_{inst} : pipe length at the installation temperature [m]

T_{inst} : temperature at which the pipe is installed [°C]

T_{oper} : temperature at which the pipe is used [°C]



PE-RT 5 layers regression curves

DIAGRAM READING

The maximum stress admitted ($\sigma_{\max}$) for a duration of 50 years at a certain temperature is identified by intersecting the straight line (vertical) pertaining to the 50 years with the straight line pertaining to the temperature. The equivalent pressure value is obtained through:

$$p_{\max} \text{ (bar)} = \frac{20 \times \sigma_{\max} \times S_p}{D - S_p}$$

where:

$\sigma_{\max}$ = maximum admissible stress (MPa)

S_p = pipe thickness (mm)

D = external pipe Ø (mm)

Once the operating pressure (p_{es}) is known, the safety coefficient will be equal to $K_s = p_{\max}/p_{es}$

Example:

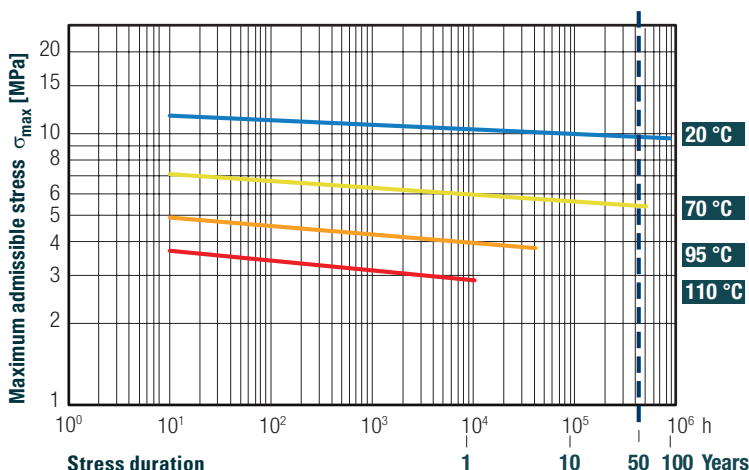
Fluid temperature = 70 °C

$D = 17 \text{ mm}$

$S_p = 2 \text{ mm}$

Duration = 50 years

$$p_{\max} \text{ (bar)} = p_{\max} \text{ (bar)} = \frac{20 \times 5,5 \times 2}{17 - 2} = \frac{220}{15} = 14,7 \text{ bar}$$



PE-RT 5 layers pipe application classes

5 LAYERS PIPE PE-RT / EVOH / PE-RT Classification of conditions of use (UNI EN ISO 22391-1)

Application class	Design temperature T_D (°C)	Time ^b at T_D (years)	$T_{\max}$ (°C)	Time at $T_{\max}$ (years)	T_{mal} (°C)	Time at T_{mal} (hours)	Typical field of application
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	2,5	70	2,5	100	100	Underfloor heating and low temperature radiators
	40	20					
	60	25					
5 ^b	20	14	90	1	100	100	High temperature radiators
	60	25					
	80	10					

Notes:

T_D design temperature

$T_{\max}$ maximum design temperature for short periods

T_{mal} malfunction temperature

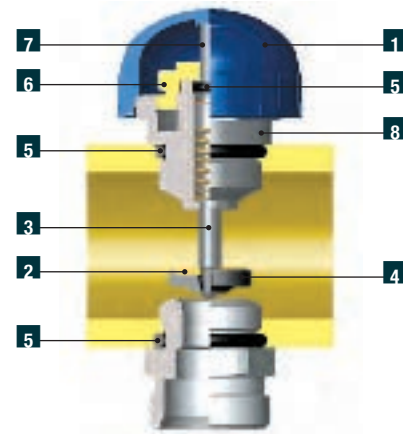
a) A Country may select either class 1 or class 2 in conformity with its national regulations.

b) Where more than one design temperature for time and associated temperature appears for any class, the symbol "+" indicates that a sum must be made. For example, the design temperature profile for 50 years for class 5 should be read as follows: 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 hours.

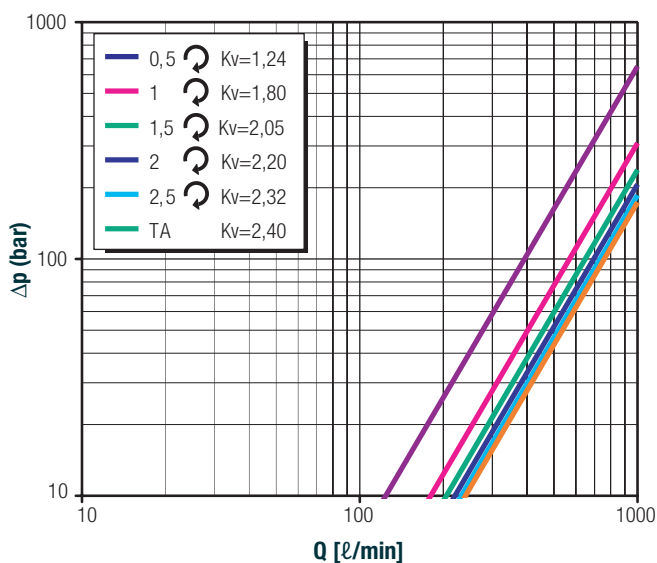
Manual valve

CONSTRUCTION MANUAL VALVE for electrothermal heads

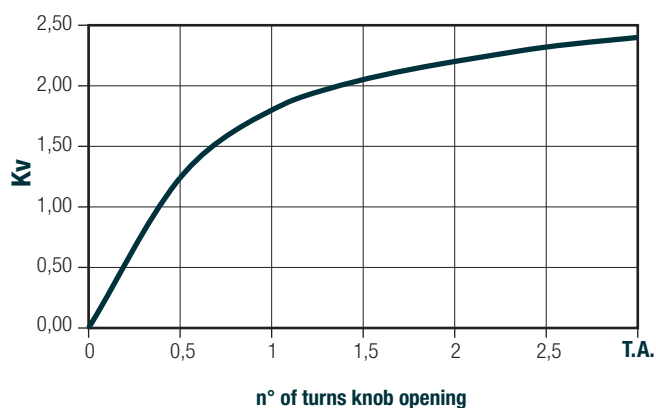
- 1** Blue ABS cap
- 2** Nickel-plated brass gasket plate, UNI EN 12164 CW614N
- 3** Nickel-plated brass stopper stem, UNI EN 12164 CW614N
- 4** NBR stopper seal
- 5** O-ring in EPDM 70
- 6** Nickel-plated brass nut, UNI EN 12164 CW614N
- 7** AISI 304 steel propulsion stem
- 8** Nickel-plated brass body, UNI EN 12164 CW614N



PRESSURE DROPS (VALVE WITH MANUAL CONTROL HANDWHEEL)



KV VALUES (VALVE WITH MANUAL CONTROL HANDWHEEL)



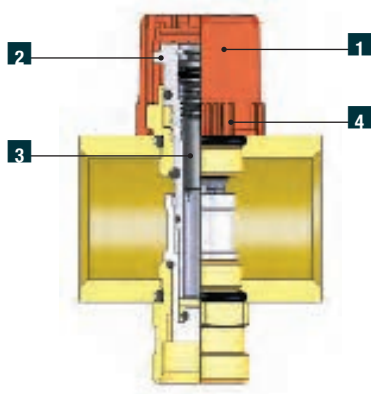
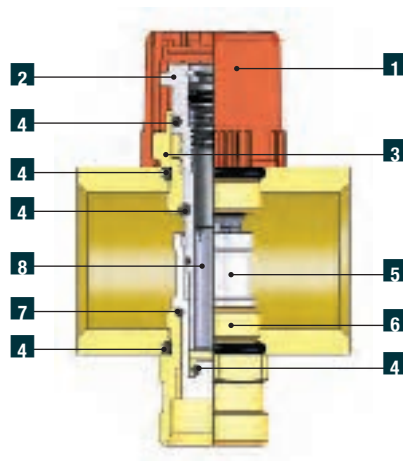
TA: All open. The values shown refer to water temperature at 15 °C

= No. of turns for opening adjustment device **3**

Transformable lockshield

LOCKSHIELD CONSTRUCTION

- 1** Cap in red ABS
- 2** Regulator in PPO
- 3** Nickel-plated brass pipe union, UNI EN 12164 CW614N
- 4** O-ring in EPDM 70
- 5** Flow meter shutter seat in PPO
- 6** Nickel-plated brass branch, UNI EN 12164 CW614N
- 7** O-ring in NBR 70
- 8** Shutter in PPO



LOCKSHIELD ADJUSTMENT

The lockshield is delivered in partially OPEN position.

To carry out the adjustment:

- 1 - Remove the cap **1**;
- 2 - Overturn the cap **1** and use the imprint on it to manually rotate the lockshield **2** anticlockwise until you feel resistance to rotation;
- 3 - With a CH4 Allen key, screw the regulator completely **3**;

The lockshield is now ready to be set:

- 4 - Unscrew the regulator **3** by the number of required turns, see diagram;
- 5 - Reinsert the cap.

It is also possible to seal, by plumbing, the cap in the position reached using the holes in the flaps **4** to secure it directly to the manifold, thereby preventing any tampering.

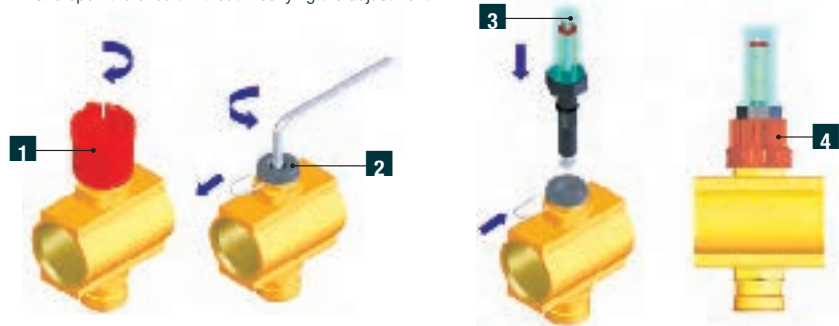
Replacement with flow meter cartridge

REPLACEMENT OF THE REGULATOR WITH A FLOW METER CARTRIDGE (FIG. B)

The FIV transformable lockshield allows to integrate to it a flow meter:

- with system running;
- without any water loss;
- with a simple and quick operation.

- 1 - Close the lockshield using the cap **1**;
- 2 - Remove the regulator **2** using an Allen key and a screwdriver;
- 3 - Insert the measuring cartridge **3** and the relative ring nut **4**;
- 4 - Manually turn the ring nut **4** anticlockwise until you feel resistance to rotation;
- 5 - Calibrate using the measuring cartridge **3** until the desired flow rate is reached (directly shown on the flow meter).
- 6 - Raise the ring nut **4** until it click indicating that it is in the correct position: it is now possible to close and open the circuit without modifying the adjustment.

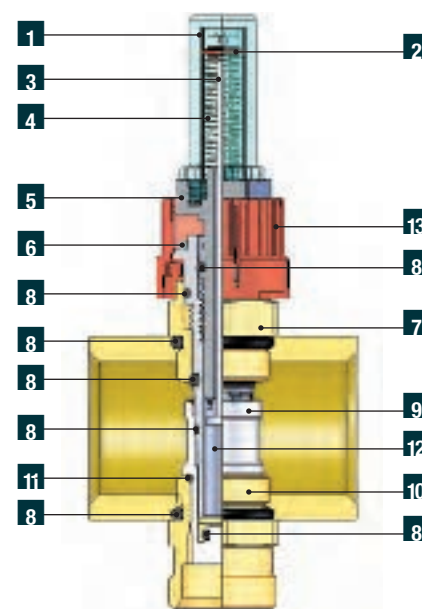


Lockshield with flow meter

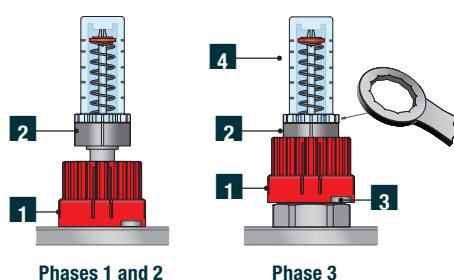
Operating range	0÷4 l/min
Max. operating pressure	6 bar
Max. operating temperature	90 °C
Pressure drops $K_v = 0,15 (1 \text{ l/min}) \div 0,55 (4 \text{ l/min})$	
K_v max (out of scale)	$K_v = 0,9$
Precision	±10% end of scale
Test pressure (25 °C max)	10 bar

LOCKSHIELD CONSTRUCTION with incorporated flow meter

- 1 Flow meter glass in NYLON
- 2 Flow indicator in NYLON
- 3 Flow meter stem in NYLON
- 4 Flow meter spring in AISI 304 steel
- 5 Flow meter regulator in PPO
- 6 Split pin for lockshield/flow meter in steel
- 7 Nickel-plated brass pipe union, UN I EN 12164 CW614N
- 8 O-ring in EPDM 70
- 9 Flow meter shutter seat in PPO
- 10 Nickel-plated brass branch, TN UNI EN 12164 CW614N
- 11 O-ring in NBR 70
- 12 Shutter in PPO
- 13 Adjustment ring nut in red ABS



Lockshield adjustment



FLOW RATE ADJUSTMENT (DO NOT USE TOOLS)

The flow meter is delivered in a partially OPEN position.

To carry out the adjustment:

- Phase 1 Manually rotate the ring nut **1** anticlockwise until you feel resistance to rotation.
- Phase 2 Calibrate using the regulator **2** until the desired flow rate is reached (directly shown on the flow meter).
- Phase 3 Raise the ring nut **1** until it click indicating that it is in the correct position: it is now possible to close and open the circuit without modifying the adjustment.

Note: All the above operations must be performed manually.

It is also possible to seal, by plumbing, the ring nut in the position reached using the holes in the flaps **3** to secure it:

- directly to the manifold, preventing any tampering;
- to the flow meter, making it possible to close the flow without modifying the set maximum opening calibration.

GLASS CLEANING

- Turn the ring nut **1**, clockwise until the lockshield is completely closed.
- Remove the glass **4** by unscrewing it from the regulator **2** with a 17 mm polygonal key.
- Clean the glass and screw it back on the regulator **2**.
- Turn the ring nut **1** manually anticlockwise until you feel resistance to rotation.

Controller / Controller S manifold diagrams

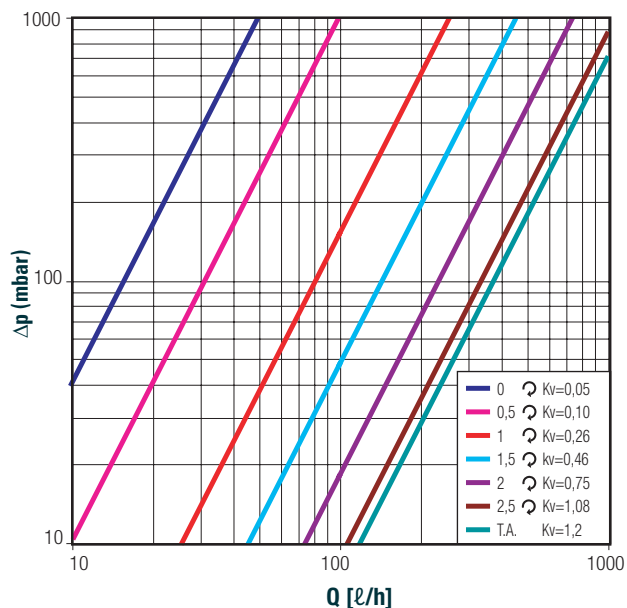
LOCKSHIELD AND FLOW METER PRESSURE DROPS

TA = All open. The values shown refer to water temperature at 15 °C

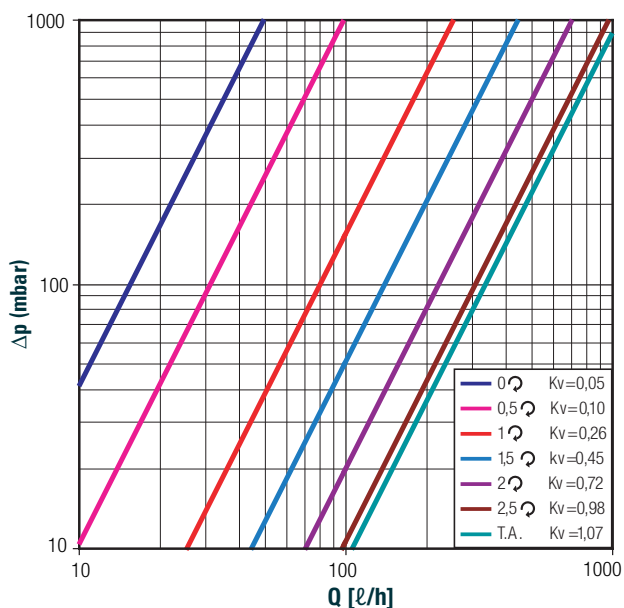
$\Delta p = \Delta p_{\text{delivery}} + \Delta p_{\text{return}}$

 = No. of turns for opening adjustment device

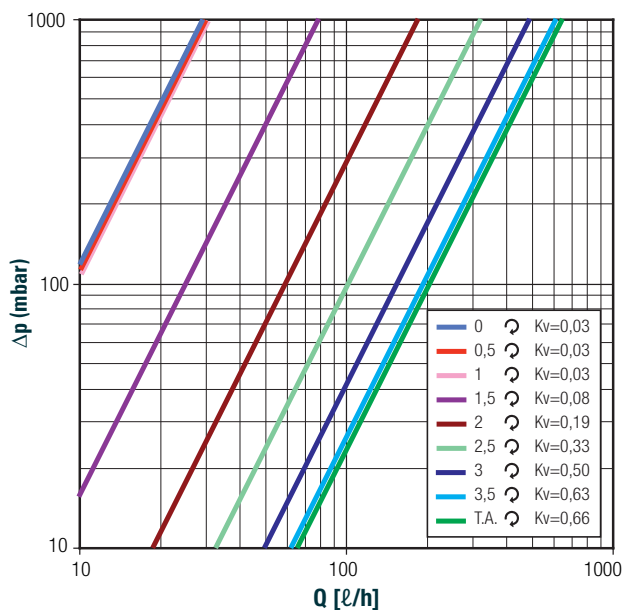
PRESSURE DROPS (LOCKSHIELD)



