

FERRO®

Welcome to the world of FERRO

The FERRO Group is one of the largest manufacturers of sanitary and plumbing fixtures in Central and Eastern Europe with nearly 30 years of experience in the industry.

Thanks to its commitment to high product quality and its mission to meet customer needs for a safe and well-functioning home, Ferro products are present in millions of places. Every year we introduce new products to the market, which better and better meet the expectations of even the most demanding customers.

Quality under scrutiny

FERRO takes care of the excellent quality of its products. The company puts particular emphasis on meeting the requirements of the applicable standards, maintaining high technical parameters, safety and functionality of products. All the company's products are subject to extremely accurate and restrictive quality verification procedures. They are inspected on every production stand. The correct course of quality control processes is supervised by highly qualified engineers responsible for quality and product certification. The auditors check compliance with the procedures of the quality assurance system. These include the procedures specified by Polish PN and European PN-EN series standards and the procedures related to the Quality Management System.

The Group's headquarters, warehouse and logistics centre is located in Skawina. The Group, whose parent company is FERRO S.A. also includes the Group:

- FERRO S.A. Poland
- FERRO International Sp. z o.o. Poland
- NOVASERVIS spol. s.r.o. Czech Republic
- NOVASERVIS FERRO Group SRL Romania, Moldova
- NOVASERVIS FERRO SK s.r.o. Slovakia
- FERRO HUNGARY KFT Hungary
- NOVASERVIS FERRO Bulgaria Ltd. Bulgaria
- FERRO BALTICS UAB Latvia, Lithuania, Estonia
- FERRO ADRIATICA Croatia, North Macedonia, Bosnia and Herzegovina, Montenegro, Slovenia
- TERMET S.A. Poland
- TESTER Sp. z o.o. Poland



INSTALLATION
AND HEATING
TECHNIQUE

CATALOGUE 2023

Pictograms and function markings



Product warranty period expressed in years. The number placed in this sign informs about the warranty years for the product.



Nickel FREE
All product elements which may have contact with potable water are not covered with nickel.



Individual packaging
Product in individual packaging with a barcode for retail sale.

PARAMETERS



Pressure



Maximum temperature



Minimum temperature



Full flow valve

USED MATERIALS



CW617N-4MS brass
the latest hygienic standard



AISI304 Stainless steel



CW617N brass

MEDIA VALVES



Water



Glycol



Gas



Compressed air

PIPING



Copper pipes



Homogeneous pipes



Multilayer pipes

Trustworthy solutions

The range of products available for installation is very wide on the market. It is important to me is that the products I install are of good quality and the offer is complementary, which guarantees a long life of the installation. I chose the FERRO brand because it meets all these conditions.



CATALOGUE

2023

INSTALLATION AND HEATING TECHNIQUE

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Complete FERRO system

The complementarity of FERRO products guarantees the consistency of the solution in terms of price effectiveness, purchase consolidation as well as comprehensive service and investment support.



Thermostatic decorative sets

A wide range of fittings and radiator thermostats, including decorative sets in many colours. Regardless of the type, size and colour of the radiators, you can easily equip your heating system with the necessary control devices.

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Mixing groups

are an indispensable element of equipment for surface heating systems, including floor heating. There are several models on offer, dedicated to radiators of different sizes and parameters.

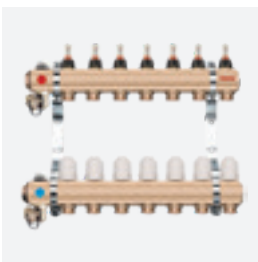
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Manifold cabinets

enable aesthetic installation of manifolds and their accessories. Ferro offers a wide range of flush and surface-mounted cabinets in various lengths, depths and heights as well as models with adjustable dimensions.

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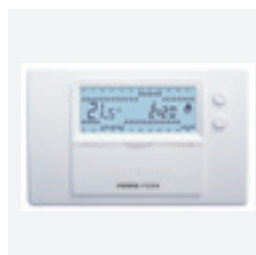
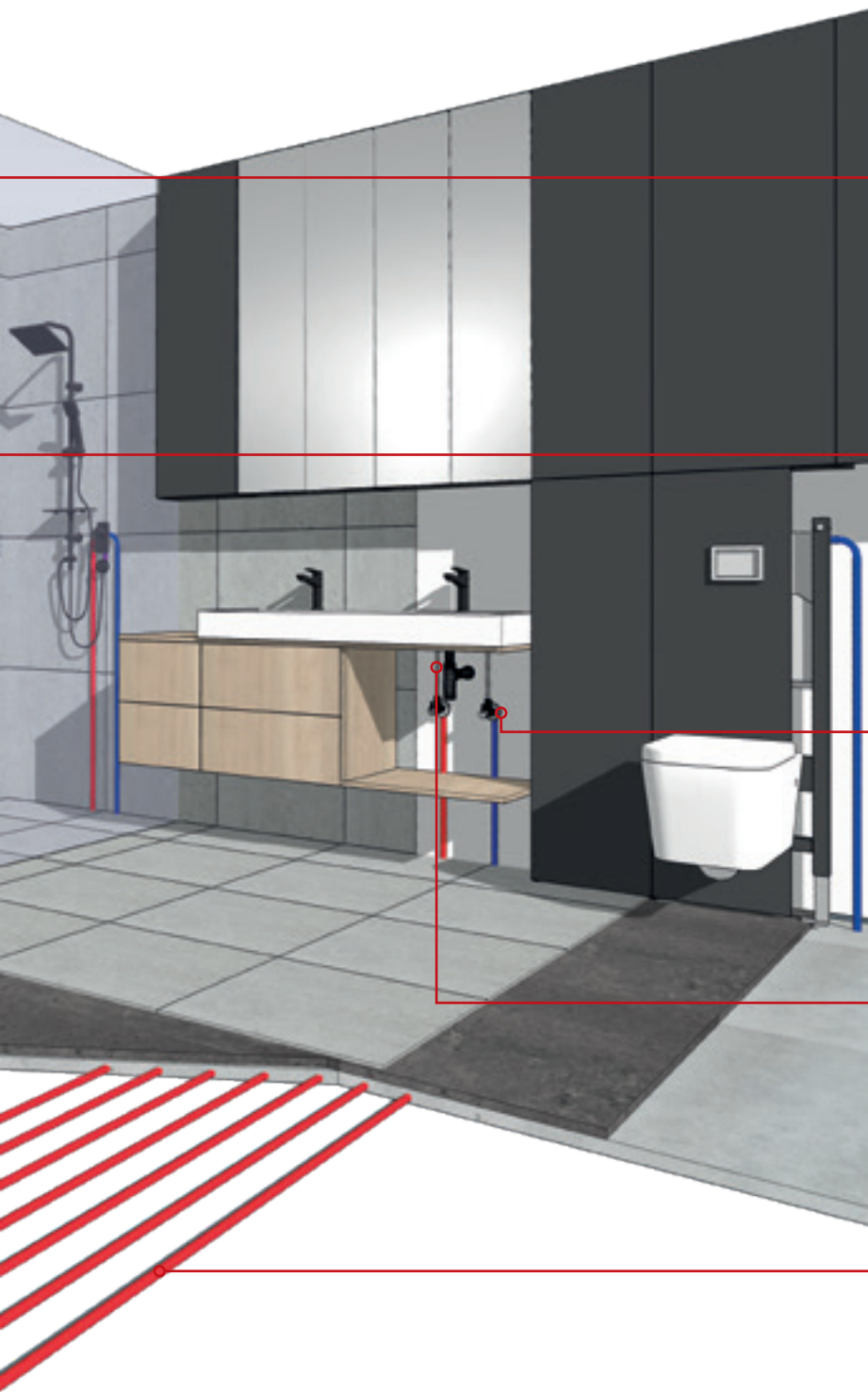
Manifolds

are indispensable devices in every modern radiator system, both with classic convection radiators and surface radiators, including floor radiators. The offer includes models with various equipping and outfitting adjusted to all practically encountered installation solutions.

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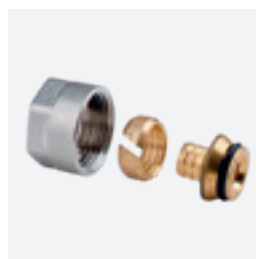


The FERRO system is an opportunity to fully realize your endeavour based on proven FERRO high quality components. Complementarity of the offer shall undoubtedly save time and guarantee reliability, harmony and functionality of the solution.



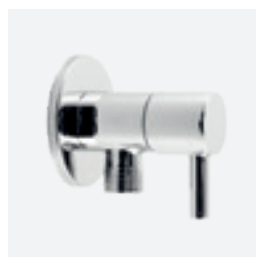
Room regulator
enables measurement and regulation of room temperature and setting of work schedules. Ferro offers both daily and weekly regulators.

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Connectors
Ferro's broad spectrum of fittings for different types of installations includes fittings for homogeneous and multilayer plastic pipes as well as steel and copper pipes.

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Angle valves
enable connection of household appliances such as washing machines, dishwashers, faucets/mixers, toilets, etc. FERRO offers a wide range of many models which differ in style, purpose and functionality.

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Connection hoses
are an indispensable element wherever there is a need for flexible connection of installation elements. We offer hoses in a wide range of lengths, types and diameters.

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PEX System Surface heating and plumbing
A multilayer, flexible pipe designed for heating systems, hot water, cold water and compressed air installations.

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Welcome to the world FERRO GROUP

The FERRO Group is one of the largest manufacturers of sanitary and plumbing fixtures in Central and Eastern Europe with nearly 30 years of experience in the industry. Thanks to its commitment to high product quality and its mission to meet customer needs for a safe and well-functioning home, Ferro products are present in millions of places. Every year we introduce new products to the market, which ever better meet the expectations of even the most demanding customers.

The vision, mission and values set the direction in which we are going, inspire us in our daily work, define our way of functioning and approach to customers, employees, business partners and shareholders.

A good understanding of individual markets and their needs has enabled us to gain the trust of our customers and dynamic international expansion. Consistent investment in modern technologies based on the philosophy of sustainable development makes us offer attractive design and quality products for many market segments. As Ferro Group, we desire to develop a leading position in the field of bathroom and kitchen solutions and offer professional installation systems. We want to accompany our customers at every stage of contact with the product - from inspiration, through efficient delivery, to failure-free use.

The FERRO Group maintains its position as market leader thanks to its numerous advantages and market advantages.



Stable and secure position of the company

The Group owns several product brands, including Ferro, Metalia and Titania, which gives it a significant competitive advantage and ensures a strong market position. FERRO cares about maintaining standards of operation and continuous development of the range of high quality products, which allows to maintain a wide range of customers, increase confidence in the brand and maintain a stable market position.



Large-scale operations

In addition to its activities in Poland, the FERRO Group offers its products in Europe and on numerous foreign markets, becoming one of the largest manufacturers of sanitary and plumbing fixtures in Central and Eastern Europe. Our products are produced at the Czech factory NOVASERVIS in Znojmo as well as several other factories in Europe and Asia.



High quality of products

The FERRO Group is constantly striving to achieve the best possible quality parameters. FERRO places particular emphasis on meeting the requirements of the applicable standards, maintaining high technical parameters, safety and functionality of its products. This is emphasized by the fact that the FERRO Group has implemented the ISO 9001:2008 Quality Management System. Thanks to special attention to quality, our company has been repeatedly awarded and honoured for the high quality of products by the environment and industry institutions and reputable industry magazines.



Exceptional team

Our company and its success is made up of People, considered to be the most valuable asset of the Group. FERRO's organizational culture is created by people with passion and open-mindedness, which is why we employ exceptional employees and ensure their continuous development.

FERRO Group companies

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- FERRO International Sp. z o.o. Poland
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Ferro Group's activities on the European market are performed by local distribution companies and local sales force

Thanks to this, the company perfectly recognizes the needs of the market and adapts its activities to the local specifics. The flexibility and local activity, combined with the global opportunities offered by the Group, make Ferro Group today the leader in the sanitary and heating technology sector in Europe. Consistent implementation of the vision of international development results in an increasing expansion of Ferro Group into new markets.



FERRO headquarters in Skawina

The history of the FERRO Group since its foundation is connected with the south of Kraków, for many years the company's headquarters have been located in Skawina, a town near Kraków. The strength of the Ferro brand is the excellent quality of the products manufactured in the Czech factory on the basis of the European standards of technology and work organization, as well as the constantly updated and extended assortment comprising several thousand unique products offered in 25 categories: from bathroom and kitchen mixers and sinks, to water and measurement fittings, radiators, pumps and heating controls, and from 2021 also gas boilers, provided to both individual customers and institutional recipients - developers, property managers, tenants.



Production plant and logistics centre in Znojmo (Czech Republic)

Our brands

We listen to the needs of our customers and create for them high quality products under brands: **Ferro, Nobless, Metalia and Titania**. Each brand responds to the needs of different groups of customers, and all of them have been created to facilitate everyday life and guarantee safe, comfortable and functional interiors of every house.

The global brand



Group brands CZ/SK



Product brands belonging to the FERRO Group

Proven in action



Our products are regularly awarded and honoured for their robust quality and high standard of workmanship. Many of them have won valuable distinctions granted by the environment and industry institutions and reputable interior design, construction and financial magazines.

RELIABLE TECHNOLOGY AND EUROPEAN STANDARDS

The FERRO Group places particular emphasis on meeting the requirements of current standards, maintaining high technical parameters, safety and functionality of its products. That is why we have implemented the ISO 9001:2015 Quality Management System.



What matters is the details

At every stage of production, FERRO attaches great importance to details, both in terms of their perfect execution and finish. Thanks to this, every product of the company is characterized by the highest quality and impeccable appearance.

QUALITY CONTROL AND PAYING ATTENTION TO DETAIL

QUALITY UNDER SCRUTINY

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Production process

FERRO's production is carried out in several modern factories around the world based on the highest quality raw materials and components from reliable suppliers from Europe and Asia.

We have our own production plant in Znojmo (Czech Republic) with a modern logistics centre. This, combined with our location in the heart of Europe, ensures efficient and effective distribution between the Group companies and to the various European and global markets. Before leaving the factories, all products undergo a meticulous quality control, which ensures that our customers receive a proven, reliable product that provides many years of comfortable operation.

The factory in Znojmo has a modern CNC machining plant, its own glassworks, assembly line, electroplating line, as well as faucet folding and polishing stations. The plant has almost 40 years of production tradition. Today not only faucets are manufactured there, but also bathroom accessories, bathroom fittings and brass distributors. The plant also boasts a fully automated chrome-plating plant with closed water circulation, adapted to the latest environmental requirements.



Experience and passion

Our company and its success is created by people who constitute the most valuable asset of the Group. FERRO's organizational culture is created by people with passion and open-mindedness, which is why we employ exceptional employees and ensure their continuous development. We believe that an appropriate incentive system, good working conditions and team partnership help to work effectively, develop employees and influence the further development of the company. In our daily activities we are guided by values that allow us to build an extraordinary working atmosphere.



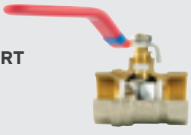



WE WORK WITH
EXTRAORDINARY PEOPLE
BECAUSE IT IS THANKS TO
THEM THAT WE ACHIEVE
EXTRAORDINARY RESULTS.



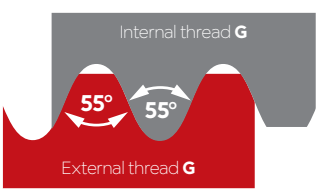

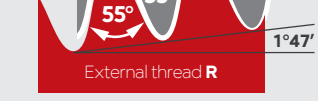
PEOPLE

Our team consists of almost half a thousand people from all over Europe. The experience of our long-time employees is complemented by a fresh look of these younger ones, thanks to which we realize creative ideas and implement innovative solutions together. And, together we create an energetic, efficient organization that values teamwork, mutual respect and continuous improvement.