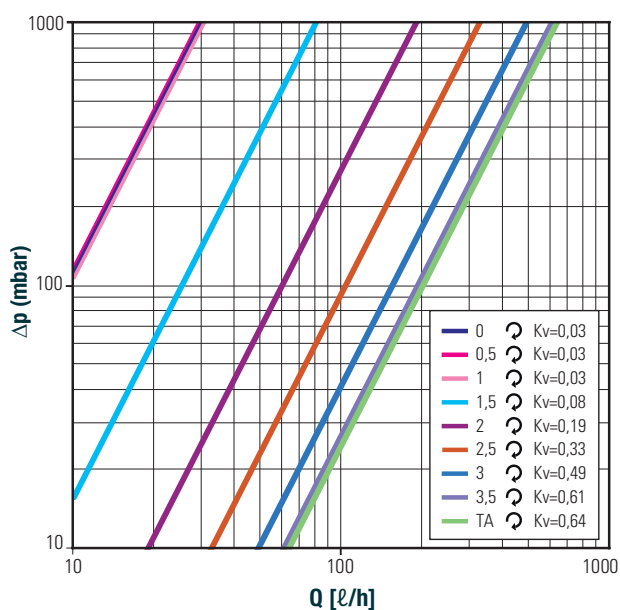
PRESSURE DROPS (LOCKSHIELD + VALVE FULLY OPEN)



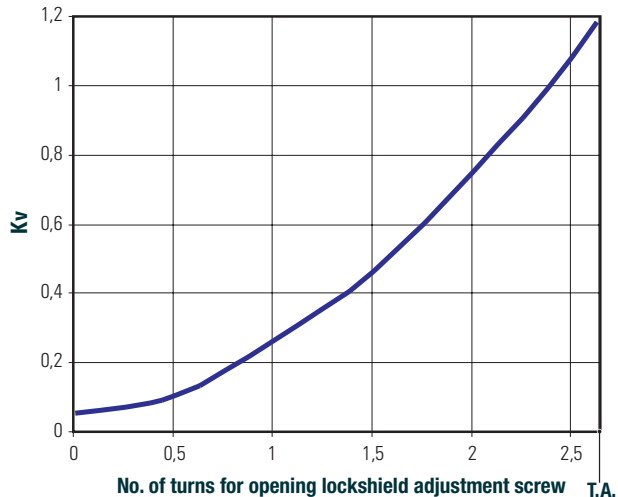
PRESSURE DROPS (FLOW METER)



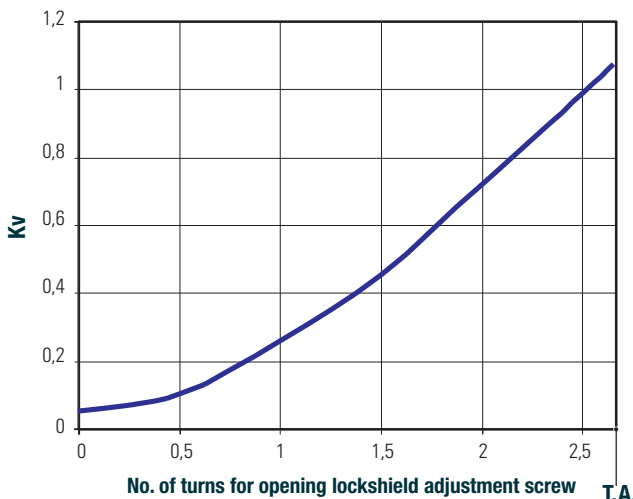
PRESSURE DROPS (FLOW METER + VALVE FULLY OPEN)



KV VALUES (LOCKSHIELD)



KV VALUES ACCORDING TO DIFFERENT OPENINGS (LOCKSHIELD + VALVE FULLY OPEN)



Controller / Controller S manifold diagrams

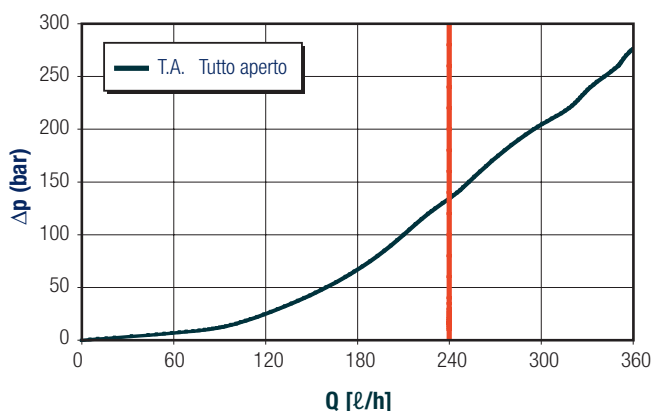
LOCKSHIELD AND FLOW METER PRESSURE DROPS

TA = All open. The values shown refer to water temperature at 15 °C

$\Delta p = \Delta p_{\text{delivery}} + \Delta p_{\text{return}}$

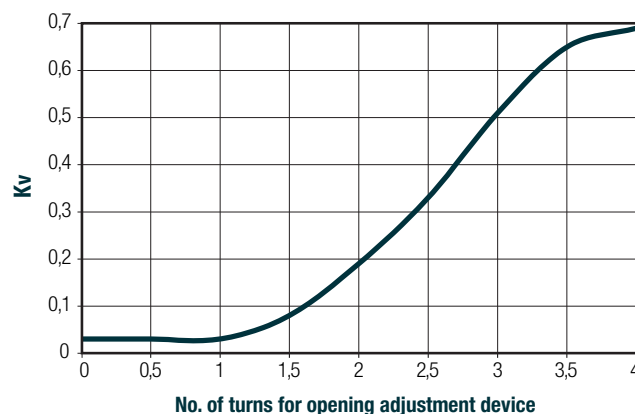
= No. of turns for opening adjustment device

FLOW METER PRESSURE DROPS

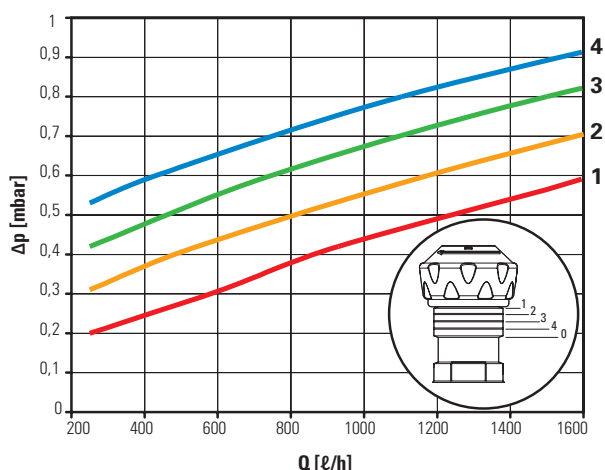


— Flow rate limit indicated by standard flow meter 4 l/min

FLOW METER Kv VALUES 4 l/min



ADJUSTMENT DIAGRAM TERMINAL KIT WITH BY-PASS



EXAMPLE OF CALCULATION

Calculation of the pressure drop Δp with a water flow rate Q of 200 l/h determined by valve and lockshield with an opening of 2.5 turns of the lockshield adjustment screw.

1° Method

Use of pressure drops diagram - Q = 200 l/h - $\Delta p = 60$ mbar

Kv represents the flow rate Q in m³/h according to a Δp equal to 1 bar: $Kv = Q / \sqrt{\Delta p}$. The relation linking the Δp [ba] to the flow rate Q [m³/h] is the following: $\Delta p = Q^2 / Kv^2$

2° Method

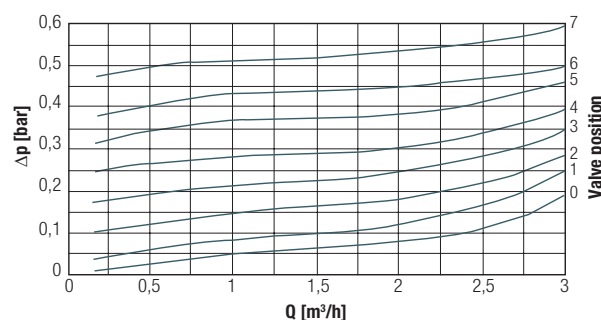
Use of Kv diagram

$Kv = 0,82$ - Q = 0,2 m³/h

$\Delta p = 0,2^2 / 0,82^2 = 0,06$ bar

Terminal kit with by-pass

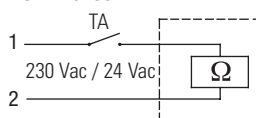
OVERPRESSURE VALVE DIAGRAM



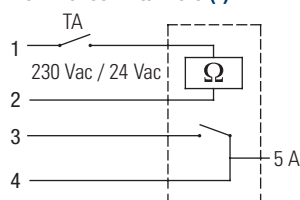
TEF 08 electrothermic heads

ELECTRICAL CONNECTIONS

NC 24 V/230 V
NO 24 V/230 V



NC 24V/230V - c/micro (*)



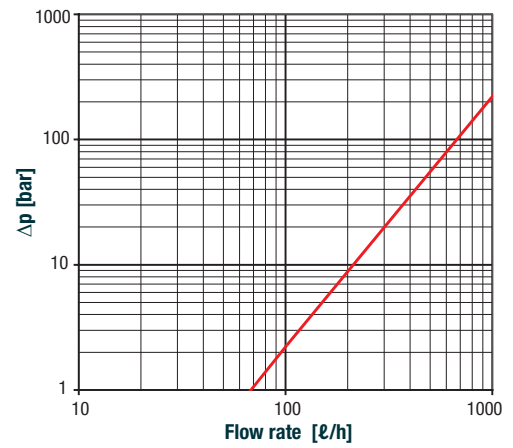
(*) with micro-switch

TA Room thermostat

- 1 Brown
- 2 Blue
- 3 Black
- 4 Black

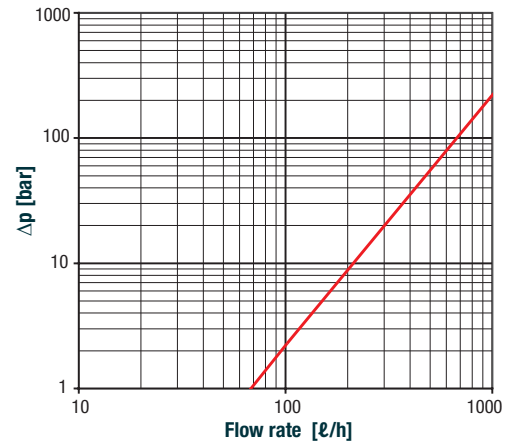
Istant manifold with taps

PRESSURE DROPS
of a single way with the tap open
($K_v = 2,064$)



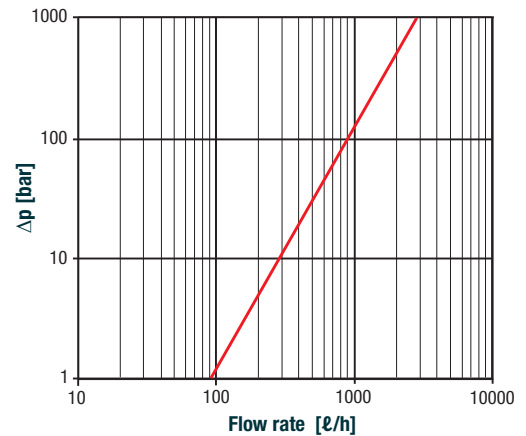
Thermoday pressed manifold

PRESSURE DROPS
of a single way
($K_v = 2,064$)

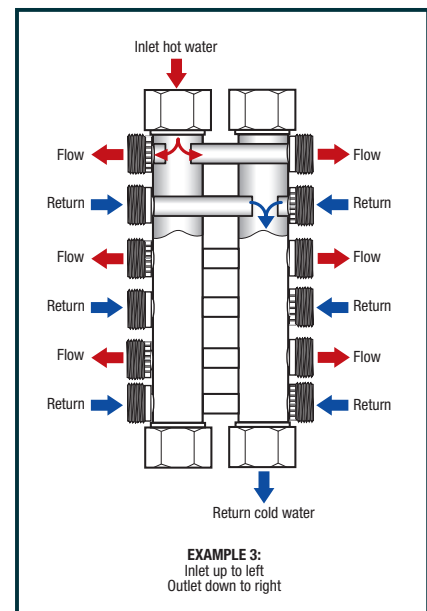
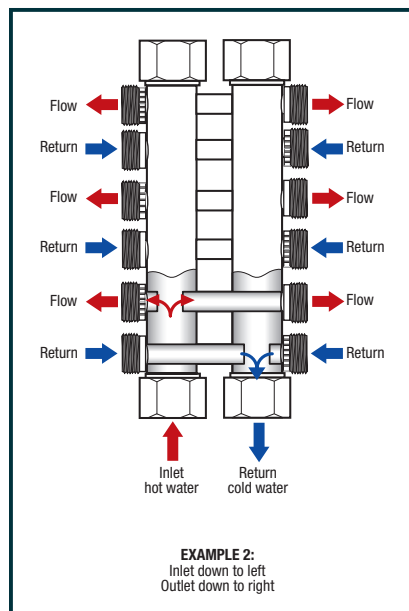
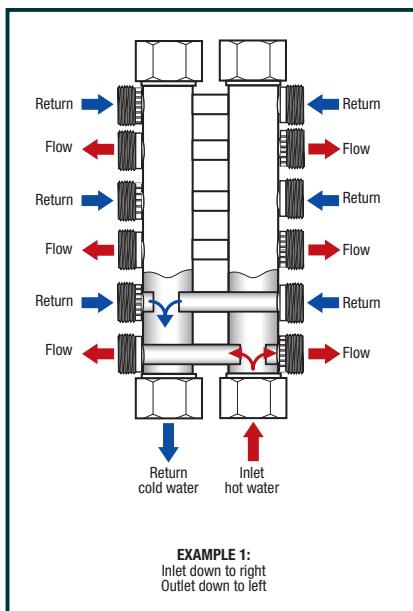


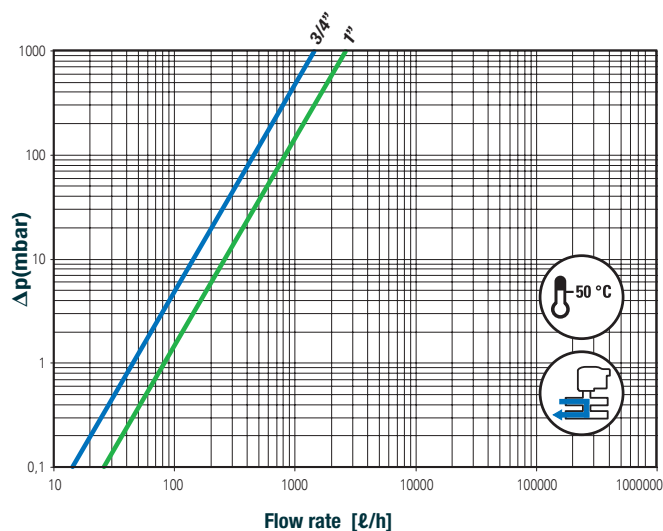
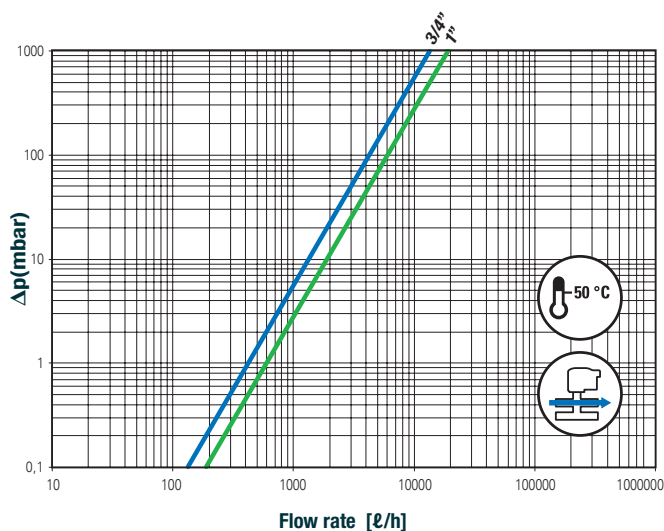
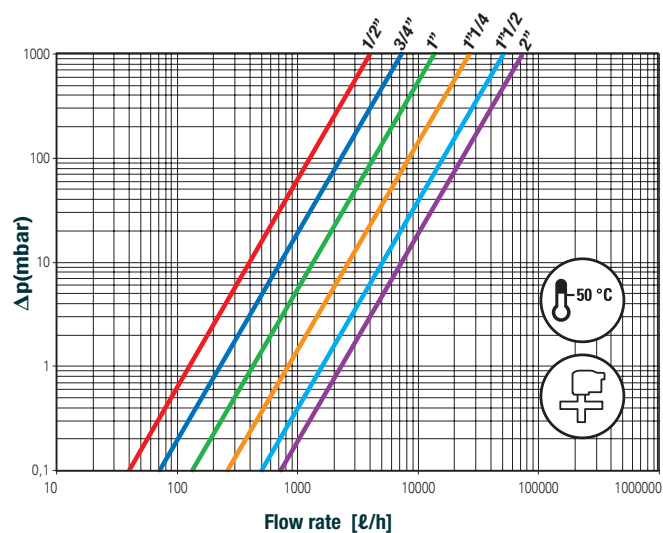
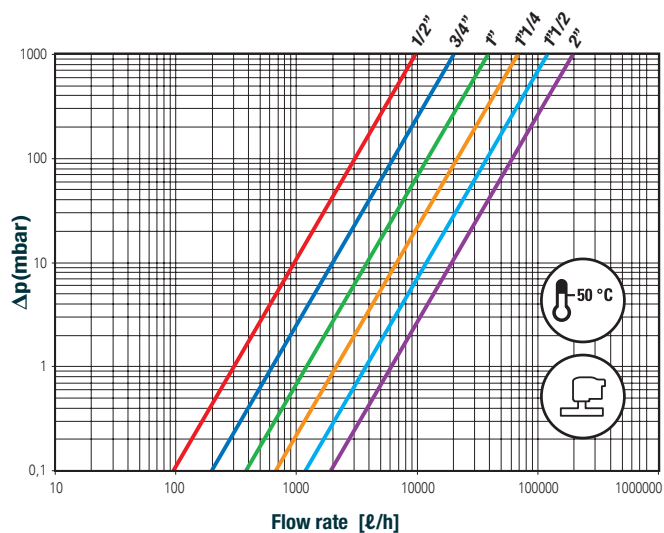
Interaset complanar manifold

PRESSURE DROPS
of a couple of branches
(inlet + outlet)
($K_v = 2,91$)

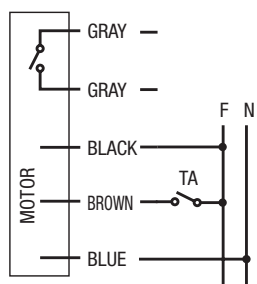


DIAGRAMS OF USE OF THE INTERASET COMPLANAR MANIFOLD

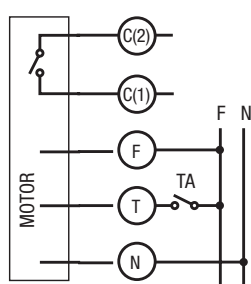




WIRING DIAGRAM

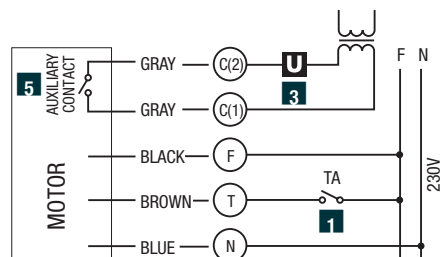
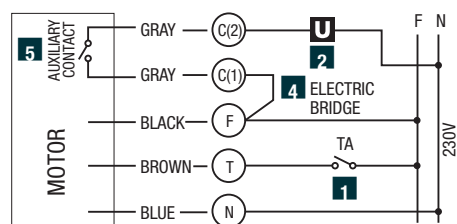


Model
1/2" - 3/4" - 1"



Model
1 1/4" - 1 1/2" - 2"

User power supply at 230 V (5 A max)



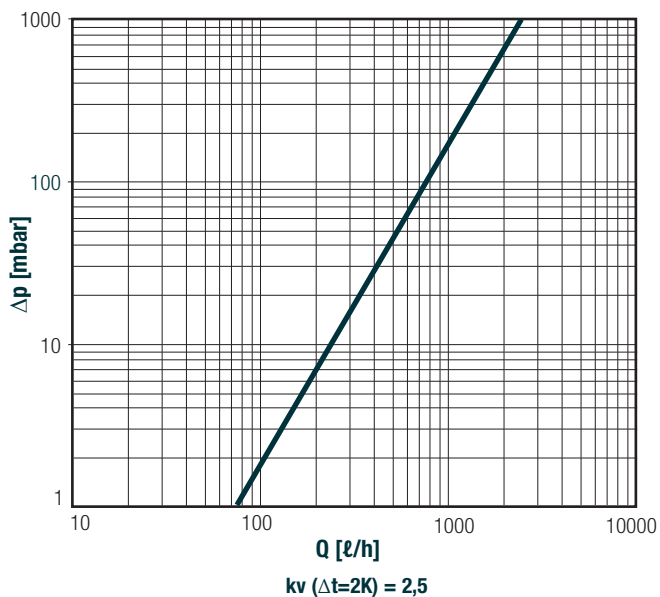
- 1 Ambient thermostat or other control switch for the motorized valve (230 V)
- 2 User at 230 V
- 3 User with independent power supply
- 4 Electric bridge
- 5 Auxiliary contact

Floor Mixing Controller S

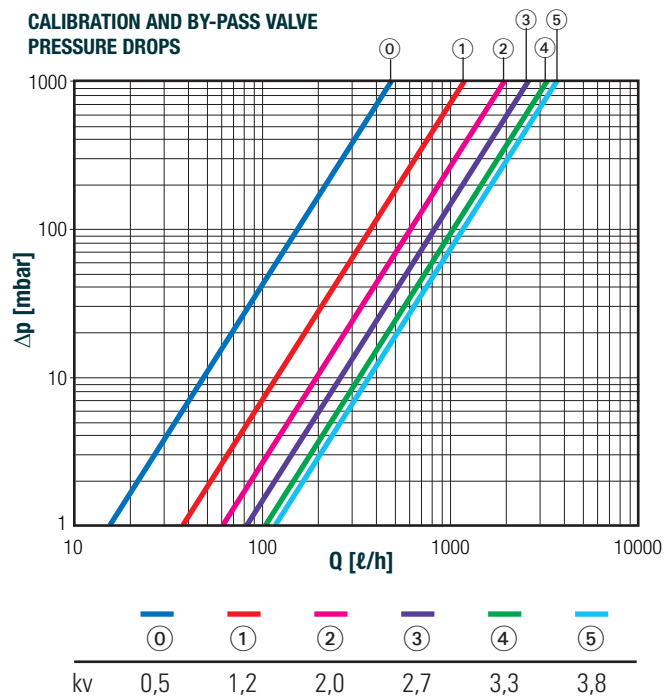
PREASSEMBLED REGULATION GROUP (FIXED-POINT OR CLIMATIC ELECTRONIC)

for low temperature heating and/or cooling systems and mixed systems with two temperature levels (radiators/fan coils + radiant panels).

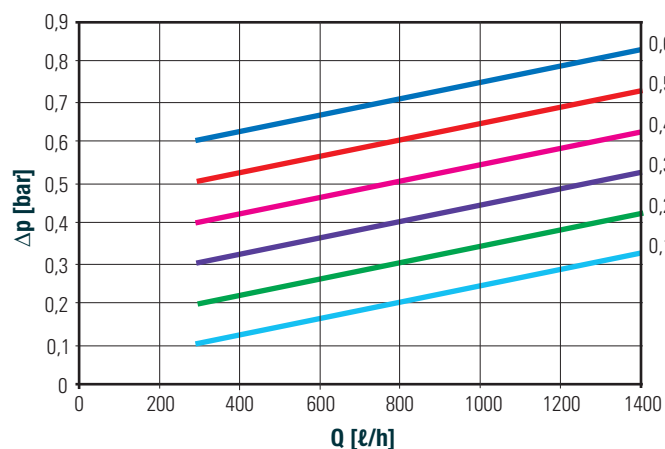
MIXING VALVE PRESSURE DROPS



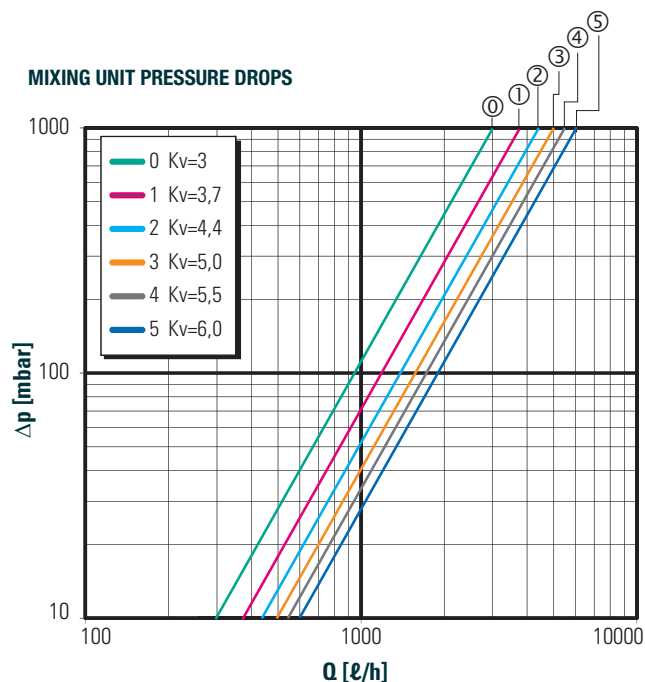
CALIBRATION AND BY-PASS VALVE PRESSURE DROPS



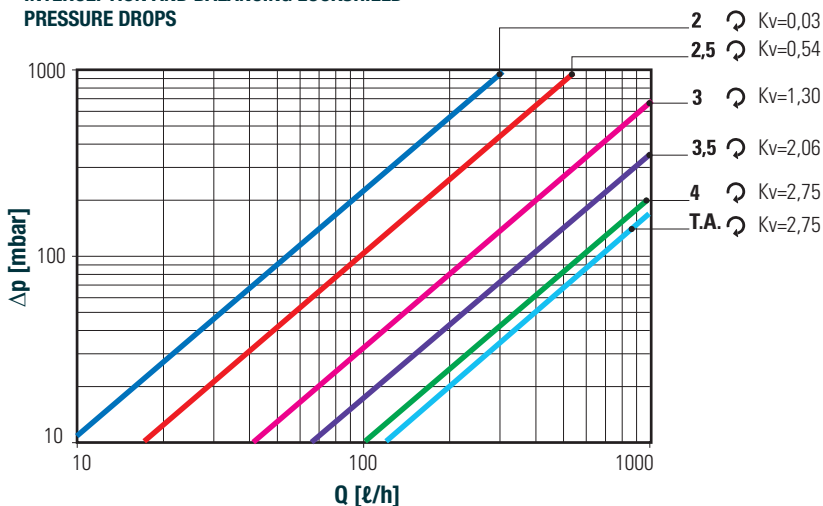
HIGH TEMPERATURE OVERPRESSURE VALVE PRESSURE DROP



MIXING UNIT PRESSURE DROPS



INTERCEPTION AND BALANCING LOCKSHIELD PRESSURE DROPS



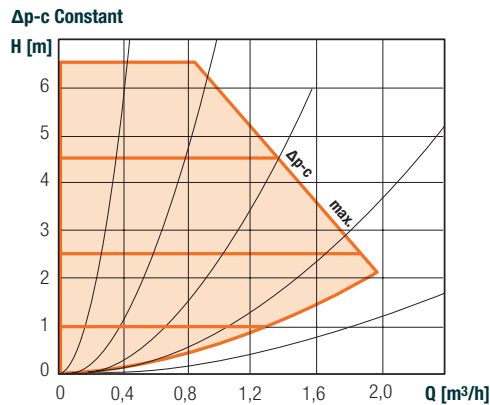
☞ = No. of turns for opening adjustment device

0...5 Calibration and by-pass valve position

Floor Mixing Controller S circulator diagram

WILO PARA HU 15/7
ELECTRONIC CIRCULATION PUMP

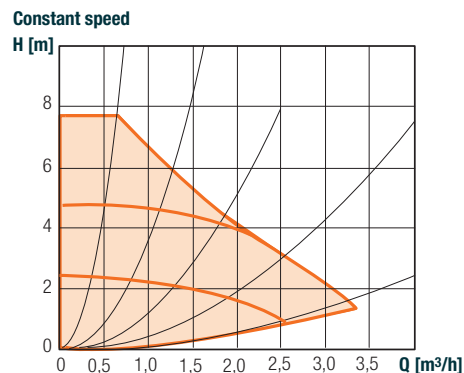
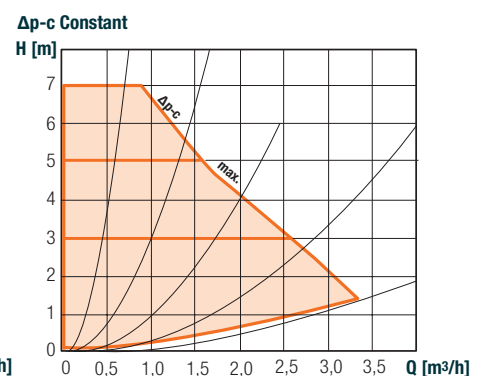
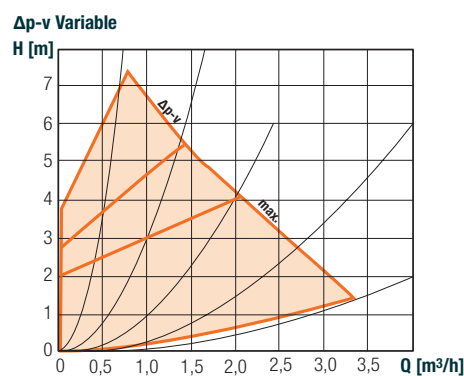
WILO CIRCULATION PUMP HYDRAULIC PERFORMANCE DIAGRAM



Modular Mixing Group circulator diagrams

WILO PARA 25/7
ELECTRONIC CIRCULATION PUMP

WILO CIRCULATION PUMP HYDRAULIC PERFORMANCE DIAGRAMS



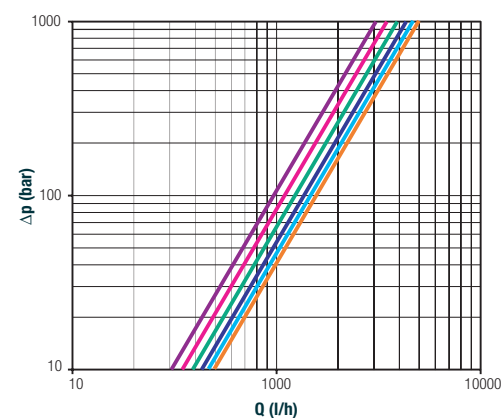
UFH Mixing Controller Modular Mixing Group

DISTRIBUTION MODULES FOR HIGH AND LOW TEMPERATURE SYSTEMS
(FIXED POINT OR CLIMATIC ELECTRONIC) for heating systems

MIXING UNIT PRESSURE DROPS

Thermal power exchangeable with $\Delta T=7^\circ\text{C}$ and $\Delta p=0,25$ bar on the secondary circuit:

- 10 kW with by-pass in position 0 (by-pass completely closed)
- 12,5 kW with by-pass in position 5 (by-pass completely open)



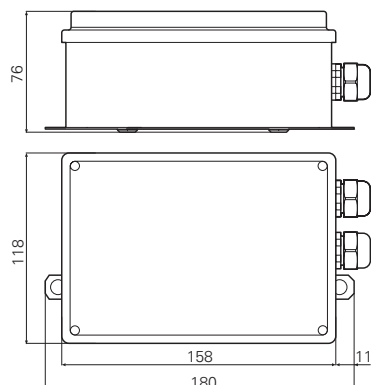
0	$k_v=3$
1	$k_v=3,4$
2	$k_v=3,8$
3	$k_v=4,2$
4	$k_v=4,5$
5	$k_v=4,8$

0...5 Knob positions

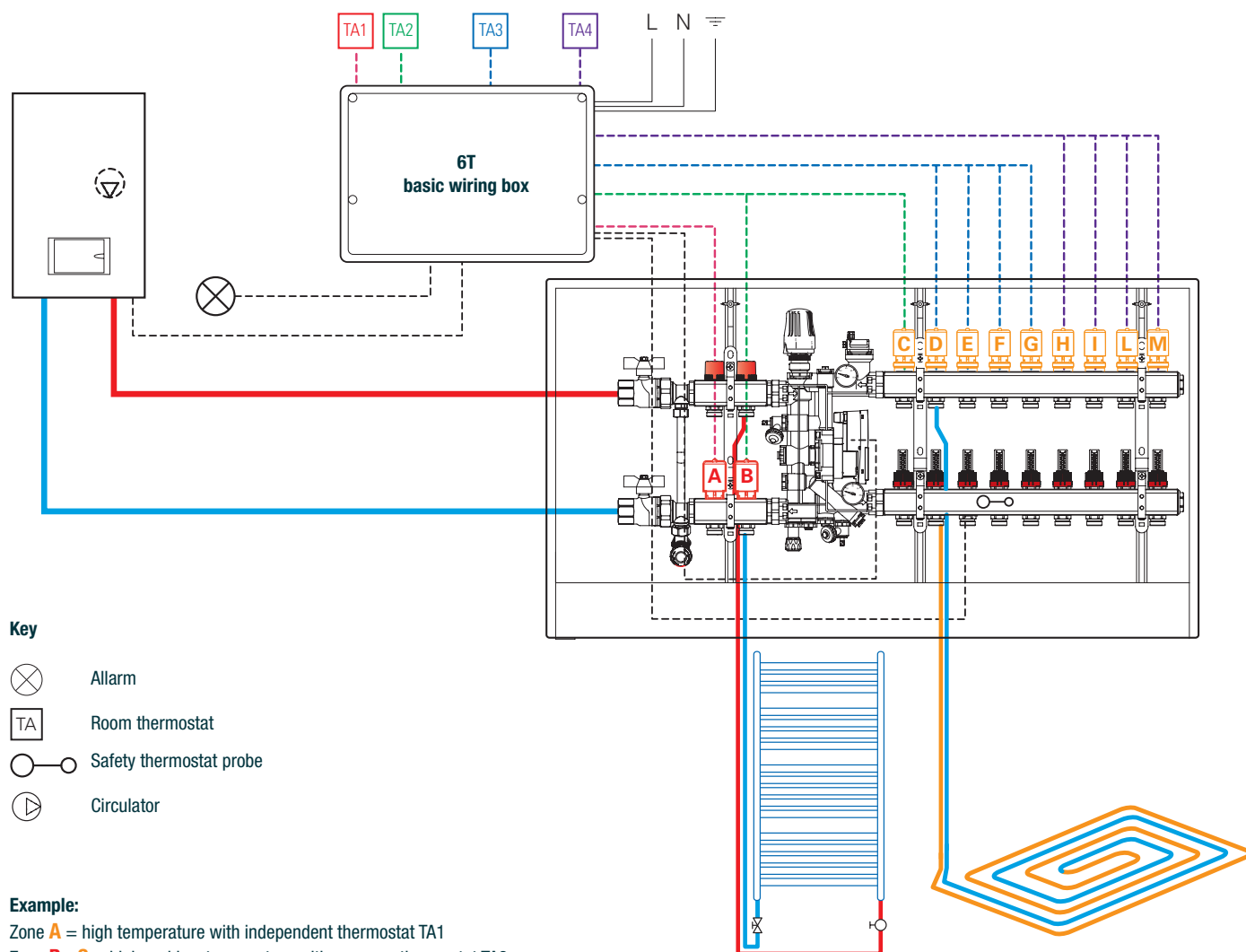
6T basic wiring box

ELECTRONIC SYSTEM FOR ELECTROTHERMIC HEADS
for heating systems with two temperature levels