Valve characteristics

Type of valve	Thread type	Nominal pressure	Max. working temperature	Full passage in compliance with standards	Gland to compensate for clearance	Working agent	PZH certificate	Guarantee
F-POWER 	G	3,0 MPa (30 bar)	120°C	yes	yes		yes	10 years
F-COMFORT 	G	2,0 MPa (20 bar)	100°C	reduced	yes		yes	5 years
HERKULES 	Rp, R	4,0 MPa (40 bar)	140°C	yes	yes		yes	15 years

Thread types

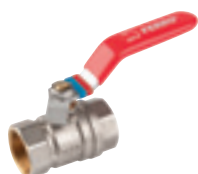
Thread	Sketch	Description	In compliance with norms	Compatibility	Seal
G		Cylindrical pipe thread joints with tightness not obtained on the thread	ISO 228	Male thread G can only be screwed into female thread G	Sealing by pressing down on two flat surfaces and an additional seal or on a 60° cone
Rp		Cylindrical pipe thread internal connections with the tightness achieved on the thread	ISO 7	Only the male thread Rp can be screwed into the female thread Rp	Sealing on the thread, e.g. with PTFE tape or thread
R		Tapered pipe thread external connections to the tightness achieved on the thread	ISO 7	Male thread R can be screwed into female thread G or Rp	

Hydraulic fittings

VALVES



BALL VALVES - F-POWER
14



BALL VALVES - F-COMFORT
22



BALL VALVES - HERKULES
28



BALL VALVES - OTHER
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NEW

OTHER WATER VALVES
37



ANGLE VALVES
44



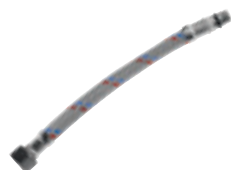
HYDRAULIC FITTINGS FOR SOLDERING
47

CONNECTORS

HOSES

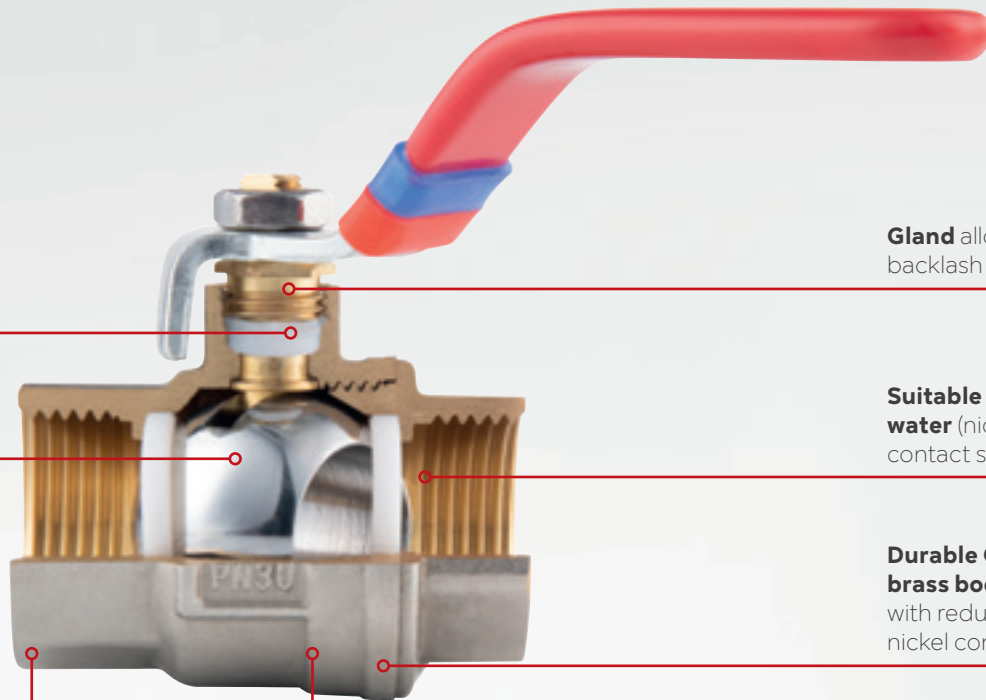


CONNECTORS FOR SOLDERING
48



CONNECTION HOSES
51

F-Power - ball valves



PTFE stem seal

Gland allowing backlash compensation

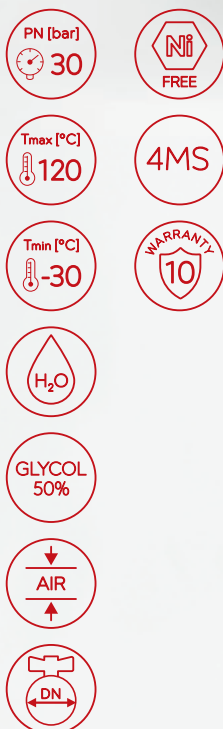
Chrome plated ball

Suitable for potable water (nickel-free contact surfaces)

Durable CW617N-4MS brass body with reduced lead and nickel content

Nominal pressure 3,0 MPa

Working temperature from -30°C up to 120°C



Advantages

- warranty: 10 years
- valve bore without any constriction affecting the flow, full port according to standard
- valves are adapted to potable water - surface, which may have contact with potable water (inside the valve and connection threads) is not nickel plated
- solid metal handle
- the gland on the stem allows compensation of possible clearance by means of a simple wrench
- chrome plated and polished ball resistant to blocking
- thick walls and solid workmanship - increased durability and strength
- quality control carried out strictly according to applicable European standards
- 100% of the valves produced are tested for leakage
- valve's bodies have permanent markings required by the European standards
- valves have removable rubber bands to identify installation on the hot water/supply or cold/return pipe and labels with EAN codes and the necessary data to facilitate retail sales
- the use of the highest quality materials, care for solid workmanship, the use of modern technologies and multi-stage quality control have resulted in the new F-Power line being awarded the Quality International 2021 Gold Emblem

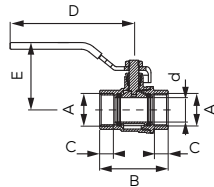
Operating parameters and scope of application:

- nominal pressure: 3.0 MPa (30 bar)
- nominal working temperature: min -30°C, max. 120°C
- working media: water (water supply systems and central heating), max. 50% glycol solution in water, compressed air
- ball valves have received a National Technical Assessment Certificate issued by the Building Research Institute in Warsaw stating suitability for use in construction and Hygienic Certificate issued by the National Institute of Hygiene in Warsaw

Workmanship and materials

- valves are made in ABT (Advanced Body Technology) technology, combining advanced design and material solutions
- body material: CW617N-4MS brass - the newest hygiene standard
- ball finish: chrome plated, polished
- ball sealing: PTFE
- stem sealing: PTFE
- stable and safe seating of the stem due to assembly from the inside of the valve

Description



- H₂O
- GLYCOL 50%
- AIR
- OIL FREE
- 4MS
- 10

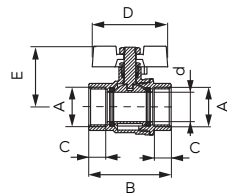
F-Power ball valve

- female-female
- full bore
- with gland
- handle: metal lever
- body material: brass
- ball material: brass (DN10 - DN50), stainless steel (DN65 - DN100)
- material of ball and stem seals: PTFE
- nominal pressure DN10 - DN50: 30 bar (PN30)
- nominal pressure DN65 - DN100: 25 bar (PN25)
- maximum working temperature: 120°C
- minimum working temperature: -30°C



Packaging

DN	A	d [mm]	C [mm]	B [mm]	E [mm]	D [mm]	K _{vs} [m³/h]	Index	Packaging	
									individual	bulk
10	G3/8	10	9	43	45	94	4,33	KFP10	20 pcs	120 pcs
15	G1/2	15	10,5	50,5	48,5	96	7,86	KFP1	12 pcs	120 pcs
20	G3/4	20	11	56	55	101,5	15,60	KFP2	10 pcs	80 pcs
25	G1	25	13	66,5	65,5	116,5	24,13	KFP3	8 pcs	48 pcs
32	G1 1/4	32	14	79	70,5	116,5	44,97	KFP4	8 pcs	32 pcs
40	G1 1/2	40	14,5	90	74	126,5	66,94	KFP5	4 pcs	24 pcs
50	G2	50	16	104	90,5	151,5	105,65	KFP6	2 pcs	12 pcs
65	G2 1/2	65	24	141	123,5	242	-	KFP7	1 pcs	4 pcs
80	G3	80	24	160	135,5	242	-	KFP8	1 pcs	4 pcs
100	G4	98	28	192	149	267	-	KFP9	1 pcs	2 pcs



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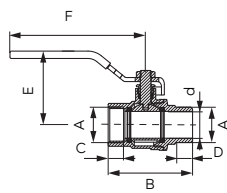
F-Power ball valve

- female-female
- full bore
- with gland
- handle: butterfly
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure 30 bar (PN30)
- maximum working temperature: 120°C
- minimum working temperature: -30°C



Packaging

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									individual	bulk
10	G3/8	10	9	43	34	51,3	4,33	KFPM10	12 pcs	120 pcs
15	G1/2	15	10,5	50,5	37,9	51,3	7,86	KFPM1	15 pcs	150 pcs
20	G3/4	20	11	56	41,3	51,3	14,80	KFPM2	12 pcs	96 pcs
25	G1	25	13	66,5	47,4	65	24,13	KFPM3	10 pcs	50 pcs
32	G1 1/4	32	14	79	63,7	88	42,58	KFPM4	6 pcs	24 pcs



- H₂O
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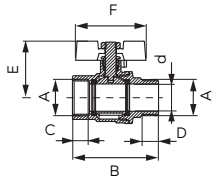


Packaging

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										individual	bulk
10	G3/8	10	9	10,5	53,5	45	94	4,21	KFP101	10 pcs	120 pcs
15	G1/2	15	10,5	11	58,5	48,5	96	7,06	KFP11	10 pcs	100 pcs
20	G3/4	20	11	11,5	63	54	101,5	14,80	KFP21	10 pcs	80 pcs
25	G1	25	13	13,5	75,5	65,5	116,5	23,11	KFP31	10 pcs	40 pcs
32	G1 1/4	32	14	18,5	93	70,5	116,5	42,01	KFP41	6 pcs	24 pcs
40	G1 1/2	40	14,5	18	101	74	126,5	66,14	KFP51	4 pcs	16 pcs
50	G2	50	16	20,5	120,5	90,5	151,5	-	KFP61	2 pcs	12 pcs

BALL VALVES - F-POWER

Description



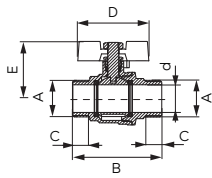
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10	G3/8	10	9	10,5	53,5	34	51,3	4,33	KFPM101	12 pcs	120 pcs
15	G1/2	15	10,5	11	58,5	37,9	51,3	7,29	KFPM11	15 pcs	90 pcs
20	G3/4	20	11	11,5	63	41,3	51,3	14,80	KFPM21	12 pcs	96 pcs
25	G1	25	13	13,5	75,5	47,4	65	23,11	KFPM31	10 pcs	50 pcs
32	G1 1/4	32	14	18,5	93	63,7	88	42,58	KFPM41	6 pcs	24 pcs



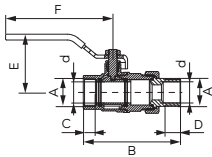
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Packaging

DN	A	d [mm]	C [mm]	B [mm]	E [mm]	D [mm]	Kvs [m³/h]	Index	individual	bulk
15	G1/2	15	11	59,5	37,9	51,3	6,94	KFPN1	15 pcs	90 pcs
20	G3/4	20	11,5	64,5	41,3	51,3	15,71	KFPN2	12 pcs	96 pcs
25	G1	25	13,5	77	47,4	65	22,31	KFPN3	10 pcs	50 pcs



F-Power ball valve

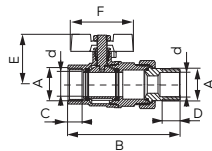
- female-male with union
- full bore
- with gland
- handle: metal lever
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure 30 bar (PN30)
- maximum working temperature: 120°C
- minimum working temperature: -30°C



Packaging

DN	A	d [mm]	C [mm]	D [mm]	B [mm]	E [mm]	F [mm]	Kvs [m³/h]	Index	individual	bulk
15	G1/2	15	10,5	12,5	80,8	48,5	96	7,29	KFPS11	8 pcs	80 pcs
20	G3/4	20	11	12,5	93	53,8	101,5	14,80	KFPS21	6 pcs	48 pcs
25	G1	25	13	16,5	108	64,6	116,5	22,43	KFPS31	4 pcs	20 pcs
32	G1 1/4	32	14	16,5	124,6	70,5	116,5	41,10	KFPS41	2 pcs	12 pcs

Description



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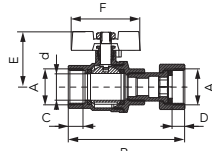
F-Power ball valve

- female-male with union
- full bore
- with gland
- handle: butterfly
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure 30 bar (PN30)
- maximum working temperature: 120°C
- minimum working temperature: -30°C



Packaging

DN	A	d [mm]	C [mm]	D [mm]	B [mm]	E [mm]	F [mm]	Kvs [m³/h]	Index	individual	bulk
15	G1/2	15	12,5	12	79,5	37,9	51,3	7,29	KFPS1	10 pcs	100 pcs
20	G3/4	20	14,5	12,5	92,1	41,3	51,3	13,55	KFPS2	12 pcs	48 pcs
25	G1	25	16,5	14,5	108	47,4	65	22,43	KFPS3	6 pcs	30 pcs
32	G1 1/4	32	18,5	15,5	124,6	63,7	88	40,98	KFPS4	4 pcs	16 pcs



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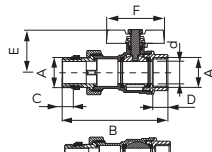
F-Power ball valve

- female-female with half-union
- with gland
- handle: butterfly
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure 16 bar (PN16)
- maximum working temperature: 120°C



Packaging

DN	A	d [mm]	C [mm]	D [mm]	B [mm]	E [mm]	F [mm]	Kvs [m³/h]	Index	individual	bulk
15	G1/2	15	12,5	11	70	37,9	51,3	4,21	KFPM1SG	10 pcs	100 pcs
20	G3/4	20	15	11	74,5	41,3	51,3	8,65	KFPM2SG	6 pcs	60 pcs



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F-Power ball valve with thermometer

- female-male with union
- additional nut with a seal on the mounting thread
- with gland
- handle: butterfly
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure 30 bar (PN30)
- maximum working temperature: 120°C

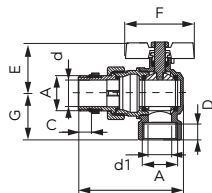


Packaging

DN	A	d [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	Kvs [m³/h]	Index	individual	bulk
25	G1	25	118,5	12,5	175	47,6	65	36,6	19,01	KFPS3T	4 pcs	24 pcs

BALL VALVES - F-POWER

Description



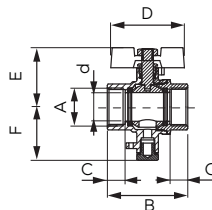
F-Power angle ball valve

- female-male with union
- additional nut with a seal on the mounting thread
- with gland
- handle: butterfly
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure 30 bar (PN30)
- maximum working temperature: 120°C



Packaging

DN	A	d [mm]	d1 [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	Kvs [m³/h]	Index	individual	bulk
25	G1	25	22	99	12,5	16,5	47,6	65	44	10,93	KFP3A	2 pcs	20 pcs



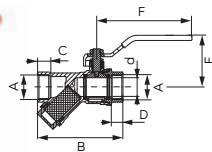
F-Power ball valve with M10x1 connection for temperature sensor

- female-female
- full bore
- with gland
- handle: butterfly
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure 16 bar (PN16)
- maximum working temperature: 120°C



Packaging

DN	A	d [mm]	C [mm]	D [mm]	B [mm]	E [mm]	F [mm]	Kvs [m³/h]	Index	individual	bulk
15	G1/2	15	12	50,5	38	51,3	37,2	7,17	KFPMT1	12 pcs	120 pcs
20	G3/4	20	12,5	56,1	41,1	51,3	37,2	15,37	KFPMT2	12 pcs	60 pcs



F-Power ball valve with filter

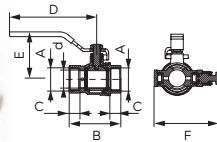
- female-female
- with gland
- handle: metal lever
- body and ball material: brass
- material of ball and stem seals: PTFE
- materiał wkładu filtra: stainless steel
- nominal pressure 16 bar (PN16)
- maximum working temperature: 120°C



Packaging

DN	A	d [mm]	C [mm]	D [mm]	B [mm]	E [mm]	F [mm]	Kvs [m³/h]	Index	individual	bulk
15	G1/2	15	13	12	79	48,5	9,6	3,19	KFPZF1	8 pcs	40 pcs
20	G3/4	20	13	12,5	90,5	55	101,5	6,38	KFPZF2	10	40
25	G1	25	15	14,5	108	65,5	116,5	10,13	KFPZF3	4	32
32	G1 1/4	32	16	15,5	137	70,5	116,5	13,66	KFPZF4	2	8

Description



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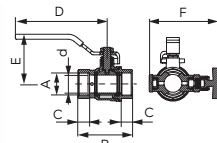
F-Power ball valve with manual air-vent and plug

- female-female
- full bore
- with gland
- handle: metal lever
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure 16 bar (PN16)
- maximum working temperature: 120°C



Packaging

DN	A	d [mm]	C [mm]	D [mm]	B [mm]	E [mm]	F [mm]	Kvs [m³/h]	Index	individual	bulk
15	G1/2	15	12	54	48,5	96	68,5	7,51	KFPO1	6 pcs	48 pcs
20	G3/4	20	12,5	60	55	101,5	74,5	15,48	KFPO2	6 pcs	36 pcs
25	G1	25	14,5	70,5	65,5	116,5	80,5	22,65	KFPO3	4 pcs	24 pcs
32	G1 1/4	32	15,5	83	70,5	116,5	90,5	45,08	KFPO4	6 pcs	24 pcs
40	G1 1/2	40	16	93,5	74	126,5	98,5	58,40	KFPO5	2 pcs	12 pcs
50	G2	50	17,5	107,5	90,5	151,5	109,5	105,99	KFPO6	1 pcs	6 pcs



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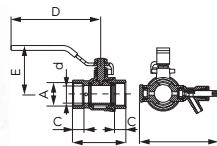
F-Power ball valve with manual air-vent and plug