6T BASIC WIRING BOX



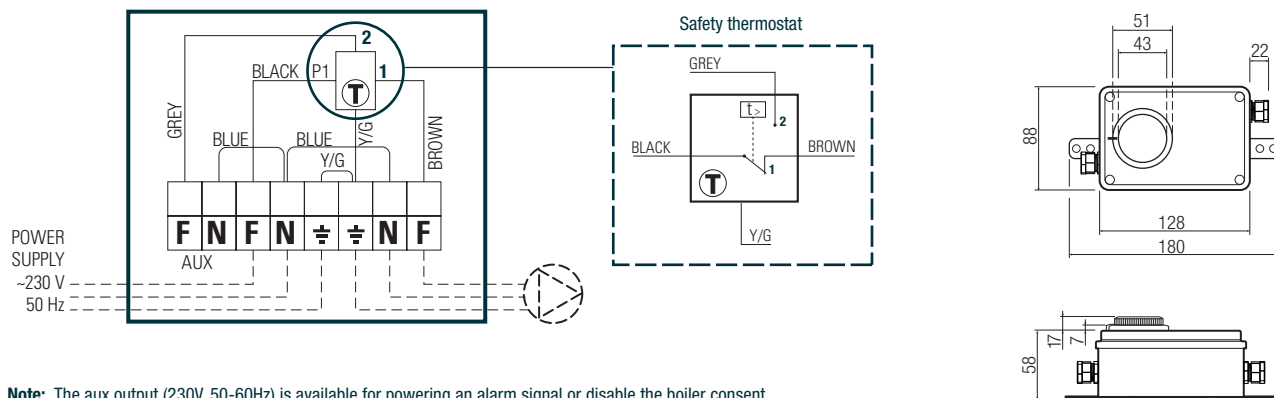
APPLICATION DIAGRAM FOR ELECTROTHERMIC HEADS



Electrical boxes

ELECTRICAL BOX WITH CAPILLARY SAFETY THERMOSTAT
for low temperature circulator wiring

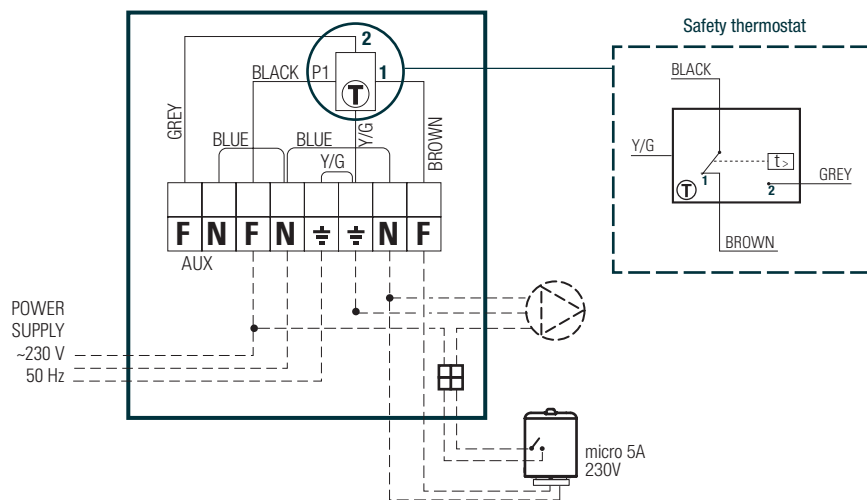
FLOOR MIXING CONTROLLER S / UFH MIXING CONTROLLER APPLICATION DIAGRAM



Electrical boxes

LOW TEMPERATURE MODULAR MIXING GROUP
with electrothermic shut-off head on the delivery

MODULAR MIXING GROUP APPLICATION DIAGRAM

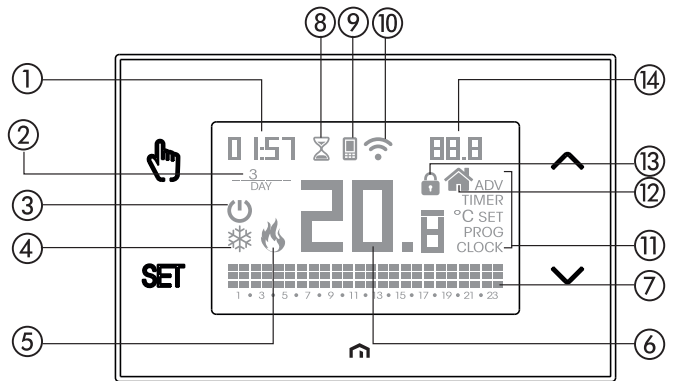


FIV Touch Wi-Fi chronothermostat

TOUCH SCREEN CHRONOTHERMOSTAT

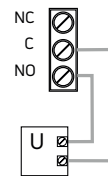
Key

- 1 Clock
- 2 Day of the week
- 3 Operation disabled
- 4 Active load (air conditioning mode)
- 5 Active load (heating mode)
- 6 Measured temperature
- 7 Running daily program divided into 24 histograms, one for each hour of the day. Each hour is associated with one of 3 temperatures: Temperature **T1** Temperature **T2** Temperature **T3**
- 8 Timed operation active
- 9 Connection to the FIV Cloud in progress
- 10 Connection to the active Wi-Fi network
- 11 Configuration menu
- 12 Local operation active. In this state, the device is disconnected from the FIV Cloud and any change in operation must be made using the keys on the chronothermostat.. Local operation can only be disabled from the app
- 13 Keypad lock active
- 14 Connection error information



WIRING DIAGRAMS

Battery power supply

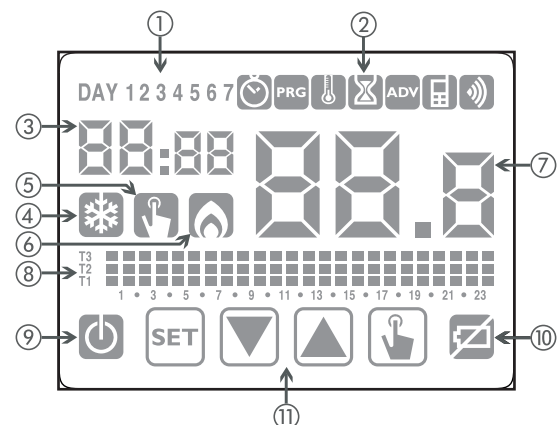


FIV Touch Evo thermostat and chronothermostat

THERMOSTAT AND CHRONOTHERMOSTAT TOUCH SCREEN

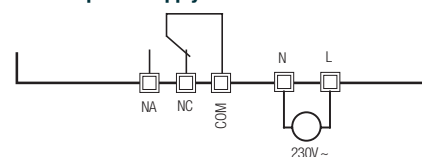
Key

- 1 Day of the week (DAY 1 = Monday)
- 2 Programming menu
- 3 Hour and minutes
- 4 Active load in summer/air conditioning mode
- 5 Manual operation active
- 6 Active load in winter/heating mode
- 7 Measured ambient temperature
- 8 Graph of the active program for the current day (in automatic mode)
- 9 Operation disabled
- 10 Low battery indication (battery-operated models only)
- 11 Keypad (only active if the device is attached to the wall-mounted support)

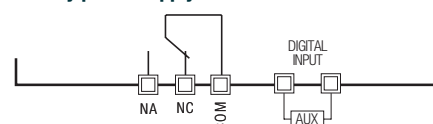


WIRING DIAGRAMS

230 Vac power supply



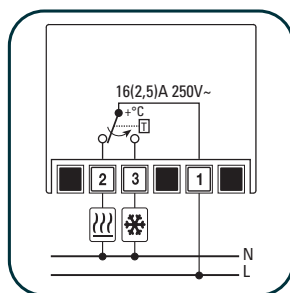
Battery power supply



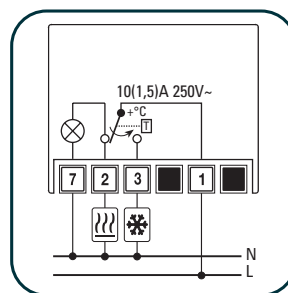
Regolo Evo mechanical thermostat

WIRING DIAGRAMS REGOLO EVO MECHANICAL THERMOSTAT

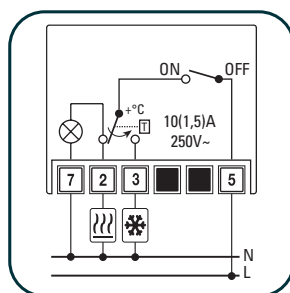
3 contacts



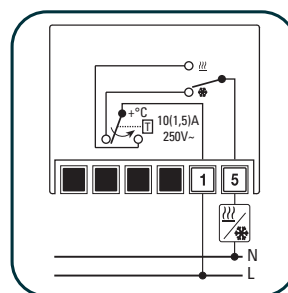
3 contacts with pilot light



3 contacts with pilot light
+ ON/OFF switch

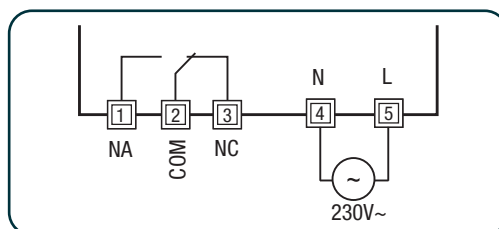


2 contacts with pilot light
+ SUMMER/WINTER switch



Electronic humidistat

WIRING DIAGRAMS RECESSED ELECTRONIC HUMIDISTAT



RCE climatic regulator kit

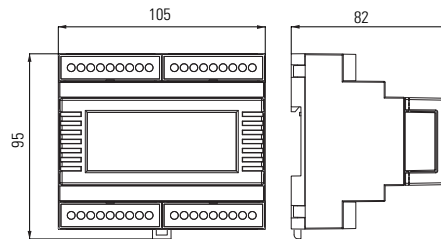
CLIMATIC REGULATOR KIT FOR MIXING UNITS

COMPOSED OF n. 1 RCE Climatic Regulator / n. 2 NTC temperature probes (*)

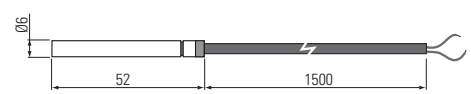
n. 1 probe holder kit / n. 1 wall plate for display

n. 1 male/female connector kit for display extension (4-pole MSTB PCB connectors)

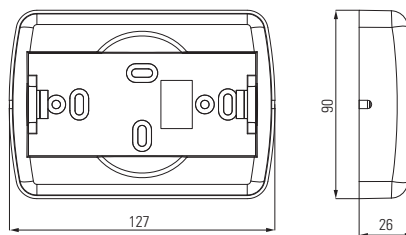
RCE REGULATOR DIMENSIONS



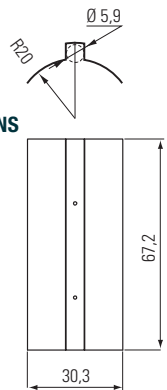
TEMPERATURE PROBES DIMENSIONS



WALL PLATE DIMENSIONS



PROBE HOLDER DIMENSIONS

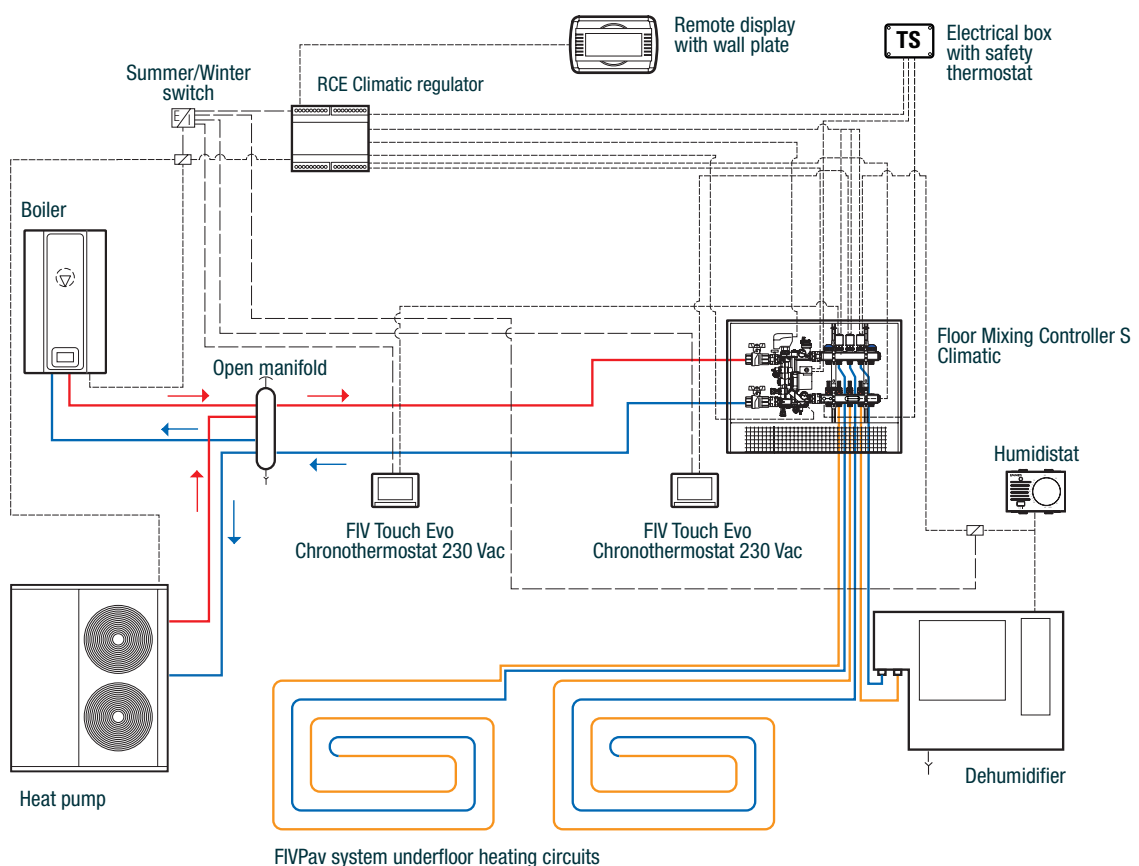


Application diagram

EXAMPLE OF INSTALLATION IN A SINGLE SYSTEM, OPERATING IN HEATING AND COOLING MODE, WITH FIXED POINT REGULATION

Warning!

- The volume of the open manifold/storage is defined in function of the potentiality of the chiller.
- The E/W summer/winter switch diverts the generator consensus in winter towards the boiler and in summer towards the chiller.
- Using the E/W Summer/Winter switch, it is possible to switch the season of all ambient thermostats (if equipped with an input contact for season change, e.g. FIV Touch with 230 Vac power supply).
- By additionally installing the external temperature probe, it is possible to perform a climatic regulation.
- By additionally installing a temperature probe placed on the return manifold, it is possible to perform a modulating regulation.



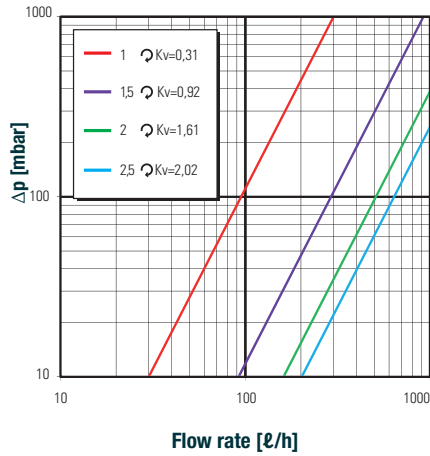
FIVPav system underfloor heating circuits

Ghibli manual valve

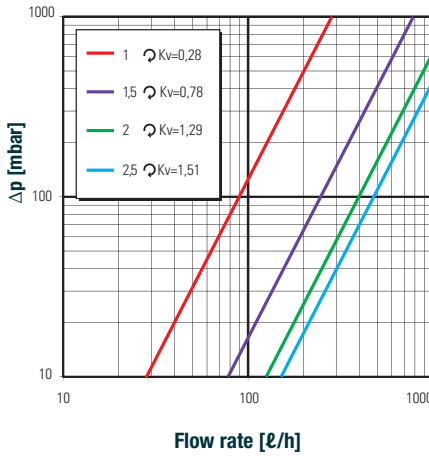
PRESSURE DROPS MANUAL REGULATION VALVE

☞ = No. of turns for opening adjustment device

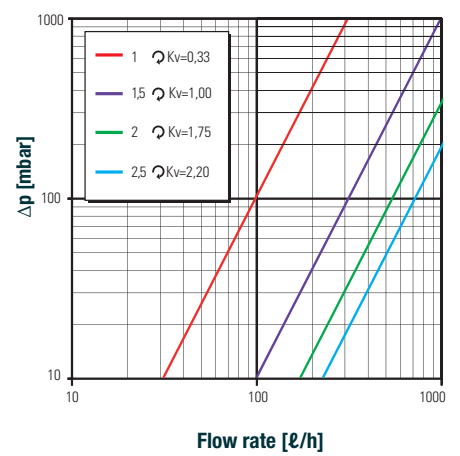
3/8" AND 1/2" RIGHT-ANGLE VALVE AND LOCKSHIELD