- female-female
- full bore
- with gland
- handle: metal lever
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure 16 bar (PN16)
- maximum working temperature: 120°C



Packaging

DN	A	d [mm]	C [mm]	D [mm]	B [mm]	E [mm]	F [mm]	Kvs [m³/h]	Index	individual	bulk
15	G1/2	15	12	54	48,5	96	71,3	7,51	KFPOM1	10 pcs	50 pcs
20	G3/4	20	12,5	60	55	101,5	77,3	15,48	KFPOM2	6 pcs	48 pcs
25	G1	25	14,5	70,5	65,5	116,5	83,3	22,65	KFPOM3	5 pcs	20 pcs



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F-Power ball valve with drain, manual air-vent and plug

- female-female
- full bore
- with gland
- handle: metal lever
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure 16 bar (PN16)
- maximum working temperature: 120°C
- minimum working temperature: -30°C

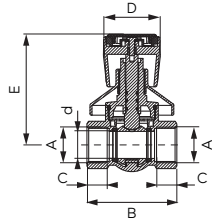


Packaging

DN	A	d [mm]	C [mm]	D [mm]	B [mm]	E [mm]	F [mm]	Kvs [m³/h]	Index	individual	bulk
15	G1/2	15	12	54	48,5	96	82,7	7,51	KFPW1	8 pcs	64 pcs
20	G3/4	20	12,5	60	55	101,5	88,7	12,41	KFPW2	6 pcs	48 pcs
25	G1	25	14,5	70,5	65,5	116,5	94,7	21,40	KFPW3	4 pcs	24 pcs
32	G1 1/4	32	15,5	83	70,5	116,5	104,7	41,21	KFPW4	2 pcs	16 pcs
40	G1 1/2	40	16	93,5	74	126,5	112,7	67,17	KFPW5	2 pcs	12 pcs
50	G2	50	17,5	107,5	90,5	151,5	123,7	-	KFPW6	2 pcs	8 pcs

BALL VALVES - F-POWER

Description



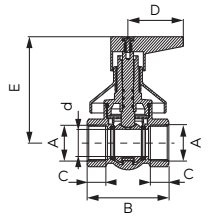
F-Power concealed ball valve

- female-female
- full bore
- with knob and rosette
- red and blue indication cap included
- body and ball material: brass
- material of ball seals: PTFE
- material of stem seals: EPDM (3 pcs O-ring)
- nominal pressure 16 bar (PN16)
- maximum working temperature: 120°C



Packaging

DN	A	d [mm]	C [mm]	B [mm]	E [mm]	D [mm]	Kvs [m³/h]	Index	individual	bulk
15	G1/2	15	12,5	57	78,8	45,3	7,29	KFP1P	4 pcs	32 pcs
20	G3/4	20	15	66,5	82	45,3	14,00	KFP2P	4 pcs	20 pcs



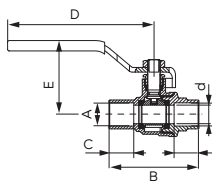
F-Power concealed ball valve

- female-female
- full bore
- with knob and rosette
- body and ball material: brass
- material of ball seals: PTFE
- material of stem seals: EPDM (3 pcs O-ring)
- nominal pressure 16 bar (PN16)
- maximum working temperature: 120°C



Packaging

DN	A	d [mm]	C [mm]	B [mm]	E [mm]	D [mm]	Kvs [m³/h]	Index	individual	bulk
15	G1/2	15	12,5	57	73,5	45	7,29	KFP1D	4 pcs	32 pcs
20	G3/4	20	15	66,5	76,5	45	14,00	KFP2D	4 pcs	32 pcs



F-Power ball valve for soldering

- with gland
- full bore
- handle: metal lever
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure 16 bar (PN16)
- maximum working temperature: 120°C

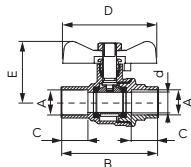


Packaging

DN	A	d [mm]	C [mm]	B [mm]	E [mm]	D [mm]	Kvs [m³/h]	Index	individual	bulk
10	12	10	14	52	44	94	3,87	KFPL1*	20 pcs	120 pcs
15	15	12	16	58	48	94	5,24	KFPL2	14 pcs	112 pcs
15	18	15	16	60	50	94	6,83	KFPL3	12 pcs	96 pcs
20	22	20	18	71	53	94	12,64	KFPL4	10 pcs	50 pcs
25	28	25	21	83	59	99,5	24,36	KFPL5	10 pcs	40 pcs
32	35	32	24	99	74	130	38,25	KFPL6	6 pcs	24 pcs

* Available while stock lasts

Description



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F-Power ball valve for soldering

- with gland
- full bore
- handle: butterfly
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure 16 bar (PN16)
- maximum working temperature: 120°C

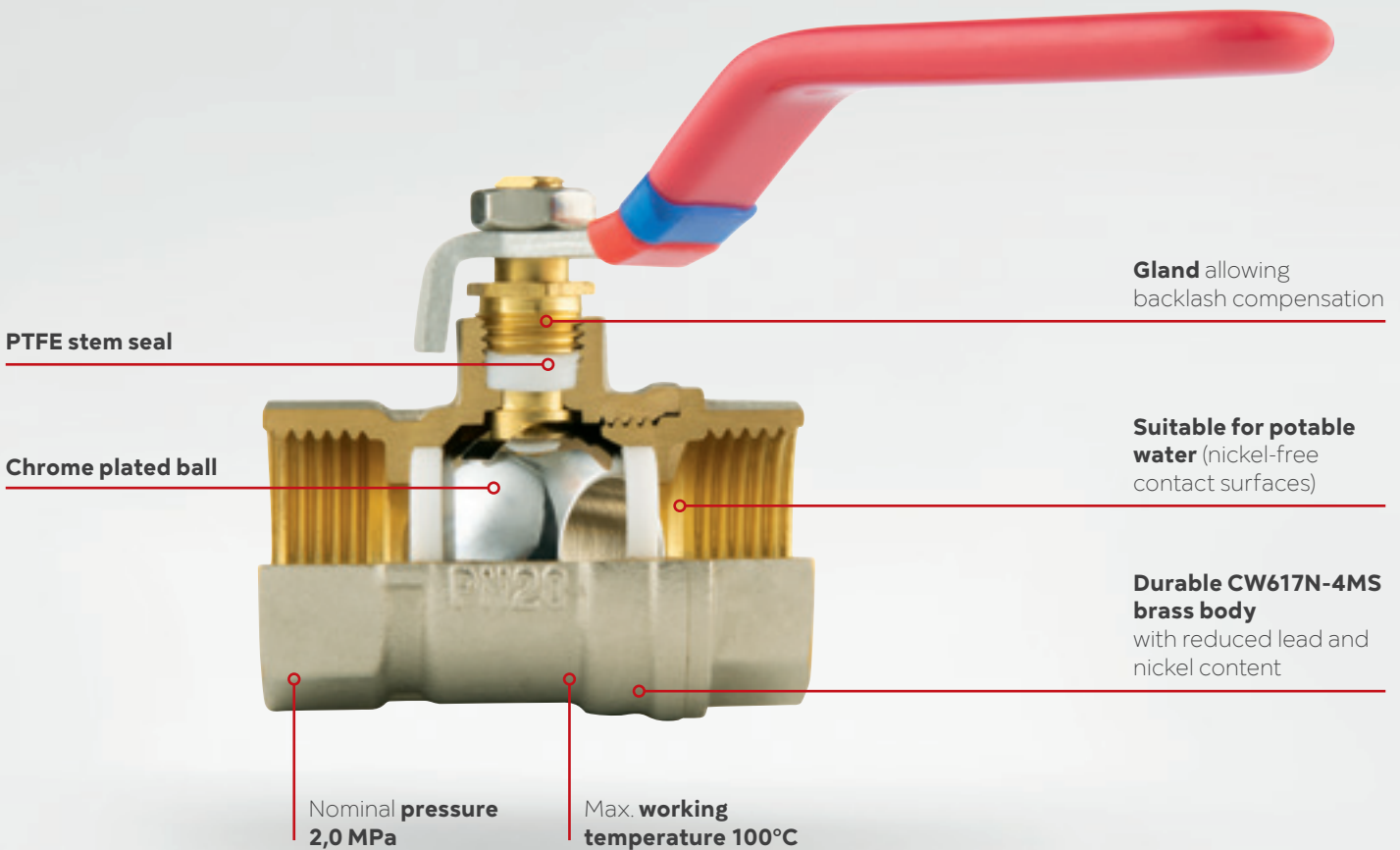
Available while stock lasts



Packaging

DN	A	d [mm]	C [mm]	B [mm]	E [mm]	D [mm]	Kvs [m³/h]	Index	individual	bulk
10	12	10	14	52	33	56	3,87	KFPL11	20 pcs	200 pcs
15	15	12	16	58	36	56	5,24	KFPL21	15 pcs	150 pcs
15	18	15	16	60	38	56	6,83	KFPL31	16 pcs	96 pcs
20	22	20	18	71	42	56	12,64	KFPL41	12 pcs	60 pcs

F-Comfort - ball valves



Advantages

- F-Comfort series valves were awarded the Gold Medal at the Poznan 2020/2021 International Trade Fair for Installations and Equipment
- warranty: 5 years
- valves are adapted to potable water - surface, which may have contact with water (inside the valve and connection threads) is not nickel plated
- solid metal handle
- the gland on the stem allows compensation of possible clearance by means of a simple wrench
- chrome plated and polished ball resistant to blocking
- thick walls and solid workmanship - increased durability and strength
- quality control carried out strictly in accordance with applicable European standards
- 100% of the valves produced are tested for leakage
- valve's bodies have permanent markings required by the European standards
- valves have removable rubber bands to identify installation on the hot water/supply or cold/return pipe and labels with EAN codes and the necessary data to facilitate retail sales

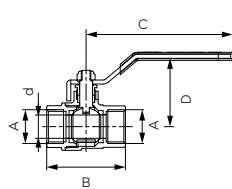
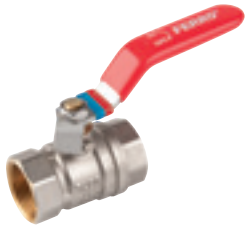
Operating parameters and scope of application

- nominal pressure: 2,0 MPa (20 bar)
- nominal working temperature: max. 100°C
- working media: water (water supply systems and central heating)
- ball valves have received a National Technical Assessment Certificate issued by the Building Research Institute in Warsaw stating suitability for use in construction and Hygienic Certificate issued by the National Institute of Hygiene in Warsaw

Workmanship and materials

- valves are made in ABT (Advanced Body Technology) technology, combining advanced design and material solutions
- body material: brass CW617N-4MS - the newest hygiene standard
- ball finish: chrome plated, polished
- ball sealing: PTFE
- stem sealing: PTFE

Description



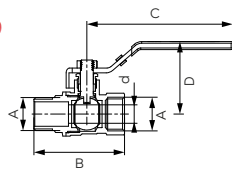
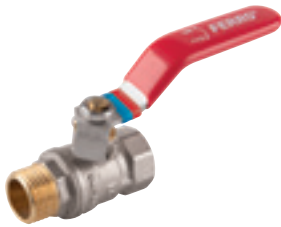
F-Comfort ball valve

- female-female
- with gland
- handle: metal lever
- body and ball material: brass
- material of ball and stem seals: PTF
- nominal pressure: 20 bar (PN20)
- maximum working temperature: 100°C



Packaging

DN	A	d [mm]	B [mm]	C [mm]	D [mm]	Kvs [m³/h]	Index	Packaging	
								individual	bulk
15	G1/2	12	47	91	45,2	6,83	KFC1	15 pcs	90 pcs
20	G3/4	16	55,5	91	48,5	10,94	KFC2	12 pcs	72 pcs
25	G1	21	63	113	59	24,48	KFC3	10 pcs	40 pcs
32	G1 1/4	27	70,2	131	67	36,30	KFC4	9 pcs	36 pcs
40	G1 1/2	33	81	154	82,5	54,77	KFC5	4 pcs	16 pcs
50	G2	43	94,4	154	86	93,22	KFC6	2 pcs	12 pcs



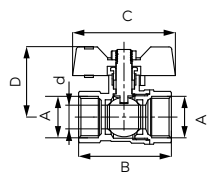
F-Comfort ball valve

- female-male
- with gland
- handle: metal lever
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure: 20 bar (PN20)
- maximum working temperature: 100°C



Packaging

DN	A	d [mm]	B [mm]	C [mm]	D [mm]	Kvs [m³/h]	Index	Packaging	
								individual	bulk
15	G1/2	12	54,5	91	45,2	6,83	KFC11	15 pcs	90 pcs
20	G3/4	16	62,5	91	48,5	10,94	KFC21	10 pcs	60 pcs
25	G1	21	71,5	113	59	24,48	KFC31	10 pcs	40 pcs
32	G1 1/4	27	78,5	131	67	36,30	KFC41	6 pcs	36 pcs
40	G1 1/2	33	93	154	82,5	54,77	KFC51	4 pcs	16 pcs
50	G2	43	103,2	154	86	93,22	KFC61	2 pcs	12 pcs



F-Comfort ball valve

- female-female
- with gland
- handle: metal butterfly
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure: 20 bar (PN20)
- maximum working temperature: 100°C

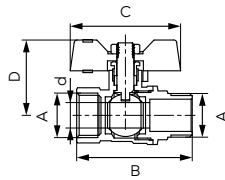


Packaging

DN	A	d [mm]	B [mm]	C [mm]	D [mm]	Kvs [m³/h]	Index	Packaging	
								individual	bulk
15	G1/2	12	47	52	35,5	5,34	KFCM1	24 pcs	120 pcs
20	G3/4	16	55,5	52	38,8	13,31	KFCM2	18 pcs	90 pcs
25	G1	21	63	67,5	49,5	21,28	KFCM3	10 pcs	60 pcs

BALL VALVES - F-COMFORT

Description



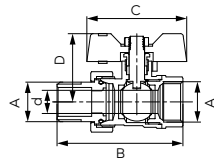
F-Comfort ball valve

- female-male
- with gland
- handle: metal butterfly
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure: 20 bar (PN20)
- maximum working temperature: 100°C



Packaging

DN	A	d [mm]	B [mm]	C [mm]	D [mm]	K _{vs} [m³/h]	Index	individual	bulk
15	G1/2	12	54,5	52	35,5	5,34	KFCM11	18 pcs	144 pcs
20	G3/4	16	62,5	52	38,8	13,31	KFCM21	18 pcs	90 pcs
25	G1	21	71,5	67,5	50	21,28	KFCM31	10 pcs	60 pcs



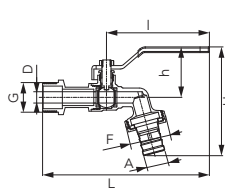
F-Comfort ball valve

- female-male with union
- with gland
- handle: metal butterfly
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure: 20 bar (PN20)
- maximum working temperature: 100°C



Packaging

DN	A	d [mm]	B [mm]	C [mm]	D [mm]	K _{vs} [m³/h]	Index	individual	bulk
15	G1/2	12	65,5	52	35,5	6,39	KFCS1	15 pcs	75 pcs
20	G3/4	16	76	52	38,8	11,83	KFCS2	14 pcs	56 pcs
25	G1	21	87	67,5	50	21,50	KFCS3	12 pcs	36 pcs



F-Comfort intake water ball valve

- male
- with gland
- with metal hose connector
- handle: metal lever
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure: 10 bar (PN10)
- maximum working temperature: 100°C

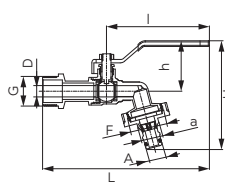
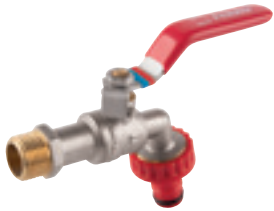


Packaging

DN	G	D [mm]	L [mm]	I [mm]	H [mm]	h [mm]	A [mm]	F	K _{vs} [m³/h]	Index	individual	bulk
10	G3/8	9	142	90	90	41	15	G3/4	2,06	KCN10*	20 pcs	80 pcs
15	G1/2	10	144	90	92	43	15	G3/4	2,50	KCN1	15 pcs	60 pcs
20	G3/4	10	148	90	95	43	19,5	G1	2,72	KCN2	10 pcs	60 pcs
25	G1	16	182	112	119	55	27	G1 1/4	8,19	KCN3	5 pcs	30 pcs

* Available while stock lasts

Description



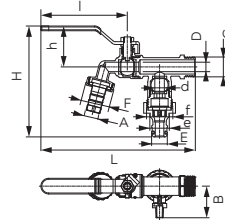
F-Comfort intake water ball valve with plastic quick coupler hose connection

- male
- with gland
- with quick coupler hose connection tip
- handle: metal lever
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure: 10 bar (PN10)
- maximum working temperature: 65°C



Packaging

DN	G	D [mm]	L [mm]	I [mm]	H [mm]	h [mm]	A [mm]	a [mm]	F	K _{vs} [m³/h]	Index	individual	bulk
15	G1/2	10	144	90	94	43	15,5	19,8	G3/4	2,50	KCPN1	15 pcs	60 pcs
20	G3/4	10	148	90	97	43	15,5	19,8	G1	2,50	KCPN2	10 pcs	60 pcs