1/2" STRAIGHT VALVE AND LOCKSHIELD



3/4" RIGHT-ANGLE VALVE AND LOCKSHIELD

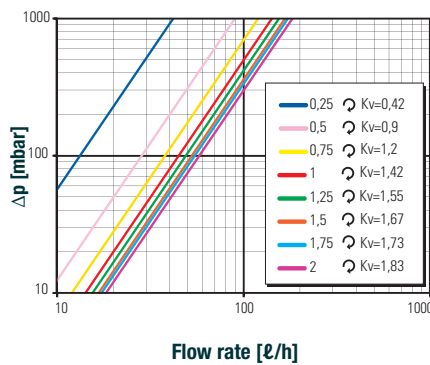


Ghibli thermostatizable

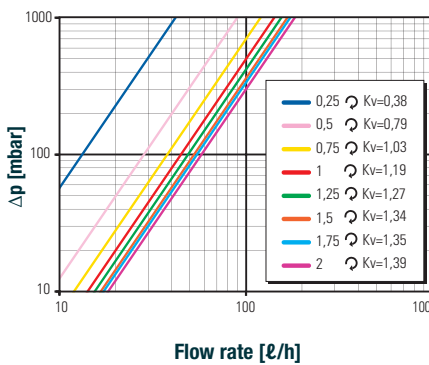
PRESSURE DROPS THERMOSTATIZABLE VALVE

☞ = No. of turns for opening adjustment device

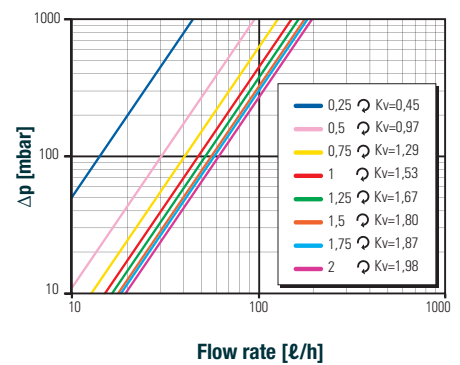
3/8" AND 1/2" THERMOSTATIZABLE RIGHT-ANGLE VALVE



3/8" AND 1/2" THERMOSTATIZABLE STRAIGHT VALVE



3/4" THERMOSTATIZABLE RIGHT-ANGLE VALVE

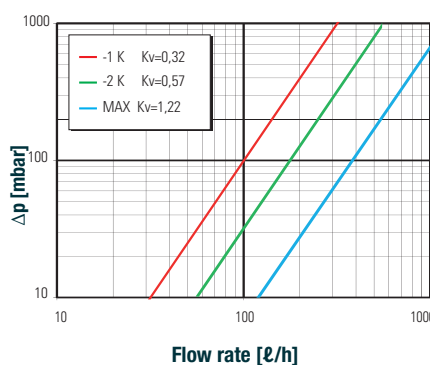


Ghibli thermostatic

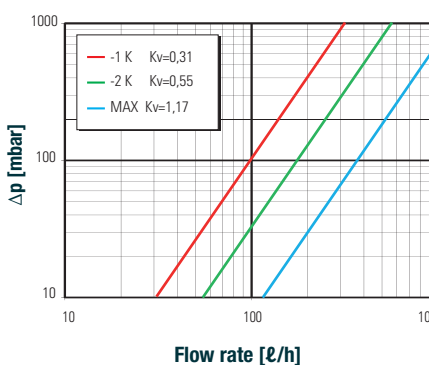
PRESSURE DROPS THERMOSTATIC VALVE WITH THERMOSTATIC HEAD

☞ = No. of turns for opening adjustment device

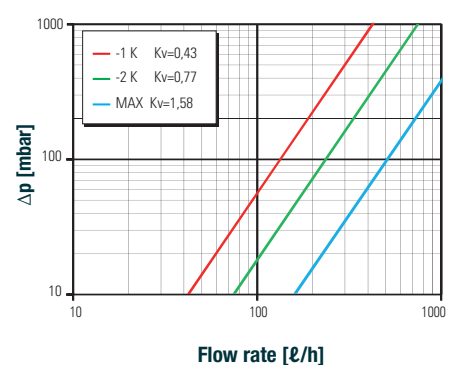
3/8" AND 1/2" THERMOSTATIC RIGHT-ANGLE VALVE



1/2" THERMOSTATIC STRAIGHT VALVE

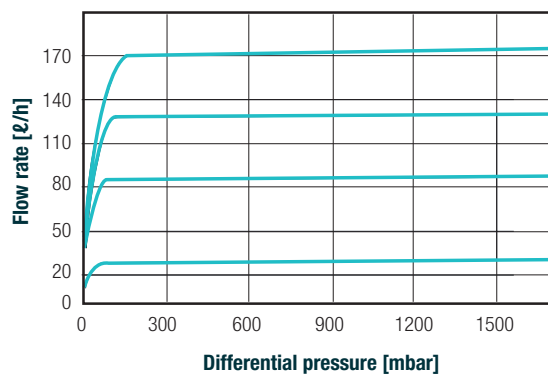


3/4" THERMOSTATIC RIGHT-ANGLE VALVE WITH THERMOSTATIC HEAD



Ghibli-D thermostatic

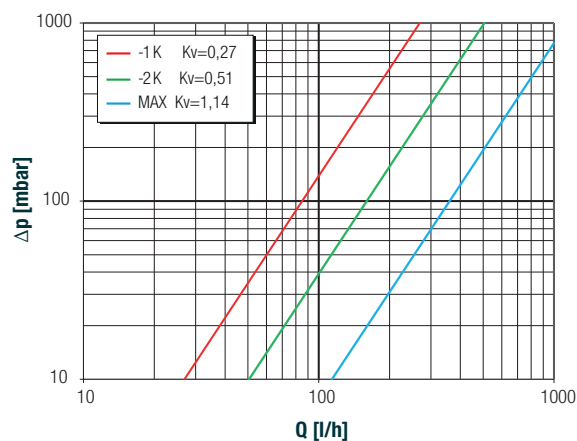
REGULATION CURVE GHIBLI-D DYNAMIC THERMOSTATIC VALVE
WITH MOUNTED THERMOSTATIC HEAD (DEVIATION -2 K)



Oasi Plus thermostatic

PRESSURE DROPS OASI PLUS VALVES
COMBINED WITH ClimaticEVO THERMOSTATIC HEAD

1/2" STRAIGHT AND RIGHT-ANGLE VALVE

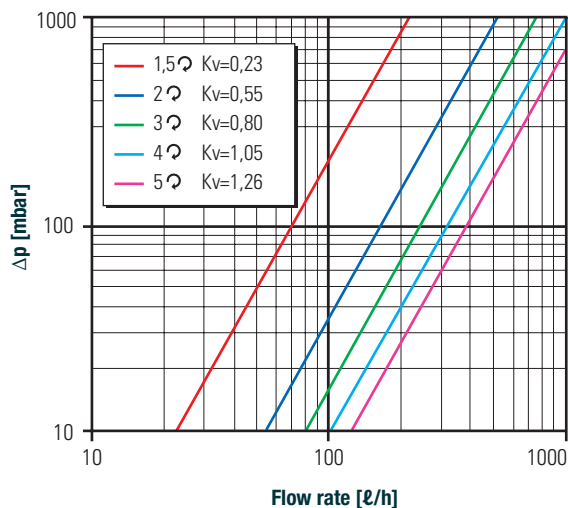


Oasi manual valve

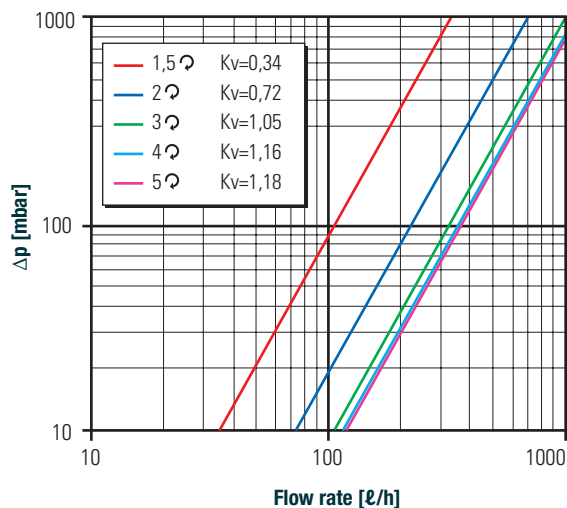
PRESSURE DROPS MANUAL REGULATION VALVE

☞ = No. of turns for opening adjustment device

3/8" AND 1/2" RIGHT-ANGLE VALVE AND LOCKSHIELD



3/8" AND 1/2" STRAIGHT VALVE AND LOCKSHIELD

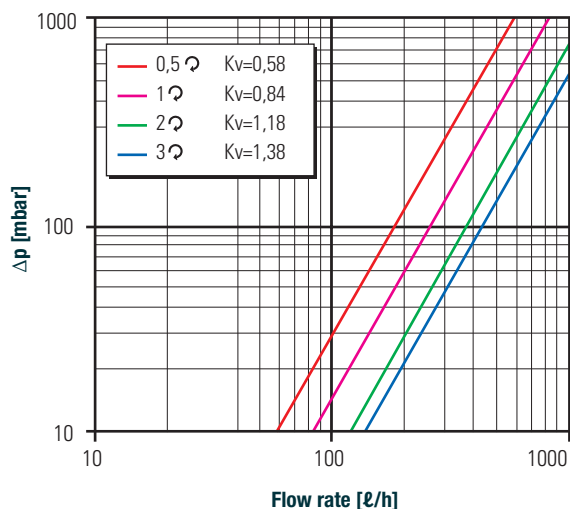


Oasi thermostatizable

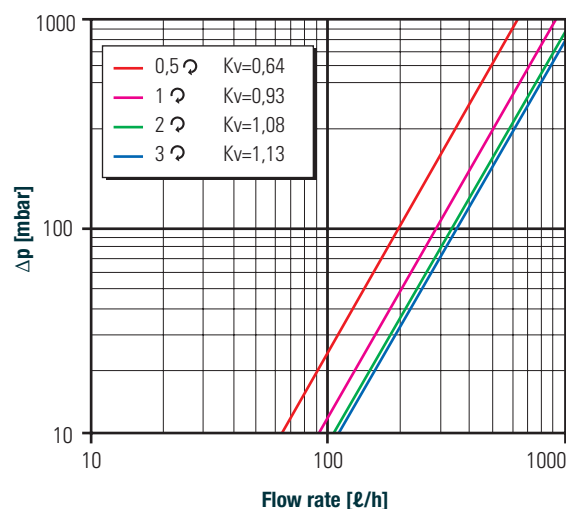
PRESSURE DROPS THERMOSTATIZABLE VALVE

☞ = No. of turns for opening adjustment device

3/8" AND 1/2" THERMOSTATIZABLE HIGH-ANGLE VALVE



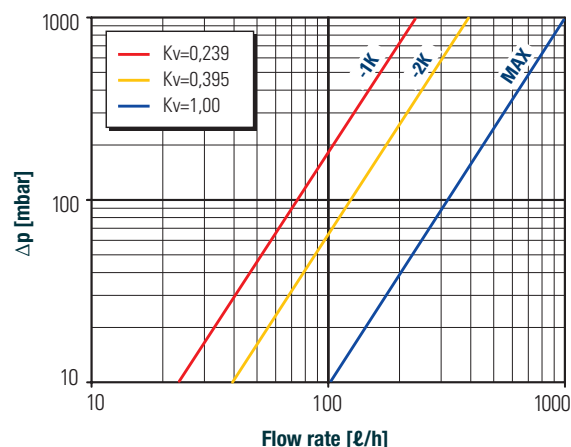
3/8" AND 1/2" THERMOSTATIZABLE STRAIGHT VALVE



Oasi thermostatic

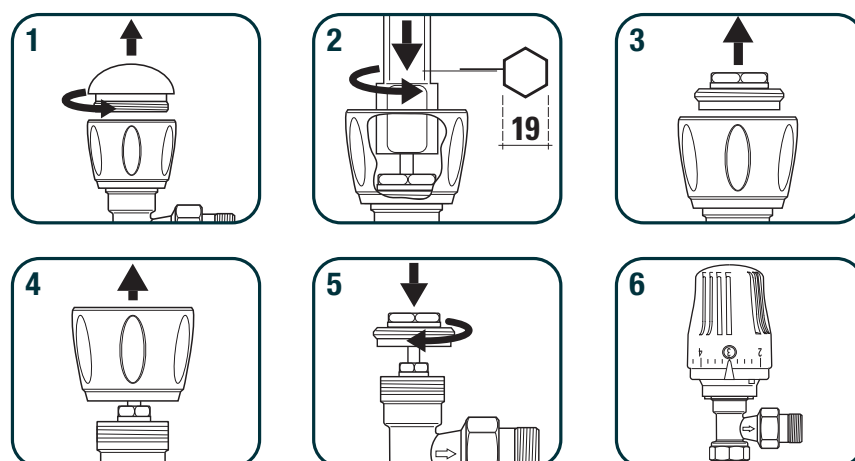
PRESSURE DROPS 3/8" AND 1/2" THERMOSTATIC VALVE WITH THERMOSTATIC HEAD

☞ = No. of turns for opening adjustment device



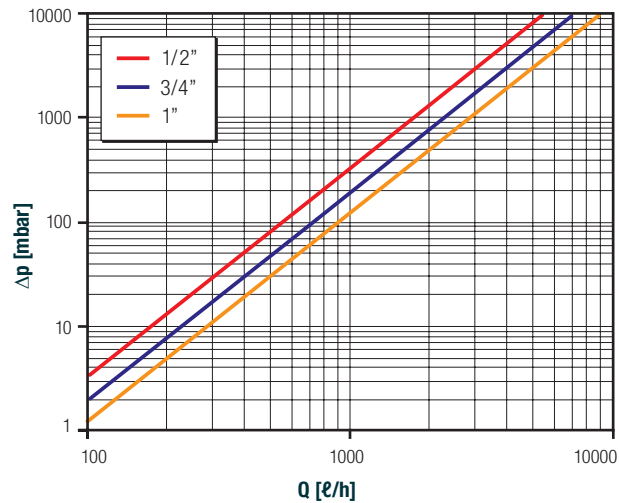
Oasi and Ghibli

TRANSFORMATION OF OASI AND GHIBLI VALVES FROM THERMOSTATIZABLES TO THERMOSTATICS (3/8" AND 1/2" MODELS ONLY, NOT APPLICABLE TO 3/4" MODELS)



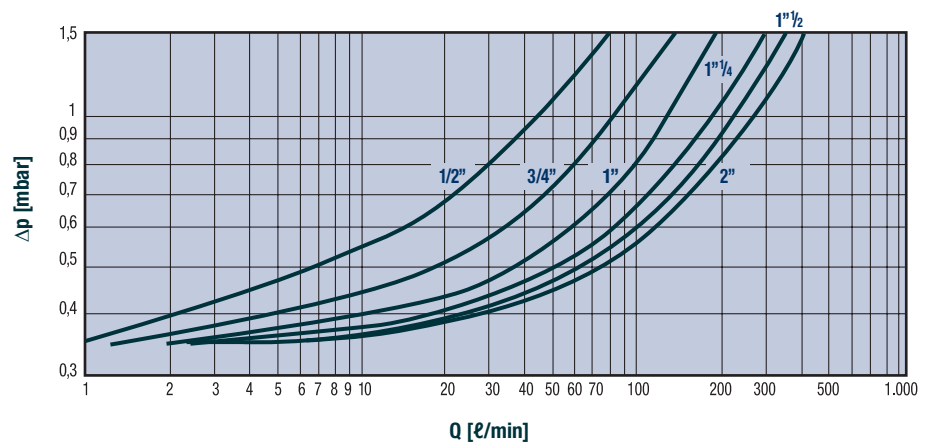
Export pressure reducer

PRESSURE DROPS

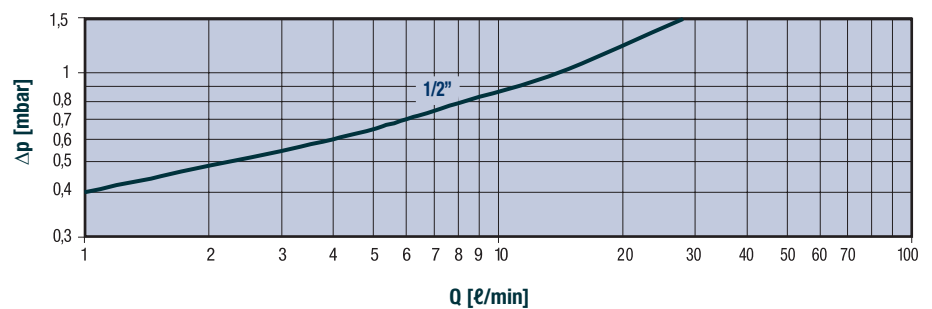


Compensated pressure reducers

PRESSURE DROPS COMPENSATED PRESSURE REDUCERS

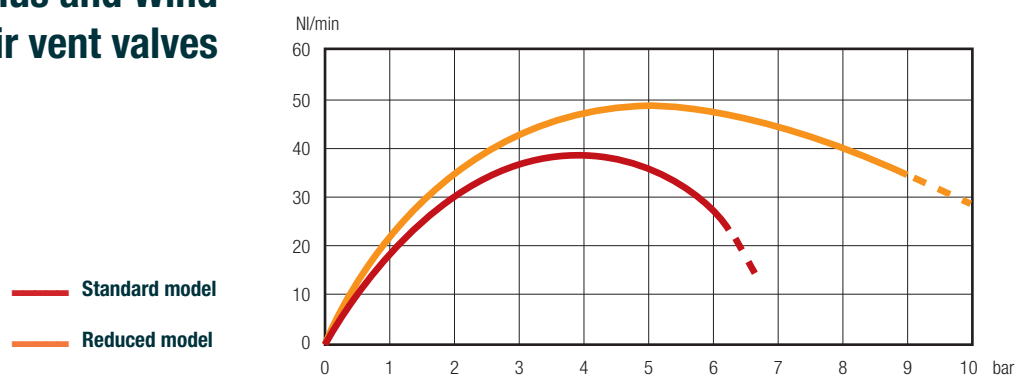


PRESSURE DROPS 1/2" PRESSURE REDUCERS



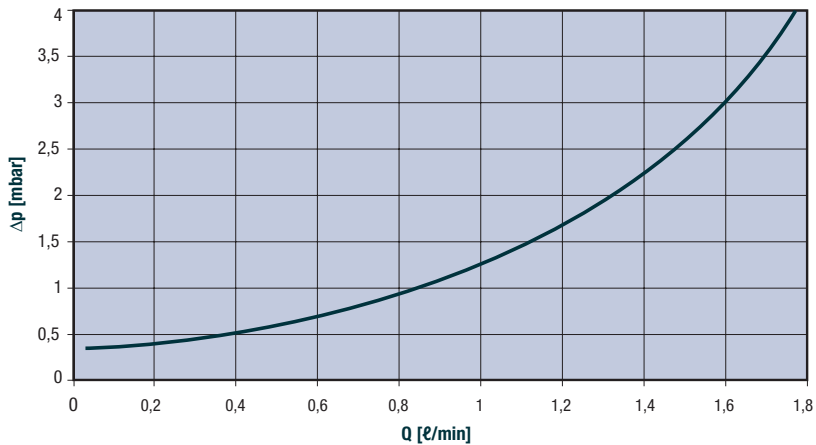
Wind Plus and Wind air vent valves

PERFORMANCE DIAGRAM OF AUTOMATIC AIR VENT VALVES



Automatic filling valve

PRESSURE DROPS (APPROXIMATE VALUE)

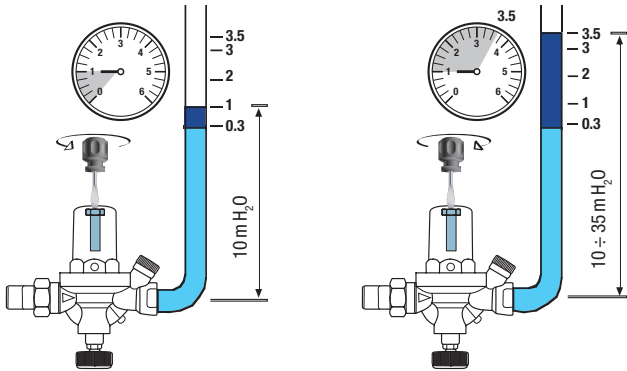


CALIBRATION

The calibration of the automatic feeder is obtained by turning the screw

- + (clockwise) = increase in pressure
- (anticlockwise) = decrease in pressure

The system pressure value can be checked on the pressure gauge.



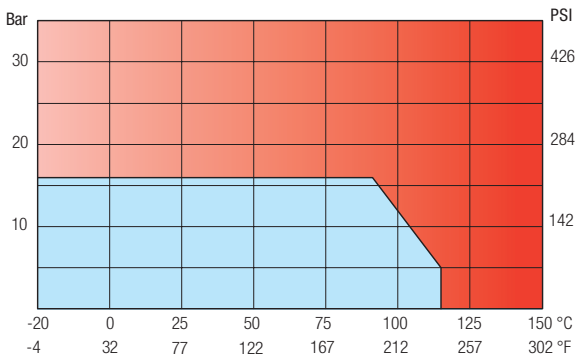
Security safety valves

TECHNICAL CHARACTERISTICS

Size	Ø Mouth (mm)	Transit section area (cm²)	Calibration pressure (bar)	Nominal discharge pressure (bar)	Closure pressure (bar)	Discharge coefficient K	Discharge capacity (kg/h)	Maximum generator power	
								(kW)	(kcal/h)
1/2"	14	1,54	3,0	3,3	2,4	0,58	180,57	104,7	90287
1/2"	14	1,54	6,0	6,6	4,8	0,58	315,12	182,8	157559

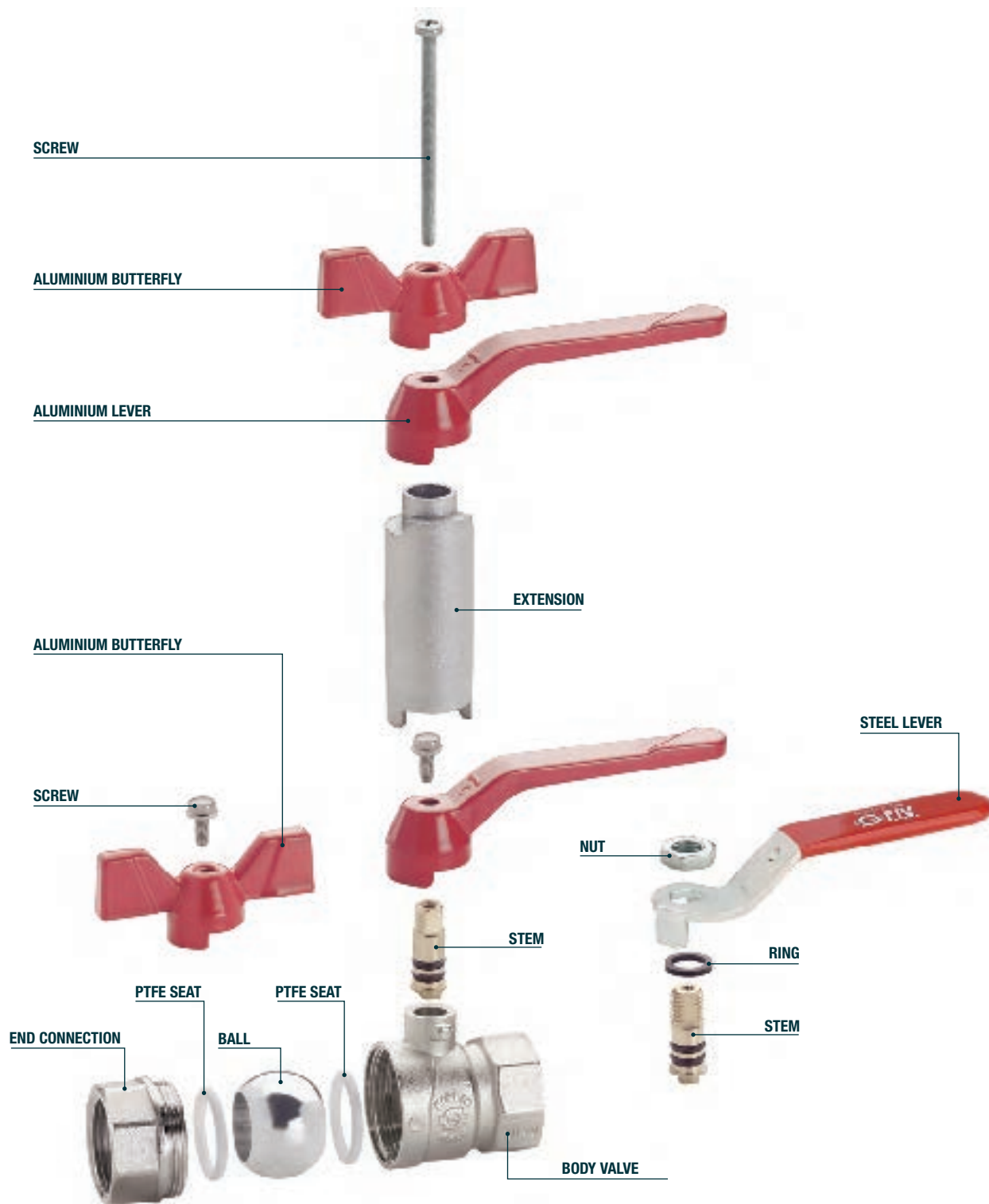
Connections for polyethylene pipe with brass seal

PRESSURE / TEMPERATURE DIAGRAM

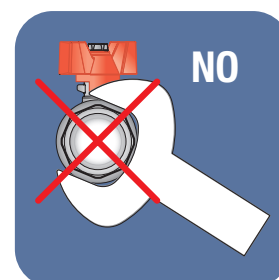


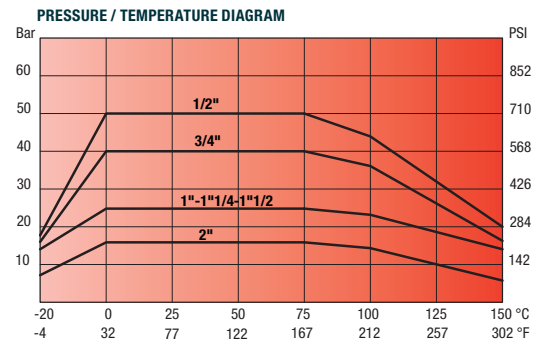
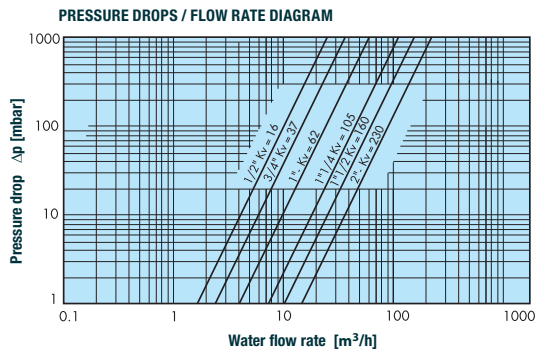
Ball valves

BALL VALVE COMPONENTS EXPLODED VIEW

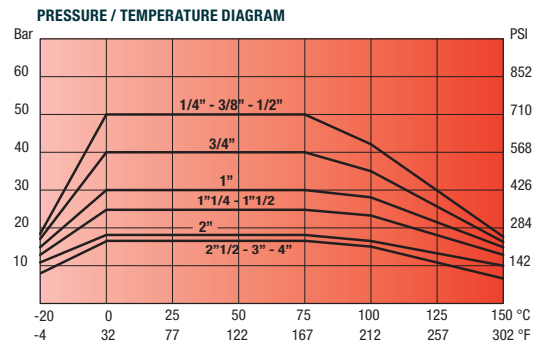
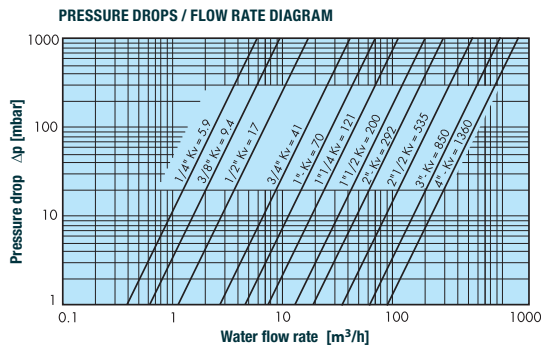


OPEN/CLOSE THE BALL VALVES AND BIBCOCKS AT LEAST ONCE A MONTH IN ORDER TO HAVE A CORRECT AND LONG LASTING FUNCTIONING OF SUCH ITEMS. IN ORDER TO AVOID THE STRAIN OF THE ITEM'S DIMENSIONAL, MECHANICAL AND TECHNICAL FEATURES, IT IS NECESSARY TO USE INSTALLATION WRENCHES OR TOOLS RESPECTING THE ITEMS DIMENSIONS.

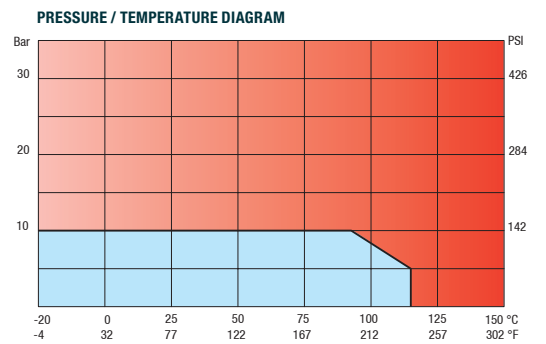
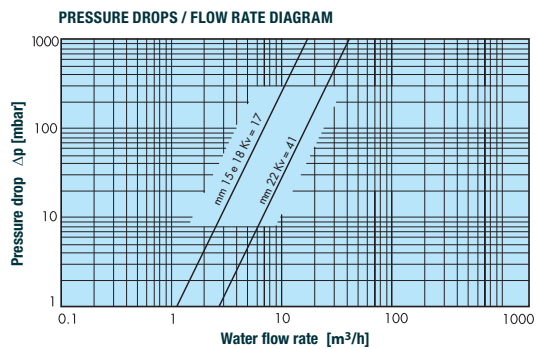




Evolution

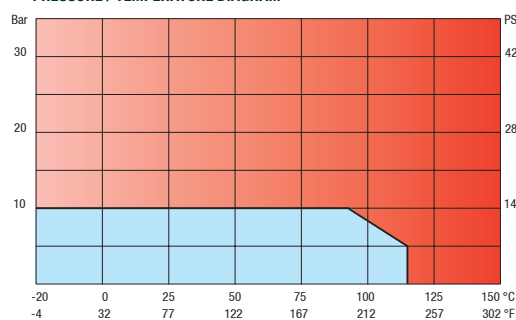


Compression

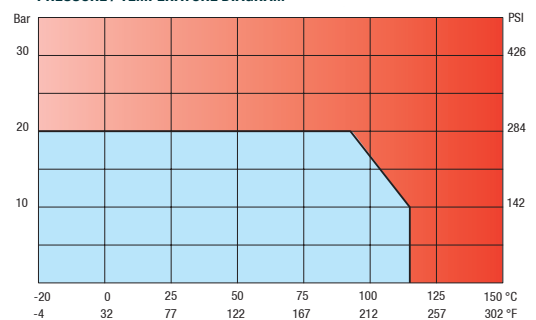


Bibcocks

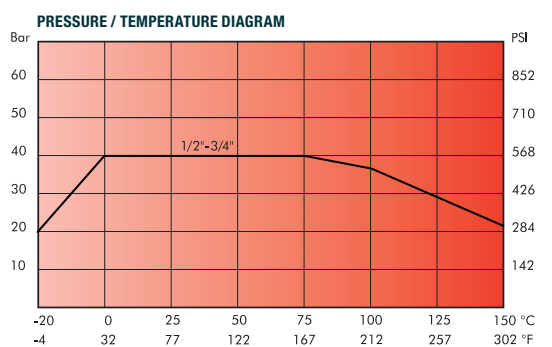
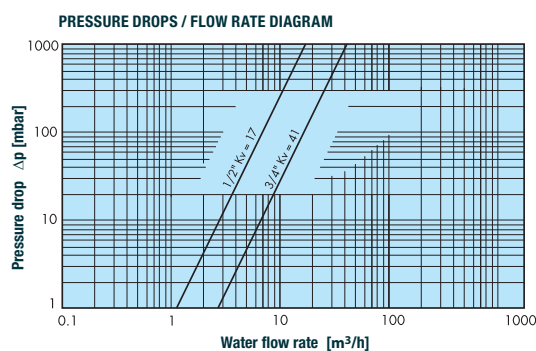
Valves for WASHING MACHINE, DISCHARGE AND OIL



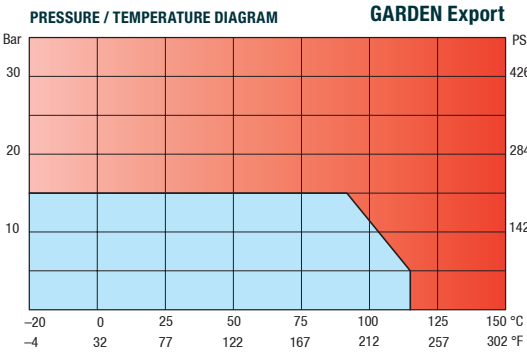
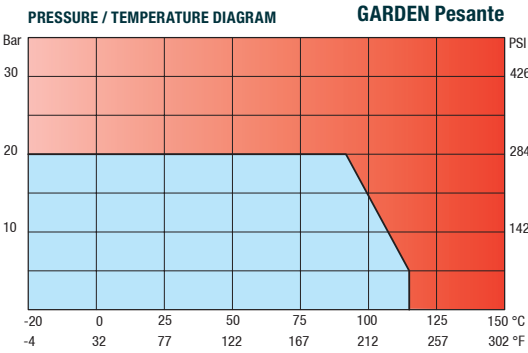
Valves with CLASSIC hose adapter



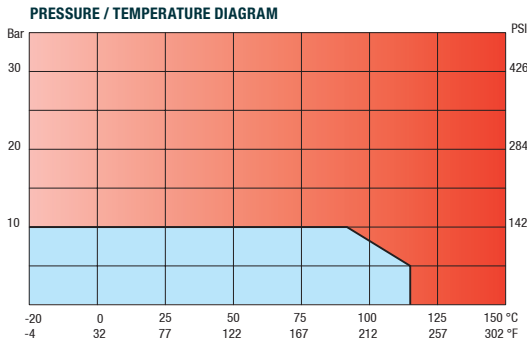
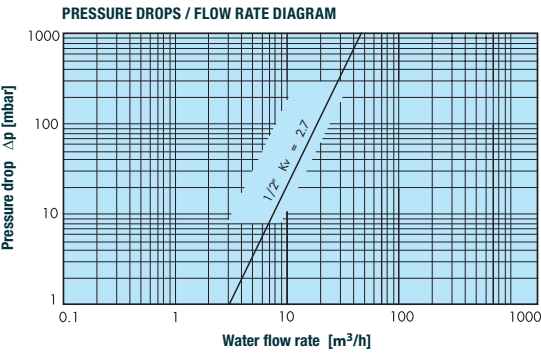
Incasso



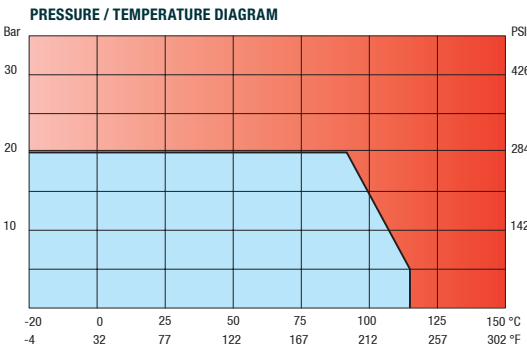
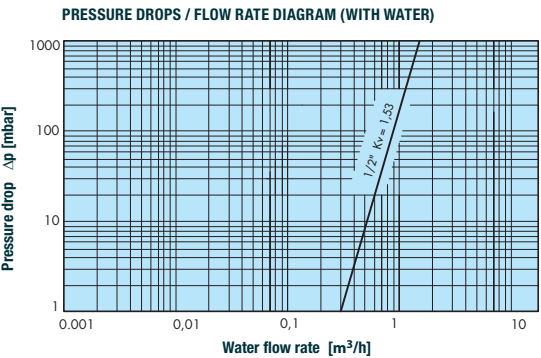
Garden



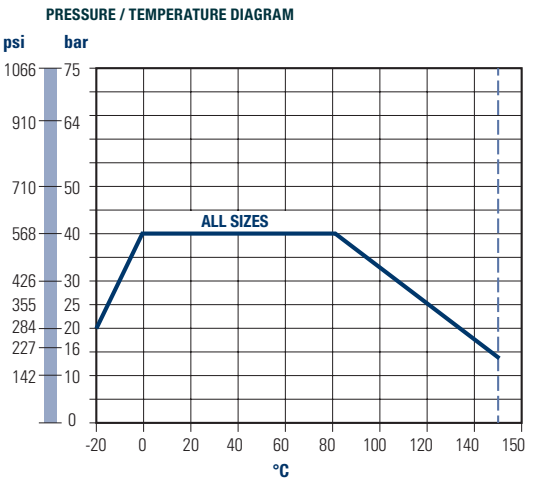
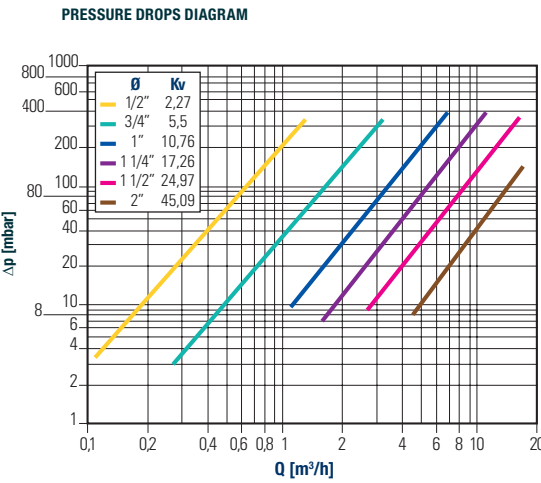
Filter King