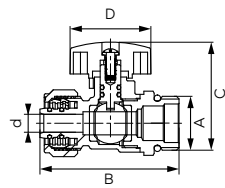
F-Comfort bibcock with two outlets

- male
- with gland
- with metal hose nipple and hose attachment for quick coupler hose connection
- handle: metal lever
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure: 10 bar (PN10)
- maximum working temperature: 65°C



Packaging

DN	G	D [mm]	d [mm]	L [mm]	I [mm]	H [mm]	h [mm]	B [mm]	A [mm]	E [mm]	e [mm]	F	f	Index	individual	bulk
15	G1/2	10	10	163	90	117	43	33	15	15,5	19,8	G3/4	G3/4	KCD1	8 pcs	32 pcs
20	G3/4	10	10	164	90	118	43	33	19,5	15,5	19,8	G1	G1	KCD2	6 pcs	24 pcs



F-Comfort ball valve for 16x2 multilayer pipes

- male
- compression connection for 16x2 mm multilayer pipes with double EPDM O-ring sealing
- 1/2" connection with EPDM O-ring
- double stem sealing (2 pcs O-ring)
- handle: metal butterfly
- body and ball material: brass
- material of ball seals: PTFE
- material of stem seals: EPDM
- red or blue handle
- nominal pressure: 10 bar (PN10)
- maximum working temperature: 100°C

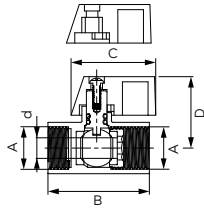
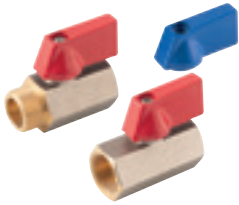


Packaging

DN	A	d [mm]	B [mm]	C [mm]	D [mm]	K _{vs} [m³/h]	Index	individual	bulk
15	G1/2	7	54,2	31,6	31,5	2,50	KNPEX16 red	10 pcs	120 pcs
15	G1/2	7	54,2	31,6	31,5	2,50	KNPEX16-BH blue	10 pcs	120 pcs

BALL VALVES - F-COMFORT

Description

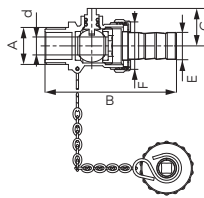


F-Comfort mini ball valve

- handle: red or blue (available in set)
- body and ball material: brass
- material of ball and stem seals: PTFE
- double stem sealing (2 pcs O-ring)
- handle: metal butterfly
- nominal pressure: 10 bar (PN10)
- maximum working temperature: 100°C



DN	A	d [mm]	B [mm]	C [mm]	D [mm]	K _{vs} [m³/h]		Index	Packaging	
									individual	bulk
10	G1/2	10	47,2	33	29,8	4,68	female-male	KRN1	20 pcs	240 pcs
10	G1/2	10	47,2	33	29,8	4,68	female-female	KRN2	20 pcs	160 pcs
8	G3/8	8	41	33	28,3	2,85	female-female	KRN10	10 pcs	120 pcs
8	G3/8	8	41	33	28,3	2,85	female-male	KRN101	10 pcs	120 pcs

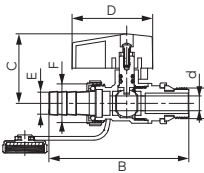


F-Comfort drain ball valve with cap handle

- male
- hose connector and plug included
- body and ball material: brass
- material of ball and stem seals: PTFE
- double stem sealing (2 pcs O-ring)
- nominal pressure: 10 bar (PN10)
- maximum working temperature: 100°C



DN	A	d [mm]	B [mm]	C [mm]	E [mm]	F	K _{vs} [m³/h]	Index	Packaging	
									individual	bulk
15	G1/2	10	74	21,3	15	G3/4	3,64	ZSN1	15 pcs	120 pcs
20	G3/4	12	76,5	22,3	15	G3/4	6,48	ZSN2	10 pcs	60 pcs



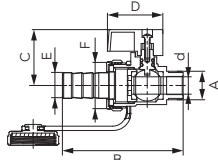
F-Comfort drain ball valve with cap handle

- male
- hose connector and plug included
- additional nut with a seal on the mounting thread
- body and ball material: brass
- material of ball and stem seals: PTFE
- double stem sealing (2 pcs O-ring)
- handle: metal butterfly
- nominal pressure: 10 bar (PN10)
- maximum working temperature: 100°C



DN	A	d [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F	K _{vs} [m³/h]	Index	Packaging	
										individual	bulk
10	G3/8	10	82,5	40,5	43,5	13	G1/2	3,54	ZSUN10	10 pcs	120 pcs
15	G1/2	12	92	41	43,5	15	G3/4	5,57	ZSUN1	10 pcs	80 pcs
20	G3/4	15	92	43	43,5	19,6	G1	10,37	ZSUN2	10 pcs	60 pcs

Description



F-Comfort drain ball valve

- male
- hose connector and plug included
- body and ball material: brass
- material of ball and stem seals: PTFE
- double stem sealing (2 pcs O-ring)
- handle: metal butterfly
- nominal pressure: 10 bar (PN10)
- maximum working temperature: 100°C

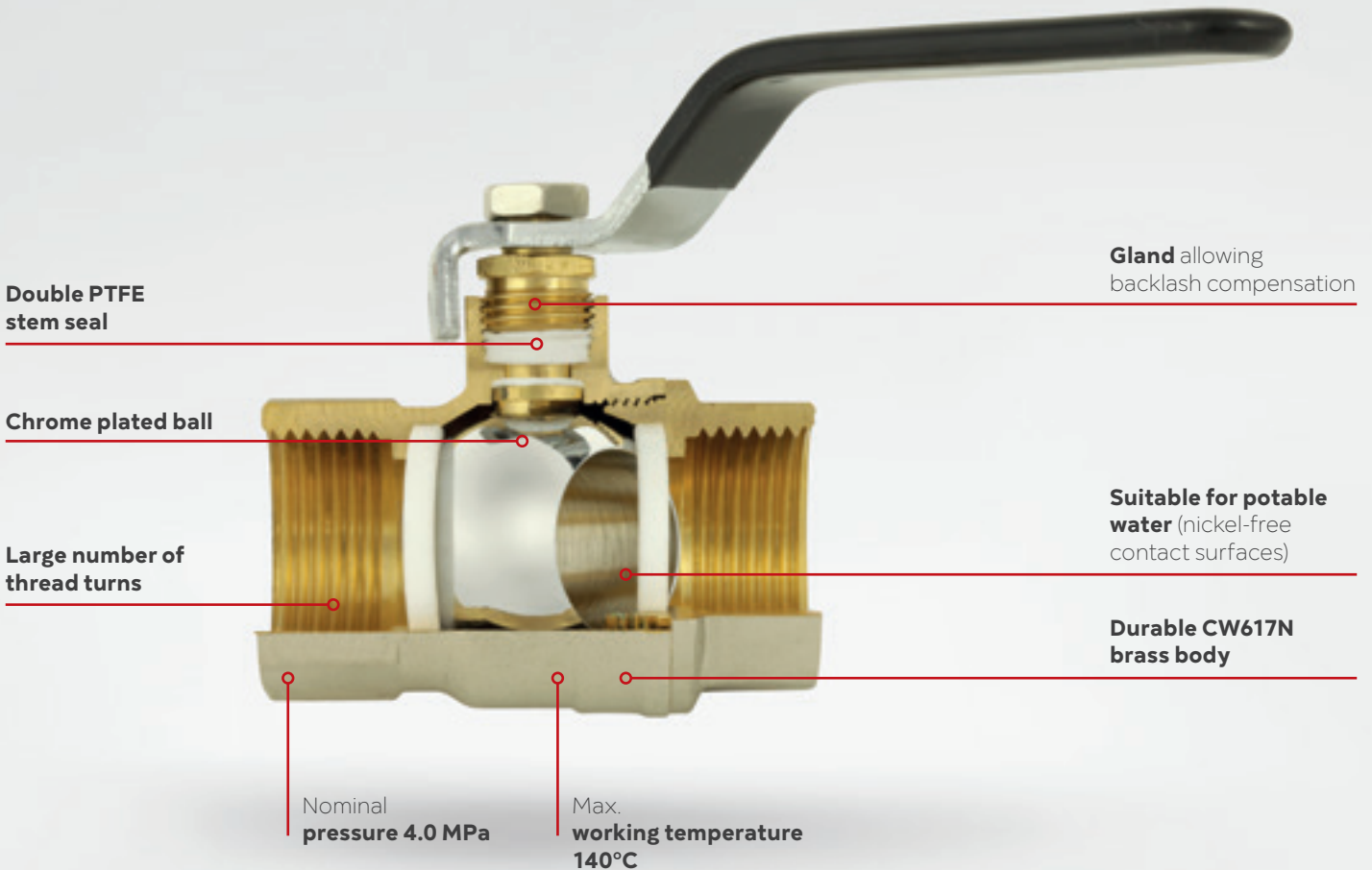


Packaging

DN	A	d [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F	Kvs [m³/h]	Index	individual	bulk
10	G3/8	9	68,5	32,3	32	15	G3/4	3,42	ZSSN10	10 pcs	120 pcs
15	G1/2	9	70,5	32,3	32	15	G3/4	3,54	ZSSN1	10 pcs	120 pcs

Herkules

- ball valves



Advantages

- warranty: 15 years
- metal handle
- double stem seal
- valve bore without any constriction affecting the flow, full port according to standard
- connection threads with a large number of thread turns provides a secure and tight connection
- the gland on the stem allows compensation of possible clearance by means of a simple wrench
- chrome plated and polished ball resistant to blocking
- thick walls and solid workmanship - increased durability and strength
- quality control carried out strictly according to applicable European standards
- 100% of the valves produced are tested for leakage
- valve's bodies have permanent markings required by the European standards
- valves adapted to potable water - surface, which may have contact with water (inside the valve and connection threads) is not nickel plated

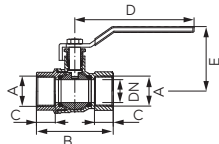
Operating parameters and scope of application

- nominal pressure: 4.0 MPa (40 bar)
- maximum working temperature: 140°C
- working media: water (water supply systems and central heating), max. 50% glycol solution in water (solar and central heating installations), compressed air
- Herkules ball valves type V17 have received a National Technical Assessment Certificate issued by the Building Research Institute in Warsaw stating suitability for use in construction and Hygienic Certificate issue

Workmanship and materials:

- bodies and nuts are made of moulded parts and processed by machine tools
- body material: CW617N brass
- ball finish: chrome plated, polished
- ball sealing: PTFE
- stem sealing: PTFE

Description



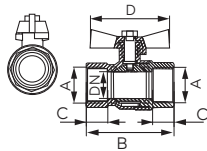
- H₂O
- GLYCOL 50%
- AIR
- OIL FREE
- 15

Herkules ball valve type V17

- female - female
- full bore
- reinforced with gland and double stem seal
- handle: metal lever
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure: 4,0 MPa (40 bar)
- maximum working temperature: 140°C



DN	A	B [mm]	C [mm]	D [mm]	E [mm]	Index	Packaging		Retail (bags)		Retail (Eurohanger)	
							individual	bulk	Index	Index	Index	Index
15	Rp 1/2	56	13	-100	49	KPH1	10 pcs	120 pcs	KPH1W		KPH1E	
20	Rp 3/4	66	14,5	-102	55	KPH2	9 pcs	81 pcs	KPH2W		KPH2E	
25	Rp 1	76	16,8	-116	64	KPH3	8 pcs	48 pcs	KPH3W		KPH3E	
32	Rp 1 1/4	86	18	-116	71	KPH4	4 pcs	36 pcs	KPH4W			
40	Rp 1 1/2	94	18	-149	80	KPH5	2 pcs	18 pcs	KPH5W			
50	Rp 2	115	23	-149	90	KPH6	2 pcs	12 pcs	KPH6W			



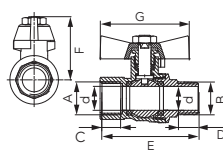
- H₂O
- GLYCOL 50%
- AIR
- OIL FREE
- 15

Herkules ball valve type V17

- female - female
- full bore
- reinforced
- with a gland and double stem seal
- handle: metal butterfly
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure: 4,0 MPa (40 bar)
- maximum working temperature: 140°C



DN	A	B [mm]	C [mm]	D [mm]	Index	Packaging		Retail (bags)		Retail (Eurohanger)	
						individual	bulk	Index	Index	Index	Index
15	Rp 1/2	56	13	-56	KMH1	12 pcs	144 pcs	KMH1W		KMH1E	
20	Rp 3/4	66	14,5	-66	KMH2	9 pcs	81 pcs	KMH2W		KMH2E	
25	Rp 1	76	16,8	-72	KMH3	8 pcs	64 pcs	KMH3W		KMH3E	



- H₂O
- GLYCOL 50%
- AIR
- OIL FREE
- 15

Herkules ball valve type V17

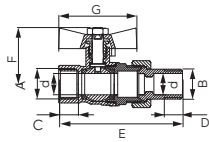
- female - male
- full bore
- reinforced
- with a gland and double stem seal
- handle: metal butterfly
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure: 4,0 MPa (40 bar)
- maximum working temperature: 140°C



DN	A	B	C [mm]	D [mm]	d [mm]	E [mm]	F [mm]	G [mm]	Index	Packaging		Retail (bags)		Retail (Eurohanger)	
										individual	bulk	Index	Index	Index	Index
15	Rp 1/2	R 1/2	13	13	15	61,5	40	-56	KMH11	12 pcs	144 pcs	KMH11W		KMH11E	
20	Rp 3/4	R 3/4	14,5	14,5	20	70	46,5	-66	KMH21	9 pcs	81 pcs	KMH21W		KMH21E	
25	Rp 1	R 1	16,8	16,8	25	81,5	51	-72	KMH31	8 pcs	64 pcs	KMH31W		KMH31E	

BALL VALVES - HERKULES

Description

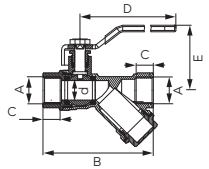


Herkules ball valve type V17

- female - male with full union
- full bore
- reinforced
- with a gland and double stem seal
- handle: metal butterfly
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure: 4,0 MPa (40 bar)
- maximum working temperature: 140°C



DN	A	B	C [mm]	D [mm]	d [mm]	E [mm]	F [mm]	G [mm]	Index	Packaging		Retail (bags)	
										individual	bulk	Index	Index
15	Rp 1/2	R 1/2	13	13	15	-88	40	-56	KSH1	8 pcs	96 pcs	KSH1W	KSH1E
20	Rp 3/4	R 3/4	14,5	14,5	20	-99	46,5	-66	KSH2	6 pcs	54 pcs	KSH2W	KSH2E
25	Rp 1	R 1	16,8	17	25	-115	51	-72	KSH3	6 pcs	48 pcs	KSH3W	KSH3E



Herkules ball valve type V17

- female - female
- with stainless steel filter
- reinforced
- with a gland and double stem seal
- handle: metal lever
- body and ball material: brass
- material of ball and stem seals: PTFE
- nominal pressure: 4,0 MPa (40 bar)
- maximum working temperature: 140°C



DN	A	B	C [mm]	D [mm]	d [mm]	E [mm]	Index	Packaging		Retail (bags)	
								individual	bulk	Index	Index
15	Rp 1/2	83,5	13	-94	15	49	KZFH1	6 pcs	72 pcs	KZFH1W	
20	Rp 3/4	103,5	14,5	-102	20	55	KZFH2	4 pcs	36 pcs	KZFH2W	
25	Rp 1	121	16,8	-116	25	66	KZFH3	4 pcs	32 pcs	KZFH3W	
32	Rp 1 1/4	143	18	-116	32	71	KZFH4	2 pcs	16 pcs		

Ball valves

- other

PTFE or NBR, EPDM
sealed stem

Max. working
temperature 100°C

Chrome ball

Durable CW617N
brass body

Nominal pressure
up to 2,5 MPa



Advantages:

- chrome plated and polished ball resistant to so-called „baking“
- robust design
- quality control carried out strictly according to the applicable European standards
- 100% of produced valves are subjected to tightness test
- markings, in compliance with required standards are embossed on the bodies
- internal surface suitable for drinking water

Operating parameters and scope of application:


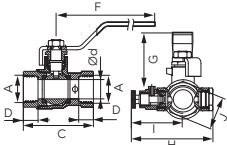





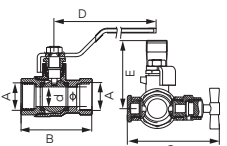




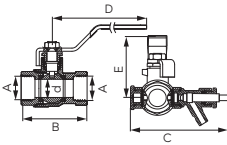




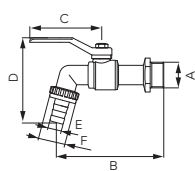

- nominal pressure: from 1.0 MPa to 2.5 MPa* (from 10 bar to 25 bar)
- max. working temperature: 100°C
- working media: water (water supply systems and central heating)
- ball valves have received a National Technical Assessment Certificate issued by the Building Research Institute in Warsaw stating suitability for use in construction and Hygienic Certificate issued by the National Institute of Hygiene in Warsaw