Twister

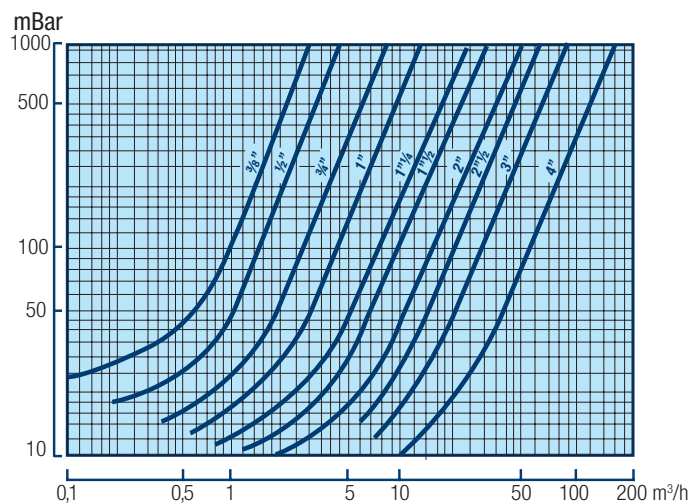


Three-way ball valves



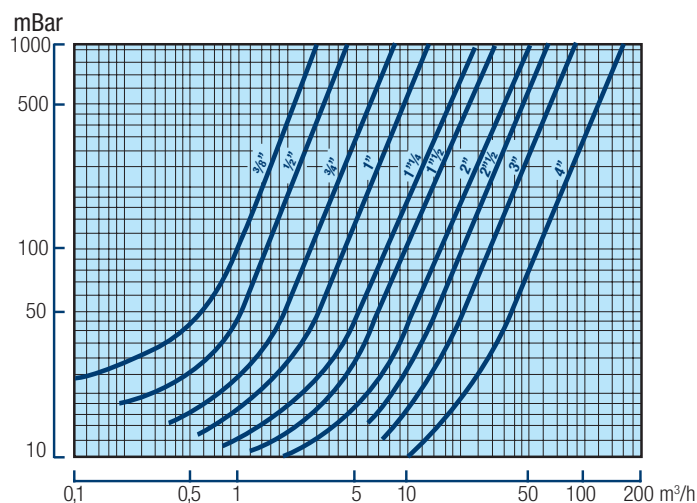
EURA EXPORT

PRESSURE DROPS (APPROXIMATE VALUES)



EURA PESANTE

PRESSURE DROPS (APPROXIMATE VALUES)



Futurgas

BALL VALVES FOR GAS WITH SAFETY LOCK

These valves, normally used on the meter, are equipped with a safety lock and keys for exclusive use by the user, as set forth in Paragraph 4.1 of the UNI 7129/2008 standard, in addition to a key (purchasable separately) for use by the manager/administrator.

In case of emergency, the gas flow can be shut off without using the key, guaranteeing locking during closure. Moreover, the manager/administrator's key can be used to prevent any action by the user.

INSTRUCTIONS FOR USE OF BALL VALVES FOR GAS

Position 1 - (no key inserted) - (Fig. A)

- When no key is inserted in the lock, the valve may ONLY be closed (OFF) and will be automatically locked in the OFF position.
- To open the valve with the **USER** key, turn it clockwise by 90° to position 2 or use the **MASTER** key turning it anticlockwise by 90° to position 2.

Position 2 - (opening) - (Fig. B)

- With the **USER** key rotated clockwise by 90° or the **MASTER** key rotated anticlockwise by 90°, the valve can be opened and closed (ON-OFF) without locking.
- The key CANNOT be extracted.

Position 3 - (closing) - (Fig. C)

- With the **USER** key inserted in this position, the valve may ONLY be closed (OFF) and it will be automatically blocked.
- The key can be extracted, or turned 90° clockwise again to position 2 to re-open the valve (ON).

Position 4 - (master key) - (Fig. D)

- The **MASTER** key has the same functions as the **USER** key for opening and closing the valve.
- With the valve in the closed position (OFF), by turning the **MASTER** key anticlockwise by 180°, it is possible to remove all functionality from the **USER** keys, definitively locking the valve.

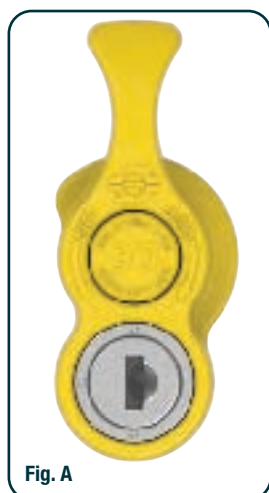


Fig. A

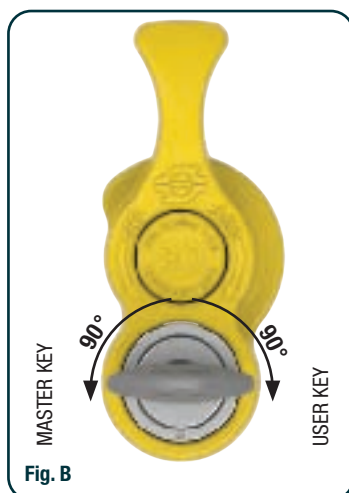


Fig. B



Fig. C

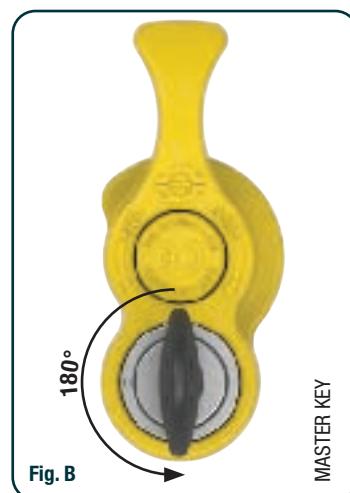
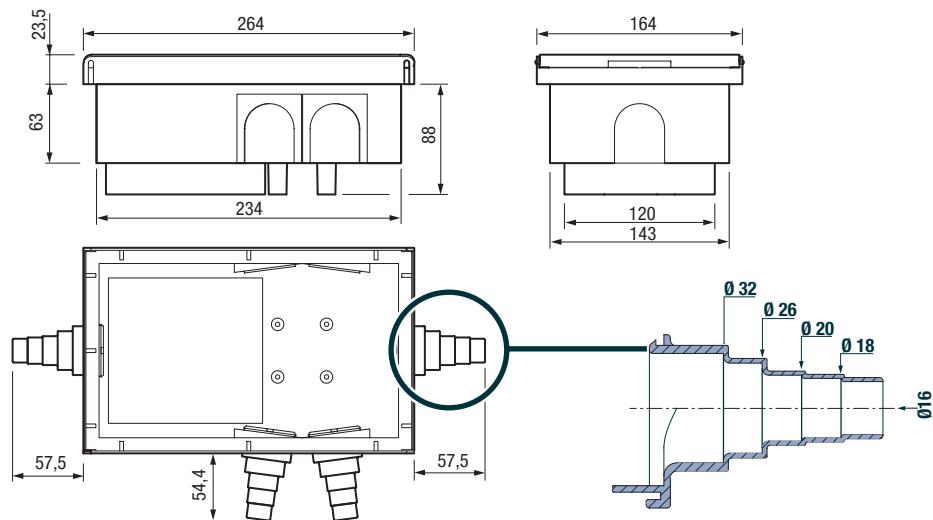


Fig. D

Recessed box

FOR VALVE WITH FIRST GAS INLET MANIFOLD



DIAMETERS OF HOSE EXTENSION

For DN16 hose:	Ø19 external (sheath)	Ø16,5 hose passage
For DN18 hose:	Ø21 external (sheath)	Ø18,5 hose passage
For DN20 hose:	Ø23 external (sheath)	Ø20,5 hose passage
For DN26 hose:	Ø30,9 external (sheath)	Ø28 hose passage
For DN32 hose:	Ø39 external (sheath)	Ø34 hose passage

Gaslock

RECESSED BALL VALVE FOR GAS WITH BOX ACCORDING TO UNI 7129-1 AND UNI EN 331 STANDARDS

The instructions in the manual, which can be consulted via the QR code below, have been drawn up in order to provide the necessary and useful information for the assembly of the only products supplied here.

For the installation, testing and maintenance of the pipes or other connected equipment, please refer to the specific instructions for these products, to the UNI 7129-1 standard or other applicable regulations.

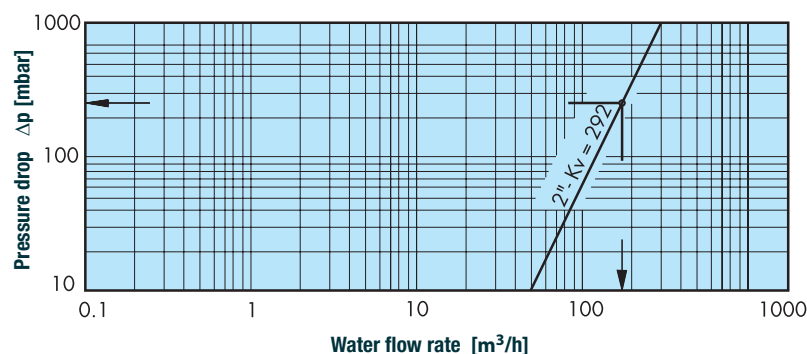


Example of calculation diagrams

PRESSURE DROPS / FLOW RATE DIAGRAMS

How to read the graph

The Kv value is the flow rate index in m³/h, water at 15,5 °C, which determines a pressure drop of 1 bar: the higher the value, the lower the load losses.



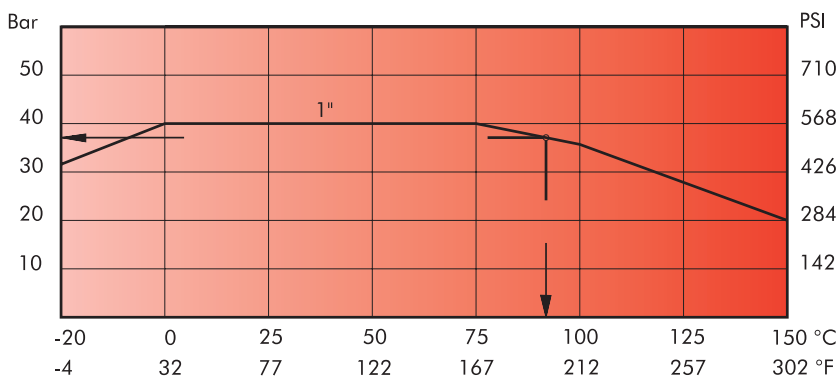
Example

To establish the pressure drop of the 2" valve, at a flow rate of 180 m³/h, work as follows: from the capacity reading on the X axis draw a straight vertical line until it meets the oblique line, and from that point of intersection draw a horizontal line until it meets the Y axis. The point on the Y axis will give a value of 270 mBar corresponding to the pressure drop.

PRESSURE / TEMPERATURE DIAGRAMS

How to read the graph

The values expressed by the curves represent the maximum operating limit of the valves. Such values have been obtained by the slow variation of the trial parameters, and therefore they are only indicative: the type of liquid, the sudden rise or fall in pressure and temperature or the frequency in the manoeuvre have a significant influence on the life-span of the valve. Above 125 °C and close to the top values in the curve, the life-span of the valves is markedly reduced.



Example

To establish the maximum pressure to which the 1" valve can resist, at a temperature of 90 °C, work as follows: from the temperature reading on the X axis draw a straight vertical line until it meets the curve, and from that point draw a horizontal line until it meets the Y axis. The point on the Y axis will give a value of 37 Bar.

Table of chemical resistance

KEY		BRASS	P.T.F.E.	N.B.R.	INOX 316	NYLON
E Excellent						
B Good						
M Poor						
S Not recommended						
— Not tested						
ACETALDEHYDE		—	E	S	E	B
ACETIC ACID		S	E	B	E	S
ACETIC ANHYDRIDE		M	E	B	B	—
ACETONE		B	E	B	E	B
ACETYLENE		M	E	—	E	—
ACID		B	E	E	M	—
ALCOHOL AMYL		E	E	E	E	B
ALCOHOL BUTYL		E	E	E	E	B
ALUMINA		B	E	E	B	S
ALUMINIUM CHLORIDE		S	E	E	M	E
ALUMINIUM SULPHATE		M	E	E	B	E
ALUMINUM FLUORIDE		—	E	E	M	—
AMINES		—	E	B	E	—
AMMONIA ACQUEOUS		S	E	B	E	M
AMMONIA ANHYDROUS		E	E	B	E	B
AMMONIUM BICARBONATE		—	E	E	B	—
AMMONIUM CARBONATE		—	E	E	B	B
AMMONIUM CHLORIDE		S	E	E	B	—
AMMONIUM HYDROXIDE		S	E	E	E	—
AMMONIUM MONOSPHOSPHATE		—	E	E	E	—
AMMONIUM NITRATE		S	E	E	B	—
AMMONIUM PHOSPHATE		—	E	E	B	—
AMMONIUM PHOSPHATE DIBASIC		—	E	E	E	—
AMMONIUM PHOSPHATE TRIBASIC		—	E	E	E	—
AMMONIUM SULPHATE		S	E	E	B	—
AMYL ACETATE		B	E	M	B	B
ANILINE CONCENTRATED		M	E	—	B	B
ARSENIC ACID		—	E	E	B	—
ASPHALT (LIQUID)		E	E	S	E	—
BARIUM CARBONATE		E	E	E	B	—
BARIUM CHLORIDE		S	E	E	B	E
BARIUM HYDROXIDE		B	E	E	B	—
BARIUM SULPHATE		E	E	E	B	E
BARIUM SULPHIDE		B	E	E	—	B
BEER		B	E	E	E	—
BENZENE		E	E	E	B	E
BENZOIC ACID		B	E	—	B	M
BORAX		E	E	E	E	—
BORIC ACID		B	E	E	B	B
BRINE		B	E	E	B	—
BROMIC ACID		S	E	E	S	—
BROMINE (DRY)		E	E	S	S	—
BROMINE (WET)		S	E	S	S	—
BUTADIENE		—	E	E	E	—
BUTANE		E	E	E	B	—
BUTYLENE		—	E	E	E	—
BUTYRIC ACID		M	E	E	B	B
CALCIUM BISULPHATE		B	E	E	B	—
CALCIUM CARBONATE		E	E	E	B	—
CALCIUM CHLORIDE		S	E	E	M	—
CALCIUM HYDROXIDE		B	E	E	B	—
CALCIUM HYPOCHLORITE		S	E	E	M	S
CALCIUM SULPHATE		E	E	E	B	—
CARBOLIC ACID		B	E	E	B	—
CARBON DISULPHIDE		B	E	S	B	—

Remarks

Data reported in the tables are not binding. Various factor such as working conditions, fluid concentration, pressure, temperature and possible dynamic shock have to be considered for the practical suitability of materials. Data reported have been obtained from materials manufacturer tables.

KEY		BRASS	P.T.F.E.	N.B.R.	INOX 316	NYLON
E Excellent						
B Good						
M Poor						
S Not recommended						
— Not tested						
CARBON SULPHIDE		E	E	S	B	E
CARBON TETRACHLORIDE WET		M	E	S	M	E
CARBONATED WATER		M	E	E	E	B
CASTOR OIL		M	E	E	E	E
CAUSTIC SODA		M	E	E	B	B
CHLORENE ANHYDROUS		S	E	E	M	—
CHLOROBENZENE DRY		—	E	M	E	—
CHLOROFORM DRY		E	E	S	E	S
CITRIC ACID		M	E	E	B	B
COAL TAR		B	E	M	E	—
COCONUT OIL		—	E	E	B	E
COPPER CHLORIDE		S	E	E	B	S
COPPER NITRATE		M	E	E	E	—
COPPER SULPHATE		S	E	E	B	E
COTTONSEED OIL		E	E	E	B	E
CREOSOTE OIL		E	E	S	B	E
CRESILIC ACID		B	E	—	E	—
CROMIC ACID		S	E	E	S	B
CROMIC ANHYDRIDE		S	E	E	S	—
DICLOROETHAN		—	E	M	B	—
DISTILLED WATER		E	E	E	E	E
ETHILENE OXIDE		E	E	S	B	—
ETHYL ACETATE		E	E	—	B	B
ETHYL ALCOHOL		E	E	E	B	B
ETHYL CHLORID		B	E	E	E	B
ETHYLENE GLYCOL		B	E	B	E	E
FERRIC CHLORID		S	E	E	S	—
FERRIC SULPHATE		S	E	E	E	—
FERROUS CHLORIDE		S	E	E	S	—
FERROUS SULPHATE		S	E	E	B	—
FISH OIL		—	E	E	E	E
FLAX OIL		B	E	E	B	E
FLOURSILIC ACID		S	E	E	S	—
FORMALDEHYDE		M	E	E	M	—
FORMIC ACID		S	E	E	M	S
FREON 11-12-21-22-TE		E	E	B	E	E
FRUIT JUICES		S	E	E	E	—
FUEL OIL		E	E	E	E	—
FURFURAL		E	E	S	B	—
GALLIC ACID		—	E	E	B	—
GASOLINE		E	E	E	E	E
GELATINE		B	E	E	E	—
GLUCOSE		E	E	E	B	—
GLYCERINE		E	E	E	E	B
GROUND WATER		B	E	E	E	E
HYDROBROMIC ACID		S	E	E	S	M
HYDROCARBONS		E	E	E	E	E
HYDROCHLORIC DRY ACID		S	E	E	B	S
HYDROCIANIC ACID		S	E	E	B	—
HYDROFLUORIC ACID		S	E	B	S	S
HYDROGEN DRY SULPHIDE		E	E	—	—	S
HYDROGEN PEROXIDE		M	E	E	E	S
HYDROGEN WET SULPHIDE		M	E	—	—	S
HYPOCHLORITE SODIUM		S	E	E	M	S
HYPOSULPHITE SODIUM		M	E	E	B	—

Table of chemical resistance

KEY					
E Excellent					
B Good					
M Poor					
S Not recommended					
— Not tested					
	BRASS	P.T.F.E.	N.B.R.	INOX 316	NYLON
iodoform	—	E	—	E	—
ipoclorato sodium	M	E	M	M	—
iso-octane	—	E	E	E	—
isopropilic alcohol	—	E	E	B	B
lactic acid	M	E	E	E	—
lead acetate	—	E	E	B	B
magnesium chloride	S	E	E	B	E
magnesium hydroxide	B	E	E	E	—
magnesium oxide	—	E	E	B	—
magnesium sulphate	M	E	E	B	—
maleic acid	—	E	E	B	—
malic acid	—	E	E	B	—
mercury	S	E	E	M	E
mercury salts	S	E	E	S	—
methane	E	E	E	B	E
methil acetate	—	E	S	E	B
methil alcohol	E	E	E	B	B
methil chloride	B	E	M	B	M
methil formate	—	E	M	B	—
milk	B	E	E	E	E
mineral oil	E	E	E	E	E
mineral water	B	E	E	B	E
molasses	B	E	E	E	—
naphtha	B	E	E	B	E
naphthalene	—	E	—	B	E
natural gas	E	E	E	E	E
nickel chloride	M	E	E	B	—
nickel nitrate	—	E	E	B	—
nickel sulphate	M	E	E	B	—
nitric acid concentrated	S	E	S	B	S
nitric acid from 0 to 50%	S	E	B	E	S
nitric acid from 50 to 80%	S	E	S	B	S
nitrobenzene	—	E	S	B	B
nitrogen	E	E	E	E	—
oleic acid	M	E	B	B	B
oleum	—	E	S	B	S
oxalic acid	M	E	E	B	—
oxygen	E	E	E	E	E
paint	E	E	E	E	—
paint solvents	E	E	M	E	—
palmitic acid	M	E	B	B	—
paraffin	E	E	E	E	—
paraformaldehyde	—	E	B	B	—
pentane	—	E	E	E	—
phenol	—	E	B	B	B
phosphoric acid	S	E	B	S	S
phtalic acid	—	E	M	B	B
picric acid	M	E	B	B	—
pine oil	—	E	E	E	E
potassium bromide	—	E	E	B	—
potassium carbonate	M	E	E	B	E
potassium chlorate	—	E	E	B	—
potassium chloride	M	E	E	B	E
potassium cyanide	S	E	E	B	—
potassium dichromate	S	E	—	B	B

Remarks

Data reported in the tables are not binding. Various factor such as working conditions, fluid concentration, pressure, temperature and possible dynamic shock have to be considered for the practical suitability of materials. Data reported have been obtained from materials manufacturer tables.