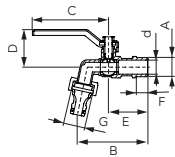



Execution and materials:


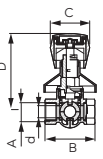


- bodies and nuts are made of moulded parts and processed by machine tools
- body and ball material: brass
- ball finish: chrome plated, polished
- ball seal: PTFE
- stem seal: PTFE or NBR, EPDM
- stainless steel filter cartridges


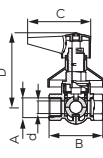


* the exact nominal pressure values are given in the product descriptions


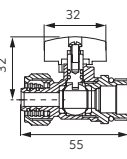



BALL VALVES - OTHER

Description													
						  		Ball valve with manual air vent and plug <ul style="list-style-type: none"> • female - female • with gland • handle: metal lever • body and ball material: brass • ball and stem seal: PTFE • nominal pressure: 1.6 MPa (1.6 bar) • maximum working temperature: 100°C 					
													
Packaging													
Retail (bags)													
DN	A	d [mm]	C [mm]	D [mm]	F [mm]	G [mm]	H [mm]	I [mm]	J [mm]	Index	individual	bulk	Index
15	G1/2	14,5	52	11	95	50	61	35	25	KPO1	6 pcs	72 pcs	KPO1W
20	G3/4	19	60	12	105	52	67	42	31	KPO2	6 pcs	72 pcs	KPO2W
25	G1	24,5	70	14	121	61	73	45	37	KPO3	4 pcs	48 pcs	KPO3W
32	G1 1/4	31	80	15	123	67	82	49	46,5	KPO4	6 pcs	36 pcs	KPO4W
40	G1 1/2	39	91	16	151	81	90	53	54	KPO5	2 pcs	18 pcs	KPO5W
50	G2	49	107	18	151	88	102	59	66	KPO6	1 pcs	16 pcs	KPO6W
						  		Ball valve with manual air vent and plug <ul style="list-style-type: none"> • female - female • with gland • handle: metal lever • body and ball material: brass • material of ball and stem seals: PTFE • nominal pressure: 2.5 MPa (25 bar) • maximum working temperature: 100°C 				Available while stock lasts	
Packaging													
DN	A	d [mm]	B [mm]	C [mm]	D [mm]	Index	individual	bulk					
15	G1/2	15	50	53	40	KPM1	10 pcs	80 pcs					
20	G3/4	19	56	53	43	KPM2	6 pcs	48 pcs					
25	G1	25	66	65	47	KPM3	5 pcs	40 pcs					
						  		Ball valve with drain, manual air vent and plug <ul style="list-style-type: none"> • female - female • with gland • handle: metal lever • body and ball material: brass • ball and stem seal: PTFE • nominal pressure: 2.5 MPa (25 bar) • maximum working temperature: 100°C 				Available while stock lasts	
Packaging													
DN	A	d [mm]	B [mm]	C [mm]	D [mm]	E [mm]	Index	individual	bulk				
15	G1/2	14,5	52	80	105	50	KPW1	8 pcs	96 pcs				
20	G3/4	19	60	86	105	52	KPW2	6 pcs	72 pcs				
25	G1	24,5	70	92	121	61	KPW3	4 pcs	40 pcs				
32	G1 1/4	31	80	101	123	67	KPW4	2 pcs	36 pcs				
40	G1 1/2	39	91	109	151	81	KPW5	2 pcs	24 pcs				
50	G2	49	107	121	151	88	KPW6	2 pcs	12 pcs				
								Ball bibcock <ul style="list-style-type: none"> • with gland • with metal hose connector • handle: metal lever • body and ball material: brass • ball and stem seal: PTFE • nominal pressure: 1.0 MPa (10 bar) • maximum working temperature: 100°C 					
Packaging													
Retail (bags)													
Retail (Eurohanger)													
DN	A	d [mm]	B [mm]	C [mm]	D [mm]	ØE [mm]	F	Kvs [m³/h]	Index	individual	bulk	Index	Index
15	G1/2	11	90	84	86,5	15	G3/4	5	KC1	15 pcs	135 pcs	KC1W	KC1E
20	G3/4	12,5	102	84	93	20	G1	8	KC2	10 pcs	90 pcs	KC2W	KC2E
25	G1	15	124	98	110	28	G1 1/4	14	KC3	6 pcs	36 pcs	KC3W	KC3E


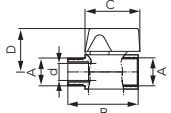




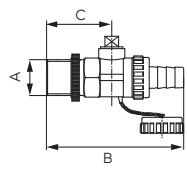





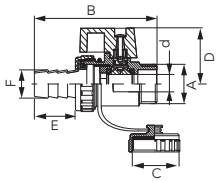



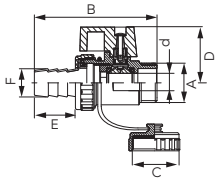



									Description					
						Ball bibcock								
														
									Packaging		Retail (bags)		Retail (Eurohanger)	
DN	A	d [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G	Index	individual	bulk	Index	Index	
15	G1/2	11	78	84	41	44	13	G3/4	KCP1	15 pcs	135 pcs	KCP1W	KCP1E	
20	G3/4	15	92	84	42	49	13	G1	KCP2	10 pcs	90 pcs	KCP2W	KCP2E	

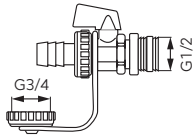
							Concealed ball valve					
											Packaging	
DN	A	d [mm]	B [mm]	C [mm]	D [mm]	K _{vs} [m³/h]	Index	individual	bulk			
15	G1/2	14	58	47	82	7	KPP1P	4 pcs	48 pcs			
20	G3/4	19	66,8	47	87	14	KPP2P	4 pcs	36 pcs			

							Concealed ball valve					
											Packaging	
DN	A	d [mm]	B [mm]	C [mm]	D [mm]	K _{vs} [m³/h]	Index	individual	bulk			
15	G1/2	14	58	70	82	7	KPP1D	4 pcs	48 pcs			
20	G3/4	19	66,8	70	87	14	KPP2D	4 pcs	36 pcs			

							Ball valve for 16 x 2mm multilayer pipes					
												
									Packaging		Retail (bags)	
									Index	individual	bulk	Index
with red butterfly handle									KPEX16	10 pcs	200 pcs	KPEX16W
with blue butterfly handle									KPEX16-BH	10 pcs	200 pcs	KPEX16-BHW

BALL VALVES - OTHER

								Description					
  								MINI ball valve <ul style="list-style-type: none"> • blue and red handle included • body and ball material: brass • ball seal: PTFE • stem seal: NBR (2 psc O-rings) • handle: metal butterfly • nominal pressure: 1.0 MPa (10 bar) • maximum working temperature: 100°C 					
										 			
								Packaging		Retail (bags)		Retail (Eurohanger)	
DN	A	d [mm]	B [mm]	C [mm]	D [mm]	K _{vs} [m³/h]		Index	individual	bulk	Index	Index	
10	G1/2	10	45	33	30	4	female - male	KR1	20 pcs	240 pcs	KR1W	KR1E	
10	G1/2	10	45	33	30	5	female - female	KR2	20 pcs	240 pcs	KR2W	KR2E	
8	G3/8	8	39,5	23	26	-	female - female	KR10	10 pcs	200 pcs	KR10W		
8	G3/8	8	39,5	23	26	-	female - male	KR101	10 pcs	200 pcs	KR101W		
   								Drain ball valve <ul style="list-style-type: none"> • male • hose coupling and cap included • body and ball material: brass • ball seal: PTFE • stem seal: NBR • nominal pressure: 1.0 MPa (10 bar) • maximum working temperature: 100°C 					
										 			
								Packaging		Retail (bags)		Retail (Eurohanger)	
DN	A	d [mm]	B [mm]	C [mm]	K _{vs} [m³/h]		Index	individual	bulk	Index	Index		
15	G1/2	10	70	25	6		ZS1	15 pcs	180 pcs	ZS1W	ZS1E		
20	G3/4	12	85	30	12		ZS2	10 pcs	120 pcs	ZS2W	ZS2E		
  								Drain ball valve with gasket <ul style="list-style-type: none"> • male • hose coupling and cap included • handle: metal butterfly • body and ball material: brass • ball and stem seal: PTFE • nominal pressure: 2.5 MPa (25 bar) • maximum working temperature: 100°C 					
													
								Packaging		Retail (bags)			
DN	A	d [mm]	B [mm]	C	D [mm]	E [mm]	F [mm]	Index	individual	bulk	Index		
10	G3/8	10,5	80	G1/2	36,5	18,9	13,1	ZSU10	10 pcs	120 pcs	ZSU10W		
15	G1/2	12	89	G3/4	38	23,5	14,6	ZSU1	10 pcs	100 pcs	ZSU1W		
20	G3/4	15	92	G1	40,5	23,5	19	ZSU2	10 pcs	60 pcs	ZSU2W		
  								Drain ball valve standard <ul style="list-style-type: none"> • male • hose coupling and cap included • handle: metal butterfly • body and ball material: brass • ball seal: PTFE • stem seal: NBR • nominal pressure: 2.5 MPa (25 bar) • maximum working temperature: 100°C 					
										 			
								Packaging		Retail (bags)		Retail (Eurohanger)	
DN	A	d [mm]	B [mm]	C	D [mm]	E [mm]	F [mm]	Index	individual	bulk	Index		
10	G3/8	10	69	G3/4	29,5	-23,5	14,6	ZSS10	10 pcs	100 pcs	ZSS10E		
15	G1/2	10	69	G3/4	29,5	-23,5	14,6	ZSS1	10 pcs	100 pcs	ZSS1W		



Description

1/2" drain ball valve for solar installations

- male
- hose coupling and cap included
- handle: butterfly
- body and ball material: brass
- ball and stem sealing: PTFE
- nominal pressure: 1.6 MPa (1.6 bar)
- max. working temperature: 150°C




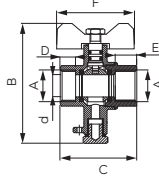
Index
ZSU1S

Packaging

individual	bulk
1 pcs	-

BALL VALVES - OTHER






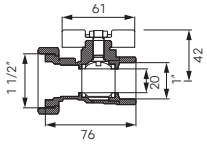
Description

Ball valve with M10x1 connection for temperature sensor

- female - female
- handle: metal butterfly
- body and ball material: brass
- ball seal: PTFE
- stem seal: NBR (2 O-rings)
- nominal pressure: 1.6 MPa (1.6 bar)
- maximum working temperature: 100°C

DN	A	d [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K _{vs} [m³/h]	Index	Packaging		Retail (bags)	
										individual	bulk	Index	Index
15	G1/2	14,5	78,0	49,8	10,0	14,0	50,5	8	KMT1	12 pcs	144 pcs	KMT1W	
20	G3/4	19,0	83,6	57,0	13,0	13,0	50,5	14	KMT2	12 pcs	108 pcs	KMT2W	






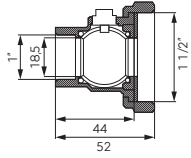
Description

1" ball valve with 1 1/2" half union for pump

- female - female with half union
- equipped with a check valve with manual opening possibility
- with gland
- handle: metal butterfly
- gasket included
- body and ball material: brass
- ball seal: PTFE
- stem seal: PTFE and FP
- nominal pressure: 1.0 MPa (10 bar)
- maximum working temperature: 110°C

DN	A	d [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	K _{vs} [m³/h]	Index	Packaging		Retail (bags)	
										individual	bulk	Index	Index
									KSP1	10 pcs	40 pcs	KSP1W	






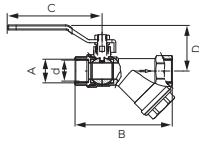
Description

1" ball valve with 1 1/2" half union for pump

- female - female with half union
- gasket included
- body and ball material: brass
- ball and stem seal: NBR
- nominal pressure: 1.0 MPa (10 bar)
- maximum working temperature: 90°C
- max. instantaneous working temperature: 100°C

DN	A	d [mm]	B [mm]	C [mm]	D [mm]	K _{vs} [m³/h]	Index	Packaging		Retail (bags)	
								individual	bulk	Index	Index
							KSP2	-	100 pcs	KSP2W	






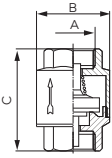
Description

Ball valve with filter

- female - female
- with stainless steel filter
- with gland
- handle: metal lever
- body and ball material: brass
- ball and stem seal: PTFE
- nominal pressure: 1.6 MPa (1.6 bar)
- maximum working temperature: 100°C

DN	A	d [mm]	B [mm]	C [mm]	D [mm]	K _{vs} [m³/h]	Index	Packaging		Retail (bags)	
								individual	bulk	Index	Index
15	G1/2	15	75,5	85	42,2	6	KZF1	8 pcs	96 pcs	KZF1W	KZF1E
20	G3/4	19	96,5	85	45,7	13	KZF2	10 pcs	60 pcs	KZF2W	KZF2E
25	G1	25	115,4	96	54	20	KZF3	4 pcs	36 pcs	KZF3W	KZF3E
32	G1 1/4	31	127,6	111	62,7	32	KZF4	2 pcs	18 pcs		

Description


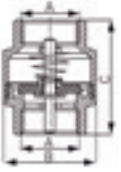
Check valve with plastic closing element

- female - female
- body: brass
- closing element: ABS
- nominal pressure: 1.0 MPa (10 bar)
- max. working temperature: 100°C

Table:

DN	A	B [mm]	C [mm]	Index	Packaging		Retail (bags)		Retail (Eurohanger)	
					individual	bulk	Index	Index	Index	Index
15	G1/2	35,5	46,8	ZZ1	30 pcs	270 pcs	ZZ1W	ZZ1E		
20	G3/4	41,7	51,4	ZZ2	20 pcs	180 pcs	ZZ2W	ZZ2E		
25	G1	47,2	59,5	ZZ3	10 pcs	120 pcs	ZZ3W	ZZ3E		
32	G1 1/4	59,3	64,5	ZZ4	6 pcs	72 pcs		ZZ4E		
40	G1 1/2	67,6	73,3	ZZ5	5 pcs	45 pcs		ZZ5E		
50	G2	83,7	80,2	ZZ6	4 pcs	24 pcs	ZZ6W			
65	G2 1/2	95,5	93	ZZ7	4 pcs	24 pcs	ZZ7W			
80	G3	110,5	100	ZZ8	1 pcs	12 pcs	ZZ8			
100	G4	144,5	112	ZZ9	1 pcs	6 pcs	ZZ9			

Description


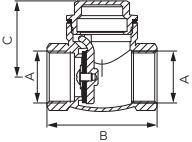
Check valve with brass closing element

- female - female
- body and closing element: brass
- nominal pressure: 1.0 MPa (10 bar)
- max. working temperature: 100°C

Table:

DN	A	B [mm]	C [mm]	Index	Packaging		Retail (bags)		Retail (Eurohanger)	
					individual	bulk	Index	Index	Index	Index
15	G1/2	35,5	46,8	ZZM1	30 pcs	270 pcs	ZZM1W	ZZM1E		
20	G3/4	41,7	51,4	ZZM2	20 pcs	180 pcs	ZZM2W	ZZM2E		
25	G1	47,2	59,5	ZZM3	10 pcs	120 pcs	ZZM3W	ZZM3E		
32	G1 1/4	59,3	64,5	ZZM4	6 pcs	72 pcs	ZZM4W	ZZM4E		
40	G1 1/2	67,6	73,3	ZZM5	5 pcs	45 pcs	ZZM5W			
50	G2	83,7	80,2	ZZM6	4 pcs	24 pcs	ZZM6W			

Description

Flap check valve

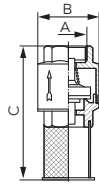
- female - female
- body and flap: brass
- plug seal: PTFE
- flap seals: NBR
- nominal pressure: 1.6 MPa (16 bar)
- max. working temperature: 100°C

Table:

DN	A	B [mm]	C [mm]	Index	Packaging		Retail (bags)	
					individual	bulk	Index	Index
15	G1/2	47	35,7	ZZK1	12 pcs	270 pcs	ZZK1W	
20	G3/4	56	38,7	ZZK2	6 pcs	180 pcs	ZZK2W	
25	G1	64	44	ZZK3	4 pcs	120 pcs	ZZK3W	
32	G1 1/4	75	52	ZZK4	3 pcs	72 pcs		
40	G1 1/2	81	59	ZZK5	2 pcs	45 pcs		
50	G2	93	66	ZZK6	1 pcs	24 pcs	ZZK6	

OTHER WATER VALVES

Description

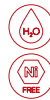
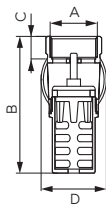


Check valve with suction basket

- female
- body: brass
- closing element: ABS
- suction basket and spring: stainless steel
- nominal pressure: 1.0 MPa (10 bar)
- max. working temperature: 100°C



DN	A	B [mm]	C [mm]	Index	Packaging		Retail (bags)	
					individual	bulk	Index	
15	G1/2	35,5	71,5	K20	20 pcs	240 pcs	K20W	
20	G3/4	41,7	76,9	K21	20 pcs	120 pcs	K21W	
25	G1	41,7	90,5	K22	10 pcs	90 pcs	K22W	
32	G1 1/4	59,3	107,5	K18	4 pcs	36 pcs	K18W	
40	G1 1/2	67,6	123,3	K24	3 pcs	36 pcs	K24W	
50	G2	83,7	142,2	K25	3 pcs	18 pcs		
65	G2 1/2	95,5	153	K251	1 pcs	12 pcs	K251	
80	G3	110	164	K252	1 pcs	10 pcs	K252	
100	G4	144	182	K253	1 pcs	4 pcs	K253	

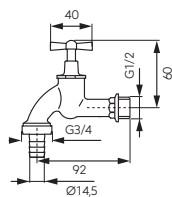


Check valve with suction basket

- female
- body, suction basket and locking element: brass
- locking element seal: NBR
- without spring
- nominal pressure: 1.0 MPa (10 bar)
- max. working temperature: 100°C



DN	A	B [mm]	C [mm]	D [mm]	Index	Packaging		Retail (bags)	
						individual	bulk	Index	
20	G3/4	67	11	41	ZS1K	12 pcs	144 pcs	ZS1KW	
25	G1	74	13	46	ZS2K	12 pcs	72 pcs	ZS2KW	
32	G1 1/4	85	14	58	ZS3K	9 pcs	54 pcs	ZS3KW	
40	G1 1/2	91	15	66	ZS4K	3 pcs	36 pcs		




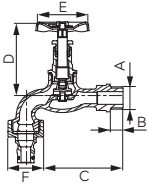
Poppet type bibcock


- male
- with metal hose connector
- with rosette
- handle: metal butterfly
- body: brass
- nominal pressure: 1.0 MPa (10 bar)
- max. working temperature: 90°C



Index	Packaging	
	individual	bulk
KCC1B	1 pcs	50 pcs









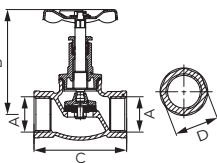
Poppet type cast iron bibcock


- male
- with quick coupler hose connection tip, gland and reliable stem seal
- handle: steel knob
- body: cast iron
- stem and plug seal: EPDM
- nominal pressure: 1.0 MPa (10 bar)
- max. working temperature: 90°C



DN	A	B[mm]	C[mm]	D[mm]	ØE[mm]	F	Index	Packaging		Retail (bags)	
								individual	bulk	Index	
G1/2	12	91,5	72	50	G3/4	ZGC01	10 pcs	30 pcs	ZGC01W		
G3/4	14	114	94	54,5	G1	ZGC02	6 pcs	18 pcs			









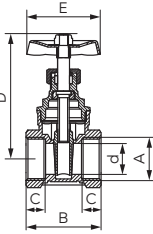
Poppet type cast iron valve




- female - female
- with a gland and reliable stem seal
- handle: steel knob
- body: cast iron
- stem and poppet seal: EPDM
- nominal pressure: 1.0 MPa (10 bar)
- max. working temperature: 95°C



DN	A	B[mm]	C[mm]	D[mm]	Index	Packaging		Retail (bags)	
						individual	bulk	Index	
15	G1/2	86	62	26,5	ZGZ01	12 pcs	144 pcs	ZGZ01W	
20	G3/4	93	72	31,5	ZGZ02	6 pcs	120 pcs	ZGZ02W	
25	G1	98,5	87	41	ZGZ03	6 pcs	72 pcs	ZGZ03W	
32	G1 1/4	115	101	50,5	ZGZ04	8 pcs	48 pcs		
40	G1 1/2	132,5	117	58	ZGZ05	4 pcs	32 pcs		
50	G2	141	140	70,5	ZGZ06	2 pcs	18 pcs		










Gate valve

- female-female
- handle: steel knob
- material of body and gate: brass
- material of stem sealing: PTFE
- nominal pressure: 1,0 MPa (10 bar)
- maximum working temperature: 100°C

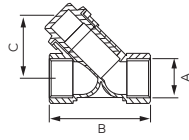
NEW

Availability
Q2 2023



DN	A	d [mm]	B[mm]	C[mm]	D[mm]	E[mm]	Index	Packaging	
								individual	bulk
15	G1/2	14,5	43	11,5	69	45	ZGV01	12 pcs	120 pcs
20	G3/4	19	46	12	76,5	45	ZGV02	12 pcs	96 pcs
25	G1	20	52	13	88	50	ZGV03	10 pcs	60 pcs
32	G1 1/4	27	56	13,5	99,5	60	ZGV04	6 pcs	36 pcs
40	G1 1/2	33	60	14,5	111,5	70	ZGV05	3 pcs	15 pcs
50	G2	43	70	16,5	123,5	70	ZGV06	2 pcs	20 pcs
65	G2 1/2	54	76,5	17,5	156	89	ZGV07	2 pcs	12 pcs
80	G3	65	77,5	19	173	110	ZGV08	1 pcs	6 pcs
100	G4	86,5	97	21,5	218,5	110	ZGV09	1 pcs	3 pcs

OTHER WATER VALVES



Description

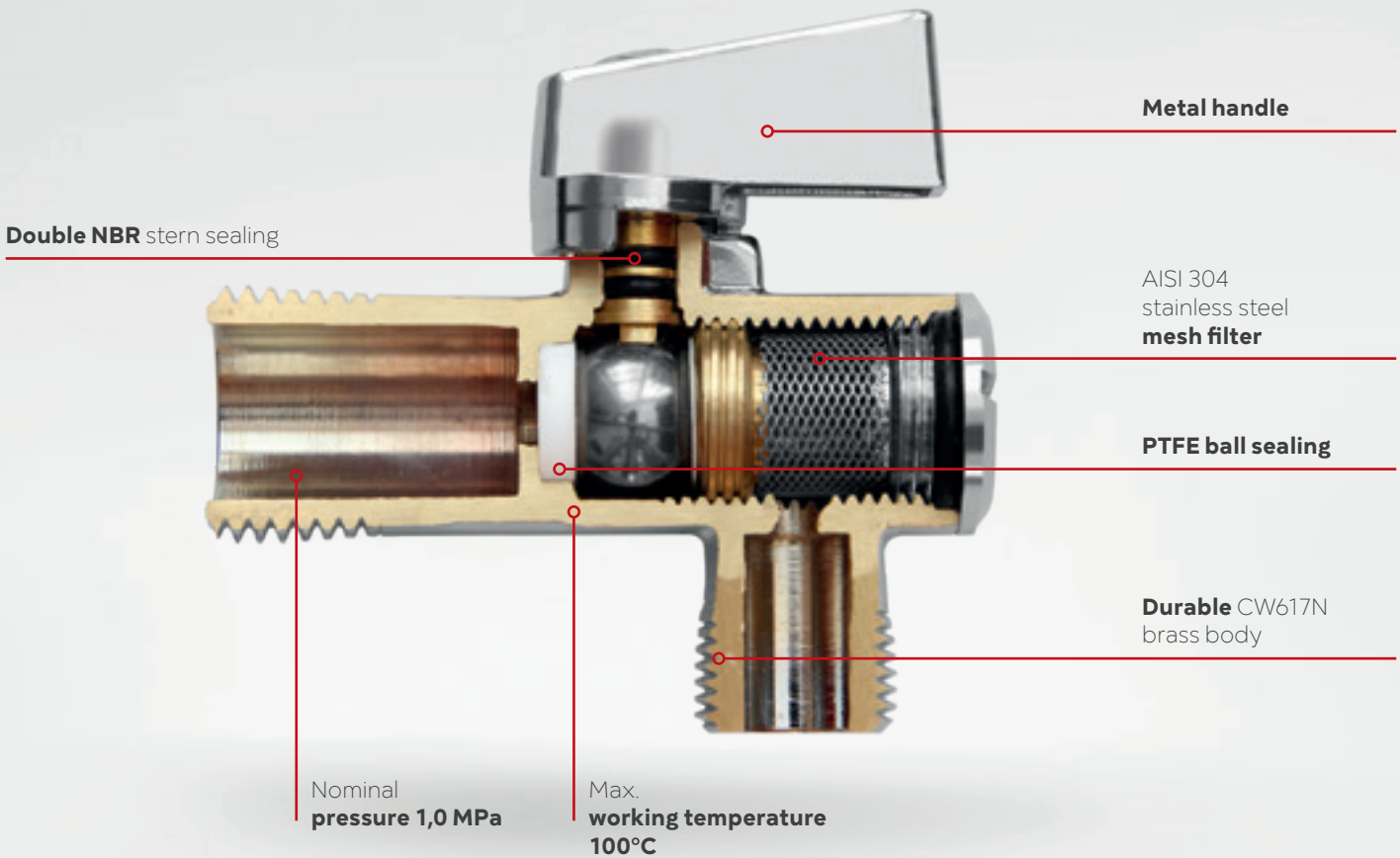
Sediment central heating filter

- female - female
- body: brass
- filter: stainless steel
- nominal pressure: 1.0 MPa (10 bar)
- max. working temperature: 100°C



DN	A	B [mm]	C [mm]	Index	Packaging		Retail (bags)		Retail (Eurohanger)	
					individual	bulk	Index	Index	Index	Index
15	G1/2	54	33,5	F02	15 pcs	180 pcs	F02W		F02E	
20	G3/4	70	56,5	F03	10 pcs	120 pcs	F03W		F03E	
25	G1	84	44,5	F06	10 pcs	90 pcs	F06W		F06E	
32	G1 1/4	98	75	F04	4 pcs	36 pcs	F04W			
40	G1 1/2	110	82	F05	2 pcs	24 pcs	F05W			
50	G2	128	93	F07	2 pcs	12 pcs	F07W			
65	G2 1/2	143	128	F08	1 pcs	12 pcs	F08			
80	G3	160	152	F09	1 pcs	6 pcs	F09			
100	G4	182	175	F10	1 pcs	4 pcs	F10			

Angle valves



Advantages:

- solid workmanship
- quality control carried out strictly according to the applicable European standards
- 100% of produced valves are subjected to tightness test
- valve's bodies have permanent markings required by the European standards
- internal surface suitable for potable water


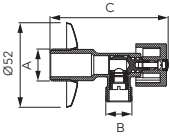



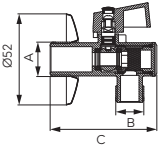



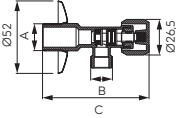



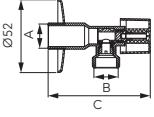


Operating parameters and scope of application:


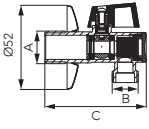
- nominal pressure: 1,0 MPa (10 bar)
- max. working temperature: 100°C
- working media: hot and cold water (water systems)

Workmanship and materials:

- bodies made of high-quality CW617N brass
- seals made of NBR or PTFE
- stainless steel filter cartridges

ANGLE VALVES

				Description		
					Ball valve with rosette and metal knob	
				<ul style="list-style-type: none"> • nominal pressure: 1.0 MPa (10 bar) • max. working temperature: 100°C 		
						
				Packaging		
A	B	C [mm]	Size of connectors	Index	individual	bulk
G1/2	G3/8	75,2	1/2"x3/8"	Z1238K	1 pcs	100 pcs
G1/2	G1/2	75,2	1/2"x1/2"	Z1212K	1 pcs	100 pcs
G1/2	G3/4	75,2	1/2"x3/4"	Z1234K	1 pcs	100 pcs
					Ball valve with filter, rosette and metal knob	
				<ul style="list-style-type: none"> • nominal pressure: 1.0 MPa (10 bar) • max. working temperature: 100°C 		
						
				Packaging		
A	B	C [mm]	Size of connectors	Index	individual	bulk
G1/2	G3/8	63	1/2"x3/8"	Z1238KF	1 pcs	100 pcs
G1/2	G1/2	63	1/2"x1/2"	Z1212KF	1 pcs	100 pcs
G1/2	G3/4	63	1/2"x3/4"	Z1234KF	1 pcs	100 pcs
					Poppet valve, rosette and metal knob	
				<ul style="list-style-type: none"> • nominal pressure: 1.0 MPa (10 bar) • max. working temperature: 100°C 		
						
				Packaging		
A	B	C [mm]	Size of connectors	Index	individual	bulk
G1/2	G3/8	78,5	1/2"x3/8"	Z1238G	1 pcs	100 pcs
G1/2	G1/2	78,5	1/2"x1/2"	Z1212G	1 pcs	100 pcs
G1/2	G3/4	78,5	1/2"x3/4"	Z1234G	1 pcs	100 pcs
					Ball valve with rosette	
				<ul style="list-style-type: none"> • nominal pressure: 1.0 MPa (10 bar) • max. working temperature: 100°C 		
						
				Packaging		
A	B	C [mm]	Size of connectors	Index	individual	bulk
G1/2	G3/4	79	1/2"x3/4"	EZ1234K	1 pcs	100 pcs





Description


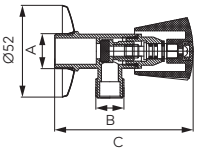
Ball valve with filter, rosette and aluminium handle

- nominal pressure: 1.0 MPa (10 bar)
- max. working temperature: 100°C

Available while stock lasts




				Packaging		
A	B	C [mm]	Size of connectors	Index	individual	bulk
G1/2	G1/2	61	1/2"x1/2"	EZ1212KF	1 pcs	100 pcs
G1/2	G3/4	61	1/2"x3/4"	EZ1234KF	1 pcs	100 pcs


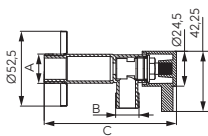
Description

Poppet valve

- nominal pressure: 1.0 MPa (10 bar)
- max. working temperature: 100°C




				Packaging		
A	B	C [mm]	Size of connectors	Index	individual	bulk
G1/2	G3/8	81,5	1/2"x3/8" with coupling for copper pipe Ø10 mm	Z240	1 pcs	100 pcs
G1/2	G3/8	81,5	1/2"x3/8"	Z241*	1 pcs	100 pcs
G1/2	G1/2	81,5	1/2"x1/2"	Z220	1 pcs	100 pcs
G1/2	G3/4	81,5	1/2"x3/4"	Z230	1 pcs	100 pcs


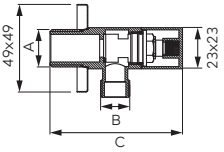
Description

Angle valve with ceramic head

- nominal pressure: 1.0 MPa (10 bar)
- max. working temperature: 100°C




				Packaging		
A	B	C [mm]	Size of connectors	Index	individual	bulk
G1/2	G3/8	98	1/2"x3/8"	Z1238C	1 pcs	100 pcs
G1/2	G1/2	98	1/2"x1/2"	Z1212C	1 pcs	100 pcs
G1/2	G3/4	98	1/2"x3/4"	Z1234C	1 pcs	100 pcs

Description

Angle valve with ceramic head and rosette

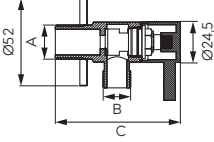


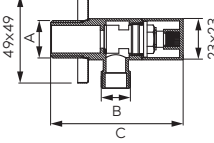


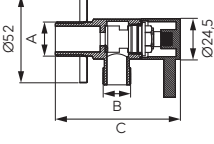



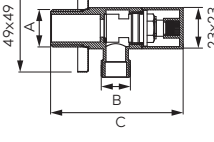

- nominal pressure: 1.0 MPa (10 bar)
- max. working temperature: 100°C

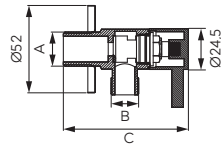


				Packaging		
A	B	C [mm]	Size of connectors	Index	individual	bulk
G1/2	G3/8	75	1/2"x3/8"	Z293	1 pcs	100 pcs
G1/2	G1/2	75	1/2"x1/2"	Z294	1 pcs	100 pcs

* Available while stock lasts

ANGLE VALVES

				Description		
			<p>Angle valve with ceramic head and rosette</p> <ul style="list-style-type: none"> nominal pressure: 1,0 MPa (10 bar) max. working temperature: 100°C 			
					Packaging	
A	B	C [mm]	Size of connectors	Index	individual	bulk
G1/2	G3/8	75	1/2"x3/8"	Z295	1 pcs	100 pcs
G1/2	G1/2	75	1/2"x1/2"	Z296	1 pcs	100 pcs
			<p>Angle valve with ceramic head and rosette</p> <ul style="list-style-type: none"> nominal pressure: 1,0 MPa (10 bar) max. working temperature: 100°C no contact of flowing water with paint finish the valve body doesn't scratch the rosette during installation finish: black matt 	NEW		
					Packaging	
A	B	C [mm]	Size of connectors	Index	individual	bulk
G1/2	G3/8	75	1/2"x3/8"	Z293-BL	1 pcs	100 pcs
G1/2	G1/2	75	1/2"x1/2"	Z294-BL	1 pcs	100 pcs
			<p>Angle valve with ceramic head and rosette</p> <ul style="list-style-type: none"> nominal pressure: 1,0 MPa (10 bar) max. working temperature: 100°C no contact of flowing water with paint finish finish: black matt 	NEW		
					Packaging	
A	B	C [mm]	Size of connectors	Index	individual	bulk
G1/2	G3/8	75	1/2"x3/8"	Z295-BL	1 pcs	100 pcs
G1/2	G1/2	75	1/2"x1/2"	Z296-BL	1 pcs	100 pcs
			<p>Angle valve with ceramic head and rosette</p> <ul style="list-style-type: none"> nominal pressure: 1,0 MPa (10 bar) max. working temperature: 100°C no contact of flowing water with paint finish the valve body doesn't scratch the rosette during installation finish: bright gold 	NEW Availability Q1 2023		
					Packaging	
A	B	C [mm]	Size of connectors	Index	individual	bulk
G1/2	G3/8	75	1/2"x3/8"	Z293-G	1 pcs	100 pcs
G1/2	G1/2	75	1/2"x1/2"	Z294-G	1 pcs	100 pcs