KEY					
E Excellent					
B Good					
M Poor					
S Not recommended					
— Not tested					
	BRASS	P.T.F.E.	N.B.R.	INOX 316	NYLON
POTASSIUM DIPHOSPHATE	—	E	E	E	—
POTASSIUM DISULPHITE	—	E	E	B	—
POTASSIUM HYDROXIDE	M	E	E	E	—
POTASSIUM IODIDE	—	E	E	B	—
POTASSIUM SULPHATE	B	E	E	B	—
PROPANE	E	E	E	B	—
PYROGALLIC ACID	—	E	—	B	—
SALICILIC ACID	—	E	E	B	—
SEA WATER	M	E	E	B	E
SILVER NITRATE	S	E	E	B	E
SOAPS	B	E	E	B	E
SODIUM ACETATE	—	E	B	B	B
SODIUM BICARBONATE	M	E	E	B	B
SODIUM BISULPHITE	B	E	E	E	—
SODIUM BORATE	—	E	E	B	—
SODIUM CARBONATE	M	E	E	B	E
SODIUM CHLORIDE	M	E	E	B	E
SODIUM CYANIDE	S	E	E	B	—
SODIUM DIPHOSPHATE	S	E	E	B	—
SODIUM FLUORIDE	—	E	—	B	—
SODIUM HYDRATE	B	E	E	E	—
SODIUM HYDROXIDE	M	E	E	E	—
SODIUM METALSILICATE	—	E	E	E	—
SODIUM NITRATE	M	E	E	B	E
SODIUM PERBORATE	—	E	E	B	—
SODIUM PHOSPHATE	M	E	E	B	—
SODIUM PHOSPHATE DIBASIC	B	E	E	B	—
SODIUM SILICATE	B	E	E	B	—
SODIUM SULFITE	B	E	E	B	—
SODIUM SULPHATE	B	E	E	B	E
SODIUM SULPHIDE	B	E	E	B	—
SODIUM TIOSULPHATE	M	E	E	E	—
SOYBEAN OIL	—	E	E	E	E
STEAM	M	E	—	E	—
STEARIC ACID	M	E	E	E	—
STYRENE	—	E	B	E	—
SULPHUR	S	E	S	B	E
SULPHUR ANHYDRIDE DRY	E	E	E	B	M
SULPHUR ANHYDRIDE WET	S	E	E	M	S
SULPHUR TRIOXIDE SAND BANK	E	E	E	E	—
SULPHURIC ACID CONCENTRATED	—	E	S	M	S
SULPHURIC ACID FROM 0 TO 10%	M	E	B	M	S
SULPHURIC ACID FROM 10 TO 90%	S	E	S	M	S
SULPHUROUS ACID	M	E	B	B	S
TANNIC ACID	B	E	E	B	—
TARTARIC ACID	M	E	E	E	B
TOLUENE OR TOLUOL	E	E	M	E	E
TRICHLORO-ETHYLENE DRY	E	E	M	B	B
TRICHLORO-ETHYLENE WET	M	E	M	—	B
TRICHLOROACETIC ACID	M	E	—	S	—
TURPENTINE	B	E	S	E	—
VINEGAR	S	E	E	E	—
XILENE DRY	—	E	S	E	—
ZINC CHLORIDE	S	E	E	B	B
ZINC SULPHATE	S	E	E	B	—

International system of units (SI)

CONVERSION FACTORS. SELECTION FOR AERAILIC APPLICATIONS

To convert SI units to other units, multiply by K. From other units to SI unit multiply by 1/K.

Description	Unit System (SI)	Other measure system unit					
		Technical	Factors K	1/K	Anglo-saxon	Factors K	1/K
Length	m (meter)	m	1	1	in (inch)	39,37	0,0254
					ft (foot)	3,281	0,305
Area	m ²	m ²	1	1	in ² (sq. in)	1550	0,000645
					ft ² (sq. ft)	10,764	0,0929
Volume	m ³	m ³	1	1	ft ³ (cu. ft)	35,315	0,0283
	10 ⁻³ m ³ = dm ³ = 1	dm ³ =1	1	1	gal US (gallon)	0,264	3,785
	liter						
Time	s (second)	s	1	1	sec (second)	1	1
	h (hour)		0,000278	3600	hr (hour)	0,000278	3600
Rotation speed	turn/s	turn/min	60	0,0167	rpm (rev/min)	60	0,0167
Speed	m/s	m/s	1	1	fpm (ft/min)	196,85	0,0051
Frequency	Hz (hertz)	Hz (period/s)	1	1	Hz (cycle/sec)	1	1
Mass	kg (kilogram)				lb (pound)	2,205	0,454
	g (gram)				gr (grain)	15,432	0,0648
Volumetric mass	kg/m ³	(**)			lb/ft ³	0,0624	16,017
Mass capacity	kg/s	(**)					
Force, weight (*)	N (newton)	kgf=kp (kg force)	0,102	9,807	lb (pound force)	0,225	4,448
Specific weight	(**)	kgf=m ³			lb/ft ³		
Weight capacity	(**)	kgf/s			lbf/sec		
Volume capacity	m ³ /s	m ³ /h	8600	0,00278	cfm (ci. ft/min)	2118,9	0,000472
	ℓ/h	ℓ/h	1	1	gpm (gal/min)	0,0044	227
Moment of a force, torque (*)	N-m	kgf-m	0,102	9,807	lb-ft	0,738	1,356
Moment of inertia (MR ²) (*)	kg-m ²	kgf-s ² -m****)	0,102	9,807	lb-ft ² (****)	23,73	0,0421
Pressure (*)	Pa (pascal)=N/m ²	kgf/m ² =mmH ₂ O	0,102	9,807	in wg (inc water gage)	0,00401	249,09
	100000Pa=1 bar	kgf/cm ² =at (****)	0,000102	98070	psi (lbf/in ²)	0,000145	6895
		torr=mmHg	0,0075	133,322	lbf/ft ²	0,0209	47,88
Stress	N-mm ² =MPa	kgf/mm ²	0,102	9,807	psi (lbf/in ²)	145	0,0069
Material resistance (*)							
Work, energy	J (joule)	kgf-m	0,102	9,807	lb-ft	0,738	1,356
		Wh (Watt hour)	0,000278	3600			
		kcal (calorie)	0,000239	4186,7	BTU (British Thermal Unit)	0,000948	1055
Mechanical power (*)	W (watt)	CV (horsepower)	0,00136	735,5	BHP (Brake Horse Power)	0,00134	745,7
Electric power	W	W	1	1	W	1	1
Thermal power	W	kcal/h	0,860	1,163	BTU/hr	3,413	0,293
Temperature	K (kelvin)	K (****)	1	1	°R (Rankine)	1,8	0,555
	°C (celsius)	°C	1	1	°F (fahrenheit)	(****)	(****)
Specific heat	J/kg K	kcal/kg °C	0,000239	4186,7	BTU/lb °F	0,000239	4186,7
Heating power / calorific value	J/kg	kcal/kg	0,000239	4186,7	BTU/lb °F	0,00043	2326
Total heat / sensible heat	J/kg	kcal/kg					
Volumetric heat content	J/m ³	kcal/m ³	0,000239	4186,7	BTU/ft ³	2,68E-5	37260
Conductivity	W/m K	kcal/m h°C	0,86	1,163	BTU in/ft ² hr °F	6,933	0,14423
					BTU/ft hr °F	0,5778	1,7308
Specific thermal power	W/m ²	kcal/m ² h	0,86	1,163	BTU in/ft ² hr	0,317	3,1546
Dynamic viscosity (*)	Pa s=N s/m ²	kgf s/m ²	0,102	9,807	lbf sec/ft ²	0,0209	47,88
		cP (centipoise)	1000	0,001			
Kinematic viscosity (*)	m ² /s	m ² /s	1	1	ft ² /sec	10,764	0,0929
		cSt (centistoke)	10 ⁶	10 ⁶			
Gas constant R (*)	J/kg K	m/K	0,102	9,807	ft/°R	0,602	1,661

MULTIPLES AND SUBMULTIPLES OF SI UNITS

Multiplication factors	10 ¹²	10 ⁹	10 ⁶	10 ³	10 ²	10 ¹	10 ⁻¹	10 ⁻²	10 ⁻³	10 ⁻⁶	10 ⁻⁹	10 ⁻¹²	10 ⁻¹⁵	10 ⁻¹⁸
Prefix	tera	giga	mega	kilo	etto	deca	deci	centi	milli	micro	nano	pico	temto	atto
Symbol	T	G	M	K	h	da	d	c	m	μ	n	p	f	a

Notes

(*) Conversion factors are valid only if acceleration of gravity has the value g=9,807 (m/s²) equivalent to 32,17 (ft/sec²)

(**) Specific weight and weight capacity are not considered in SI system: their numeric values in technic system correspond, respectively, to those of volumetric mass and mass capacity in SI system. The volumetric mass of the air in standard conditions (t=20°C; p_a = 100.000 Pa) has the value of 1,20 Kg/m³, equal to 0,075 lb/ft³ in the Anglo-Saxon system.

(****) In technical system the dynamic moment PD² (kgf-m²) is preferably used. The moment of inertia in SI system results MR² (kg-m²) = PD²/4. Anglo-Saxon system uses the fly wheel effect WR² (lb-ft²) = 23,73 MR².

(*****) at=metric or thermal atmosphere = 736 torr. - atm = normal or physical atmosphere = 760 torr.

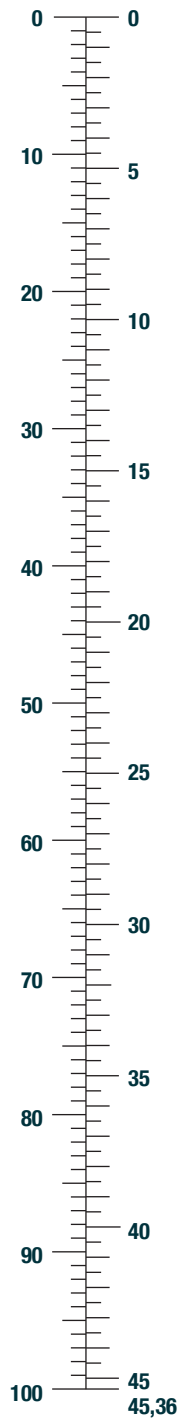
(*****) t (°C) = T(K) - 273,15 t (°C) = 5/9 [t(°F) - 32] - t(°F) = 9/5 t(°C) ÷ 32.

Conversion table

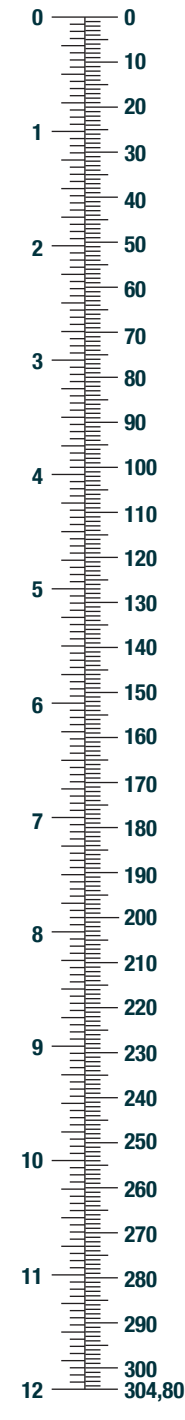
CONVERSION TABLE OF MEASUREMENT UNIT

List of conversion factors between the most common measurement units

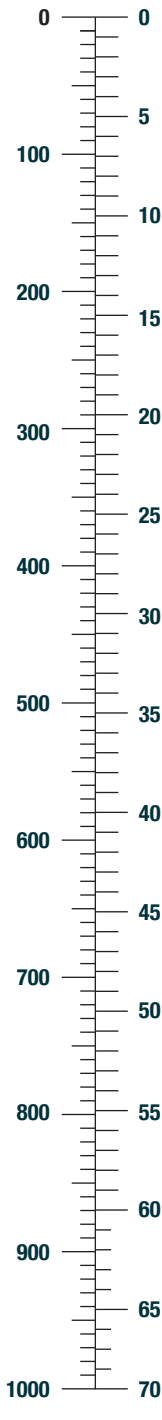
Weight	
pounds	kg



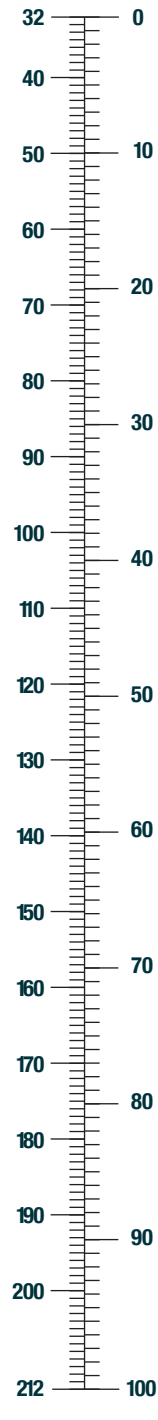
Lenght	
inches	mm



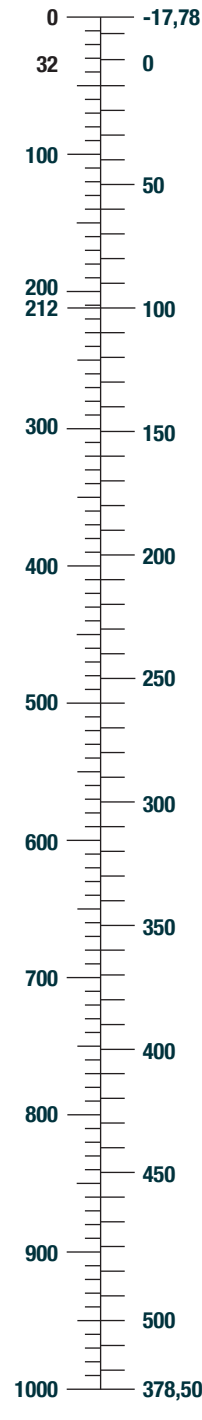
Pressure	
psi	bar



Temperature	
°F	°C



Volume	
US gallons	liters



Declaration of REACH compliance

DECLARATION ACCORDING TO THE REACH REGULATION N. 1907/2006

FIV S.r.l. Unipersonale, 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>

FIV 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 FIV products for their safe use, if used in the manner provided by the related product documentation.

FIV 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

DECLARATION OF CONFORMITY RoHS

FIV S.r.l. Unipersonale, 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.

General conditions of sale

GENERAL CONDITIONS OF SALE VALID FOR THE EXPORT MARKET

The Customer is required, before submitting his purchase order, to carefully read these general conditions of sale

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 are accepted for a minimum amount of 2,500 euro. Any orders for smaller amounts will be processed at the discretion of the seller.
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. 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.
5. The purchaser may not make any exceptions to delay payment.
6. 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. We inform buyers that if they detect any damage affecting the goods upon reception, they have the right to accept the goods by only indicating a specific reservation and only on the shipping note. In addition, the purchaser may collect the goods with his own means from the seller's factory.
7. The material travels at the risk and peril of the purchaser and, if shipping is seen to by the seller as specified in the previous art. 6, the purchaser must make any complaints directly to the carrier. The documentation necessary to receive insurance payment must be sent promptly to the company.
8. 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, extended for 60 days if so dictated by production requirements.

Beyond such a term, 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.
9. 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.
10. Any defects found in the material, whether they are faults covered by the guarantee as under the previous point 9, or otherwise, must be reported to the seller within 8 days from the date of delivery (otherwise it will be considered not valid) and covered by a third party product insurance taken out with a leading company.
11. 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).
12. Any particular and general exceptions to these conditions shall be agreed upon between the parties in writing.
13. 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.
14. 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.
15. 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.
16. The images of the products shown in this Catalogue Price List are indicative.
17. All judicial disputes, with no exception, will be settled by the Pordenone - Italy Court of Law.

The descriptions of the products components contained in the catalogue are not decisive for the purposes of the materials componentry and technical performance, which are subject to change and clarifications.

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