Description

Angle valve with ceramic head and rosette

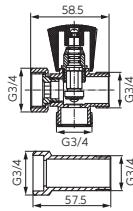
- nominal pressure: 1,0 MPa (10 bar)
- max. working temperature: 100°C
- no contact of flowing water with paint finish
- finish: bright gold

NEW
Availability
Q1 2023



Packaging

A	B	C [mm]	Size of connectors	Index	individual	bulk
G1/2	G3/8	75	1/2"x3/8"	Z295-G	1 pcs	100 pcs
G1/2	G1/2	75	1/2"x1/2"	Z296-G	1 pcs	100 pcs



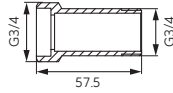
Washing machine connection valve with 3/4"

- chrome
- nominal pressure: 1,0 MPa (10 bar)
- max. working temperature: 100°C



Packaging

Index	individual	bulk
Z250	1 pcs	36 pcs



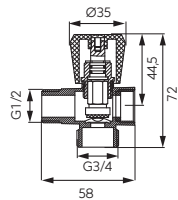
Faucet extension G3/4

- chrome



Packaging

Index	individual	bulk
P480	1 pcs	100 pcs



3-way poppet valve


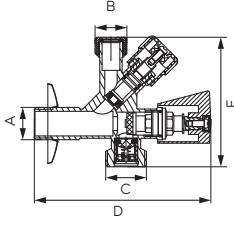


- for connecting a washing machine or dishwasher with an existing angle valve
- 1/2" FT connection for flat seal
- nominal pressure: 1,0 MPa (10 bar)
- max. working temperature: 100°C


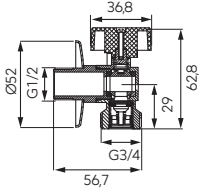





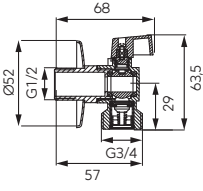


Packaging


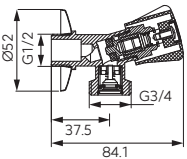


Index	individual	bulk
CF3019A	1 pcs	100 pcs


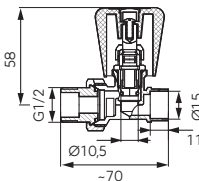
ANGLE VALVES

						Description		
						Double poppet valve with rosette		
						<ul style="list-style-type: none"> • for connecting mixers and washing machine or dishwasher • check valve built into the 3/4" connection • nominal pressure: 1.0 MPa (10 bar) • max. working temperature: 100°C 		
								
						Packaging		
A	B	C	D [mm]	E [mm]	Size of connectors	Index	individual	bulk
G1/2	G3/8	G3/4	114	84	3/8"x1/2"x3/4" with coupling for copper pipe Ø10 mm	CF5104	1 pcs	24 pcs
G1/2	G1/2	G3/4	114	84	1/2"x1/2"x3/4"	CF5105	1 pcs	24 pcs

						1/2" x 3/4" ball valve with rosette and metal handle		
						<ul style="list-style-type: none"> • for connecting a washing machine or dishwasher • check valve built into the 3/4" connection • nominal pressure: 1.0 MPa (10 bar) • max. working temperature: 100°C 		
								
						Packaging		
						Index	individual	bulk
						CF3016	1 pcs	100 pcs

						1/2" x 3/4" ball valve with rosette and aluminium handle		
						<ul style="list-style-type: none"> • for connecting a washing machine or dishwasher • check valve built into the 3/4" connection • nominal pressure: 1.0 MPa (10 bar) • max. working temperature: 100°C 		
								
						Packaging		
						Index	individual	bulk
						CF3027	1 pcs	100 pcs

						1/2" x 3/4" poppet valve with rosette		
						<ul style="list-style-type: none"> • for connecting a washing machine or dishwasher • check valve built into the 3/4" connection • nominal pressure: 1.0 MPa (10 bar) • max. working temperature: 100°C 		
								
						Packaging		
						Index	individual	bulk
						CF3017	1 pcs	100 pcs


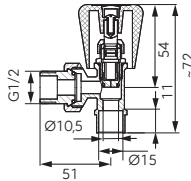



1/2" straight radiator valve for soldering with gland

- max. working temperature: 100°C
- max. working pressure: 1.0 MPa (10 bar)

Packaging

Index	individual	bulk
ZG2LY	12 pcs	144 pcs


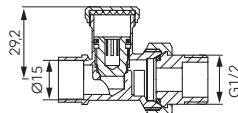



1/2" angle radiator valve for soldering with gland

- max. working temperature: 100°C
- max. working pressure: 1.0 MPa (10 bar)

Packaging

Index	individual	bulk
ZG5LY	12 pcs	144 pcs


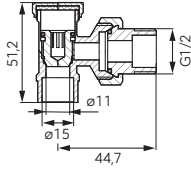



1/2" straight cut-off radiator valve for soldering

- max. working temperature: 100°C
- max. working pressure: 1.0 MPa (10 bar)

Packaging

Index	individual	bulk
ZP2LY	16 pcs	162 pcs

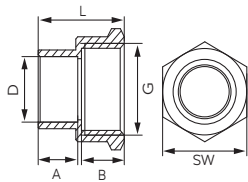
1/2" angle cut-off radiator valve for soldering

- max. working temperature: 100°C
- max. working pressure: 1.0 MPa (10 bar)

Packaging

Index	individual	bulk
ZK2LY	16 pcs	192 pcs

CONNECTORS FOR SOLDERING

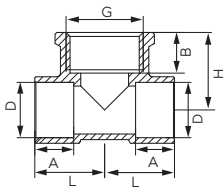


Description

Transition muff



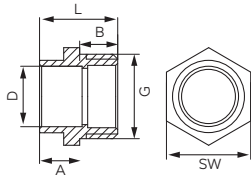
G	B[mm]	A[mm]	D[mm]	L[mm]	SW[mm]	Index	Packaging	
							individual	bulk
G3/8	86	9	12	19	20	4270-1200*	25 pcs	800 pcs
G1/2	86	11	12	21	24	4270-1201*	25 pcs	700 pcs
G3/8	10,6	9	15	21	20	4270-1500	25 pcs	700 pcs
G1/2	10,6	11	15	23	24	4270-1501	25 pcs	600 pcs
G3/4	10,6	12	15	24,5	30	4270-1502	25 pcs	350 pcs
G1/2	10,6	11	18	25	24	4270-1801*	25 pcs	500 pcs
G3/4	12,6	12	18	26	30	4270-1802	25 pcs	400 pcs
G1/2	12,6	11	22	28	24	4270-2201	25 pcs	400 pcs
G3/4	15,4	12	22	29,5	30	4270-2202	10 pcs	240 pcs
G1	15,4	14	22	31,5	37	4270-2203	10 pcs	200 pcs
G1/2	18,4	11	28	32,5	24	4270-2801	10 pcs	300 pcs
G3/4	18,4	12	28	32	30	4270-2802	10 pcs	220 pcs
G1	18,4	14	28	34,5	37	4270-2803	10 pcs	150 pcs
G1 1/4	18,4	16	28	37	47	4270-2804*	5 pcs	100 pcs
G1	23	14	35	39	37	4270-3503	5 pcs	90 pcs
G1 1/4	23	16	35	40,5	47	4270-3504	1 pcs	70 pcs



Transition tee female

G	A[mm]	B[mm]	D[mm]	L[mm]	SW[mm]	Index	Packaging	
							individual	bulk
G1/2	10,6	11	15	19	21	4130-1501	25 pcs	350 pcs
G1/2	12,6	11	18	22	22,5	4130-1801	10 pcs	240 pcs
G1/2	15,4	11	22	26,5	23,5	4130-2201	10 pcs	150 pcs
G1/2	18,4	11	28	29,5	27,5	4130-2801	10 pcs	100 pcs

* Available while stock lasts

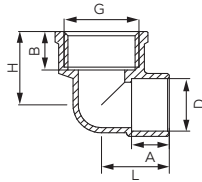


Description

Transition nipple



G	A [mm]	B [mm]	D [mm]	L [mm]	SW [mm]	Index	Packaging		Retail (bags)	
							individual	bulk	Index	
G3/8	8,6	9	12	19	17	4243-1200*	25 pcs	1000 pcs		
G1/2	8,6	10	12	20	21	4243-1201*	25 pcs	800 pcs		
G3/8	10,6	9	15	21	18,5	4243-1500	25 pcs	800 pcs		
G1/2	10,6	10	15	19,5	21	4243-1501	25 pcs	700 pcs		
G3/4	10,6	11	15	21,5	27	4243-1502	25 pcs	500 pcs		
G1/2	12,6	10	18	24	22	4243-1801	25 pcs	550 pcs		
G3/4	12,6	11	18	25	27	4243-1802	25 pcs	400 pcs		
G1/2	15,4	10	22	27	26	4243-2201	10 pcs	400 pcs		
G3/4	15,4	11	22	27	27	4243-2202	10 pcs	300 pcs		
G1	15,4	13	22	27,5	33,5	4243-2203	10 pcs	250 pcs		
G3/4	18,4	11	28	31,5	32	4243-2802	10 pcs	220 pcs		
G1	18,4	13	28	32	33,5	4243-2803	10 pcs	200 pcs		
G1 1/4	18,4	14,5	28	34	43	4243-2804	5 pcs	150 pcs		
G1	23	13	35	38	40	4243-3503	5 pcs	100 pcs		
G1 1/4	23	14,5	35	33	43	4243-3504	1 pcs	80 pcs	4243-3504	
G1 1/2	23	16,5	35	43	50	4243-3505*	1 pcs	50 pcs	4243-3505*	



Transition elbow female

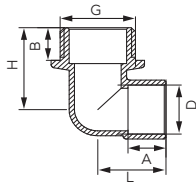


G	A [mm]	B [mm]	D [mm]	L [mm]	H [mm]	Index	Packaging		Retail (bags)	
							individual	bulk	Index	
G1/2	10,6	11	15	19	21	4090-1501	10 pcs	400 pcs		
G3/4	10,6	12	15	20	21,5	4090-1502*	25 pcs	300 pcs		
G1/2	12,6	11	18	22	22,5	4090-1801	10 pcs	350 pcs		
G3/4	12,6	12	18	23	23,5	4090-1802*	10 pcs	250 pcs		
G1 1/4	23,0	16	35	37,5	36	4090-3504*	1 pcs	50 pcs	4090-3504	

* Available while stock lasts

CONNECTORS FOR SOLDERING

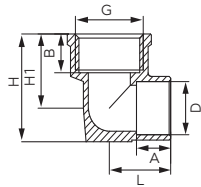
Description



Transition elbow male

Packaging

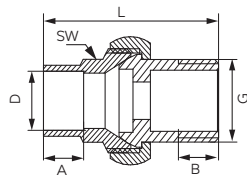
G	A [mm]	B [mm]	D [mm]	L [mm]	H [mm]	Index	Packaging	
							individual	bulk
G1/2	10,6	10	15	19	24	4092-1501	10 pcs	400 pcs
G3/4	10,6	11	15	21	24	4092-1502*	25 pcs	300 pcs
G1/2	12,6	10	18	21,5	25,5	4092-1801	25 pcs	350 pcs
G3/4	12,6	11	18	27	27	4092-1802*	10 pcs	250 pcs



Bracket elbow female

Packaging

G	A [mm]	B [mm]	D [mm]	L [mm]	H1 [mm]	H [mm]	Index	Packaging	
								individual	bulk
G1/2	10,6	11	15	19	21,0	30,5	4472-1501	10 pcs	250 pcs
G3/4	10,6	12	15	20	21,5	31,5	4472-1502*	10 pcs	180 pcs
G1/2	12,6	11	18	22	22,5	34,5	4472-1801	10 pcs	160 pcs
G3/4	12,6	12	18	23	23,5	35	4472-1802*	10 pcs	140 pcs
G1/2	15,4	11	22	26,5	23,5	37	4472-2201*	10 pcs	140 pcs
G3/4	15,4	12	22	26,5	25,0	39	4472-2202*	10 pcs	120 pcs



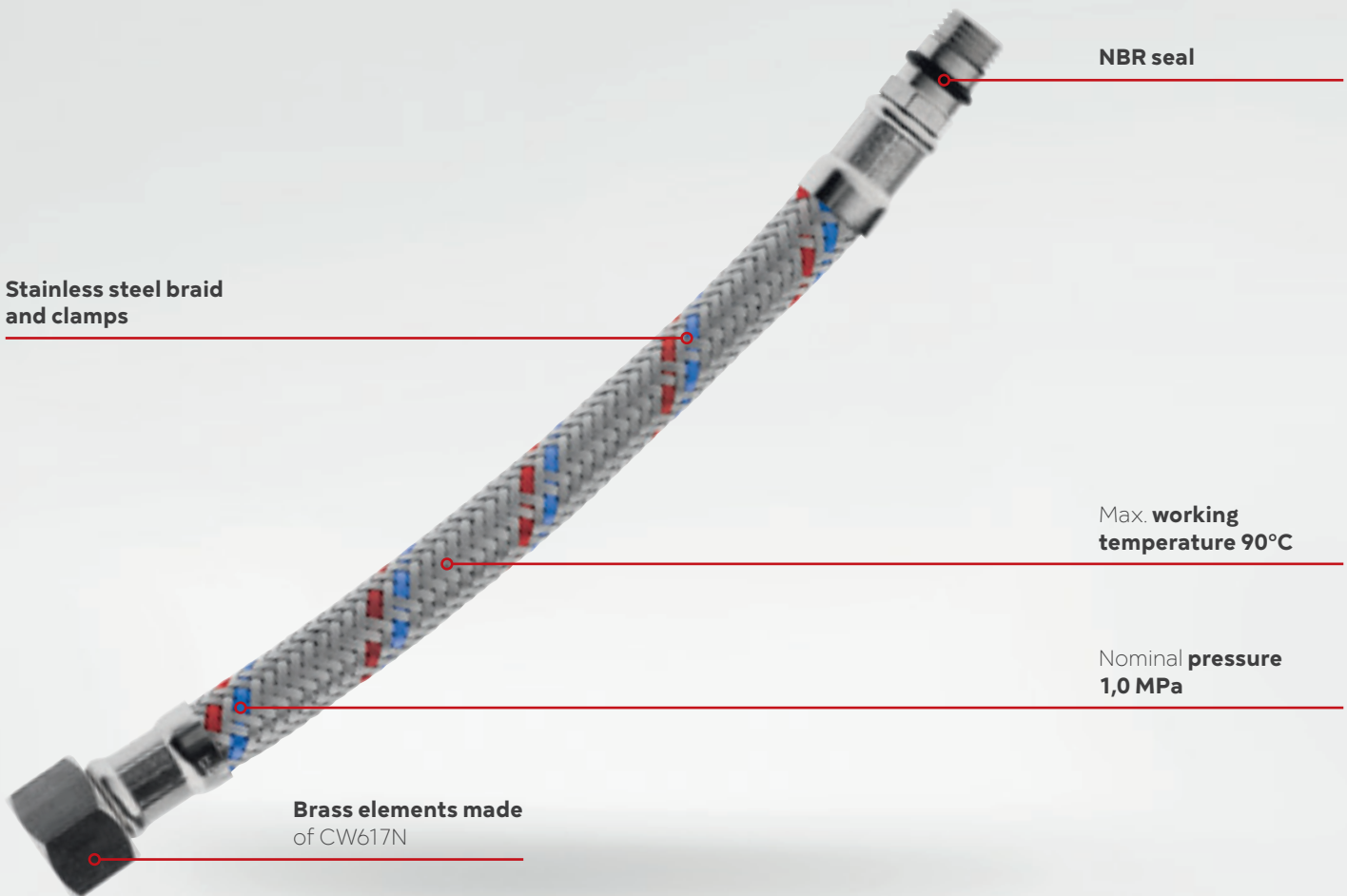
Straight pipe union male

Packaging

G	A [mm]	B [mm]	D [mm]	L [mm]	SW [mm]	Index	Packaging	
							individual	bulk
G1/2	11,5	11,5	15	50	19	4341G-1501	10 pcs	250 pcs
G1/2	12,6	11,5	18	52	23	4341G-1801	10 pcs	200 pcs
G3/4	12,6	13,5	18	57,5	23	4341G-1802	10 pcs	180 pcs
G1	18,4	16	28	69	33	4341G-2803	5 pcs	100 pcs

* Available while stock lasts

Connection hoses



NBR seal

Stainless steel braid and clamps

Max. working temperature 90°C

Nominal pressure 1,0 MPa

Brass elements made of CW617N



Advantages:

- strong and durable stainless steel braid
 - resistant to building lime
 - in contact with water no oxide formations appear on the surface of the hose creating stains optically resembling corrosion
- steel and brass elements connecting the flexible part with the end of the hose provide a long term, reliable and tight connection
- all flexible connections are subjected to 100% tightness test
- simple design and high reliability
- all connections have the manufacturer's markings and production year

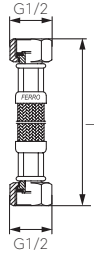
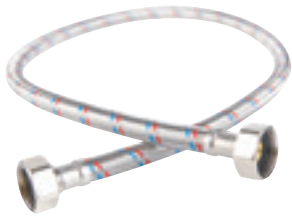
Operating parameters and scope of application:

- nominal pressure: 1.0 MPa (10 bar)
- max. working temperature: 90°C
- working media: water (water supply systems and central heating)
- connection cables have a Hygienic Certificate issued by the National Institute of Hygiene in Warsaw

Workmanship and materials:

- connections (clamping nuts and connection ends): nickel-plated or chrome-plated brass
- outer braid and clamping sleeve: stainless steel AISI 304
- flat or O-ring seal: EPDM or NBR

CONNECTION HOSES



Description

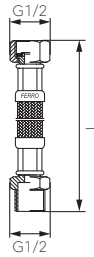
Stainless steel braided connection hose with gasket

• 1/2" female – female



Packaging

Index	L [cm]	individual	bulk
PWS04	15	1 pcs	10 pcs
PWS1	20	1 pcs	10 pcs
PWS01	25	1 pcs	10 pcs
PWS2	30	1 pcs	10 pcs
PWS02	35	1 pcs	10 pcs
PWS3	40	1 pcs	10 pcs
PWS03	45	1 pcs	10 pcs
PWS4	50	1 pcs	10 pcs
PWS5	60	1 pcs	10 pcs
PWS6	70	1 pcs	10 pcs
PWS7	80	1 pcs	10 pcs
PWS8	90	1 pcs	10 pcs
PWS9	100	1 pcs	10 pcs
PWS20	120	1 pcs	10 pcs
PWS30	150	1 pcs	10 pcs
PWS40	200	1 pcs	10 pcs



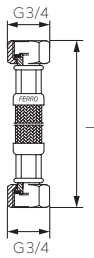
Stainless steel braided connection hose with gasket

• 1/2" male – female



Packaging

Index	L [cm]	individual	bulk
PWS11	20	1 pcs	10 pcs
PWS411	25	1 pcs	10 pcs
PWS21	30	1 pcs	10 pcs
PWS31	40	1 pcs	10 pcs
PWS41	50	1 pcs	10 pcs
PWS51	60	1 pcs	10 pcs
PWS61	70	1 pcs	10 pcs
PWS71	80	1 pcs	10 pcs
PWS81	90	1 pcs	10 pcs
PWS91	100	1 pcs	10 pcs
PWS511	120	1 pcs	10 pcs
PWS301	150	1 pcs	10 pcs



Stainless steel braided connection hose with gasket

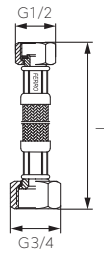
• 3/4" female - female



Packaging

Index	L [cm]	individual	bulk
PWS611	30	1 pcs	10 pcs
PWS62	40	1 pcs	10 pcs
PWS63	50	1 pcs	10 pcs
PWS64	100	1 pcs	10 pcs

Description



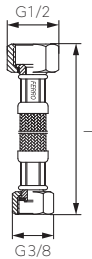
Stainless steel braided connection hose 3/4" x 1/2"

• female - female



Packaging

Index	L [cm]	individual	bulk
PWS711	30	1 pcs	10 pcs
PWS72	35	1 pcs	10 pcs
PWS73	40	1 pcs	10 pcs
PWS74	50	1 pcs	10 pcs
PWS75	60	1 pcs	10 pcs
PWS76	70	1 pcs	10 pcs
PWS77	80	1 pcs	10 pcs
PWS78	100	1 pcs	10 pcs



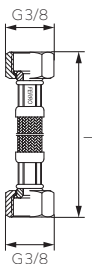
Stainless steel braided connection hose 1/2" x 3/8"

• female - female



Packaging

Index	L [cm]	individual	bulk
PWS811	20	1 pcs	10 pcs
PWS82	30	1 pcs	10 pcs
PWS83	40	1 pcs	10 pcs
PWS84	50	1 pcs	10 pcs
PWS85	60	1 pcs	10 pcs
PWS86	80	1 pcs	10 pcs
PWS87	100	1 pcs	10 pcs



Stainless steel braided connection hose 3/8" x 3/8"


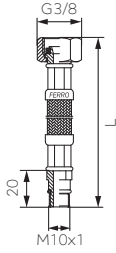

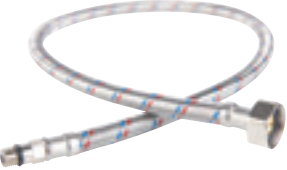
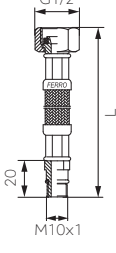


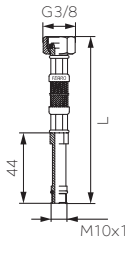


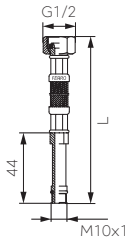

• female - female



Packaging

Index	L [cm]	individual	bulk
PWS95	20	1 pcs	10 pcs
PWS911	30	1 pcs	10 pcs
PWS92	40	1 pcs	10 pcs
PWS93	50	1 pcs	10 pcs
PWS94	60	1 pcs	10 pcs
PWS96	80	1 pcs	10 pcs

CONNECTION HOSES

		Description																																						
		<p>Stainless steel braided connection hose 3/8"×M10×1</p> <ul style="list-style-type: none"> • with short tip 																																						
		<p></p> <table border="1"> <thead> <tr> <th colspan="4">Packaging</th> </tr> <tr> <th>Index</th> <th>L[cm]</th> <th>individual</th> <th>bulk</th> </tr> </thead> <tbody> <tr> <td>WBS15</td> <td>30</td> <td>1 pcs</td> <td>10 pcs</td> </tr> <tr> <td>WBS11</td> <td>35</td> <td>1 pcs</td> <td>10 pcs</td> </tr> <tr> <td>WBS17</td> <td>40</td> <td>1 pcs</td> <td>10 pcs</td> </tr> <tr> <td>WBS12</td> <td>50</td> <td>1 pcs</td> <td>10 pcs</td> </tr> <tr> <td>WBS18</td> <td>60</td> <td>1 pcs</td> <td>10 pcs</td> </tr> <tr> <td>WBS19</td> <td>80</td> <td>1 pcs</td> <td>10 pcs</td> </tr> </tbody> </table>	Packaging				Index	L[cm]	individual	bulk	WBS15	30	1 pcs	10 pcs	WBS11	35	1 pcs	10 pcs	WBS17	40	1 pcs	10 pcs	WBS12	50	1 pcs	10 pcs	WBS18	60	1 pcs	10 pcs	WBS19	80	1 pcs	10 pcs						
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WBS20	100	1 pcs	10 pcs																																					

Measuring devices

MEASURING DEVICES



WATER METERS
57



PRESSURE GAUGES
59

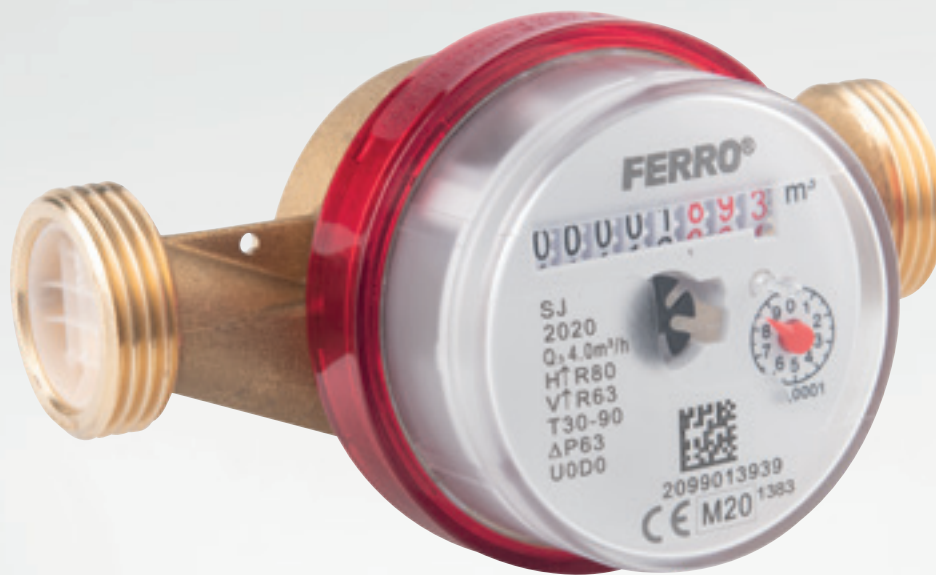


THERMOMANOMETERS
61



THERMOMETERS
61

Measuring devices



Description:

Measuring devices include water meters, manometers/pressure gauges, thermomanometers gaugess and thermometers that allow to measure the working parameters of the installation. The devices can be used in water installations, central heating and industrial installations. High technical parameters ensure accurate and reliable measurement.

SJ PLUS is a series of single flow dry water meters for measuring the volume of cold or hot water. The only element that comes into contact with water flowing in a pipe is the turbine therefore, a reading is also possible if the water is contaminated with suspended solids or sand, or has a high hardness index. In addition to the metrological certificates, the products in this series are approved for use and can be installed in drinking water systems. The offer also includes consoles with adjustable connection spacings that facilitate the installation of water meters.

Pressure gauges are based on Bourdon's tubular spring and their casings are made of high quality plastic. They offer measuring ranges from 0 to 4, 6 or 10 bar and are equipped with

side or rear brass connections. Thermomanometers gaugess are devices that allow to simultaneously measure pressure and temperature in the system.

Dial thermometers are available in galvanized steel casings and their covers are made of scratch-resistant plastic. The measuring mechanism is based on a bimetallic spiral. The temperature measurement range is from 0 to 120°C and the dial diameters measure 40 mm, 63 mm, 80 mm and 100 mm. Dial thermometers are equipped with rear brass connections. The offer also includes bar thermometers for boilers.



Description

Single-jet dry dial water meter (antimagnetic) for hot water adapted to cable remote reading by means of a pulse transmitter

Available while stock lasts

- maximum operating pressure (MAP): 1.6 MPa (16 bar)
- operating temperature: up to 90°C
- upgraded metrological class: H-R80 V-R63
- protection against influence of external magnetic field
- horizontal or vertical mounting position
- hermetic counter
- for installations inside buildings



Packaging

Nominal volume flow	Water meter thread flange	For installation in systems	Metrological class	Index	Packaging	
					individual	bulk
2,5 m³/h	G3/4	DN15	H-R80, V-R63	SJ15ACPLUSPLI	1 pcs	10 pcs
40 m³/h	G1	DN20	H-R80, V-R63	SJ20ACPLUSPLI	1 pcs	10 pcs



Reed pulse transmitter for SJ PLUS PLI water meters

Available while stock lasts

- reed switch transmitter for remote readings of SJ PLUS PLI water meters
- reed relay potted in resin
- protection class: IP68
- current parameters: 24 Vac/Vdc, 0.1 A max.
- cable length: 1 m
- operating temperature: -25°C ÷ +90°C
- storage temperature: -45°C ÷ +90°C
- for installations inside buildings



Packaging

Index	individual	bulk
RSSJPLUSPLI	1 pcs	50 pcs



Single-jet dry dial water meter (antimagnetic) for hot water

- maximum operating pressure (MAP): 1.6 MPa (16 bar)
- working temperature: to 90°C
- upgraded metrological class: H-R80 V-R63
- protection against influence of external magnetic field
- horizontal or vertical mounting position
- hermetic counter
- for installations inside buildings



Packaging

Nominal volume flow	Water meter thread flange	For installation in systems	Metrological class	Index	Packaging	
					individual	bulk
2,5 m³/h	G3/4	DN15	H-R80, V-R63	SJ15ACPLUS	1 pcs	10 pcs
40 m³/h	G1	DN20	H-R80, V-R63	SJ20ACPLUS	1 pcs	10 pcs

WATER METERS



Description

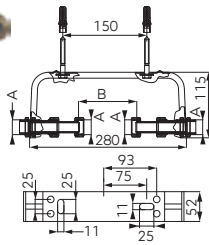
Single-jet dry dial water meter (antimagnetic) for cold water

- maximum operating pressure (MAP): 1.6 MPa (16 bar)
- working temperature: to 50°C
- upgraded metrological class: H-R80 V-R63
- protection against influence of external magnetic field
- horizontal or vertical mounting position
- hermetic counter
- for installations inside buildings



Packaging

Nominal volume flow	Water meter thread flange	For installation in systems	Metrological class	Index	Packaging	
					individual	bulk
2,5 m ³ /h	G3/4	DN15	H-R80, V-R63	SJ15AFPLUS	1 pcs	10 pcs
40 m ³ /h	G1	DN20	H-R80, V-R63	SJ20AFPLUS	1 pcs	10 pcs




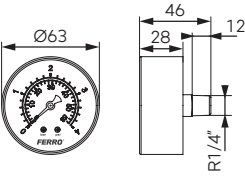
Water meter console

- adjustable spacing between connections
- fitting lead seals possible
- gaskets, screws and rawplugs included



Packaging


DN	A	B [mm] min.	B [mm] max.	Index	individual	bulk
15	G3/4	71	156	KSD15	1 pcs	8 pcs
20	G1	55	126	KSD20	1 pcs	8 pcs

Description


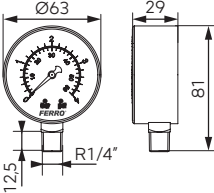
Pressure gauges

- casing: high resistance ABS
- cover: scratch-resistant plastic
- dial: powder-coated aluminium
- type: pressure gauge with Bourdon tube spring
- dial diameter: 63 mm
- range: 0 - 4 bar
- connection: 1/4" brass - rear connection



Packaging


Index	individual	bulk
M6304A	1 pcs	150 pcs

Description


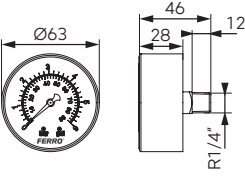
Pressure gauges

- casing: high resistance ABS
- cover: scratch-resistant plastic
- dial: powder-coated aluminium
- type: pressure gauge with Bourdon tube spring
- dial diameter: 63 mm
- range: 0 - 4 bar
- connection: 1/4" brass – side connection



Packaging


Index	individual	bulk
M6304R	1 pcs	120 pcs

Description


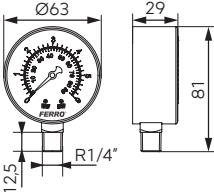
Pressure gauges

- casing: high resistance ABS
- cover: scratch-resistant plastic
- dial: powder-coated aluminium
- type: pressure gauge with Bourdon tube spring
- dial diameter: 63 mm
- range: 0 - 6 bar
- connection: 1/4" brass - rear connection



Packaging


Index	individual	bulk
M6306A	1 pcs	150 pcs

Description

Pressure gauges


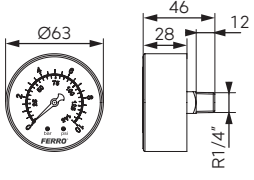

- casing: high resistance ABS
- cover: scratch-resistant plastic
- dial: powder-coated aluminium
- type: pressure gauge with Bourdon tube spring
- dial diameter: 63 mm
- range: 0 - 6 bar
- connection: 1/4" brass – side connection


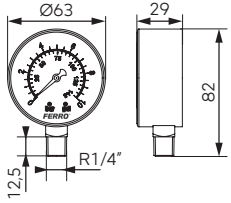




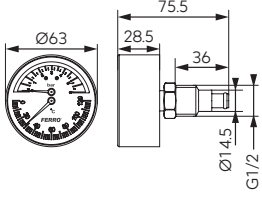
Packaging

Index	individual	bulk
M6306R	1 pcs	120 pcs

PRESSURE GAUGES

		Description				
 		<p>Pressure gauges</p> <ul style="list-style-type: none"> • casing: high resistance ABS • cover: scratch-resistant plastic • dial: powder-coated aluminium • type: pressure gauge with Bourdon tube spring • dial diameter: 63 mm • range: 0 - 10 bar • connection: 1/4" brass - rear connection 				
		<p>Packaging</p> <table border="1"> <thead> <tr> <th>Index</th> <th>individual</th> <th>bulk</th> </tr> </thead> <tbody> <tr> <td>M6310A</td> <td>1 pcs</td> <td>150 pcs</td> </tr> </tbody> </table>	Index	individual	bulk	M6310A
Index	individual	bulk				
M6310A	1 pcs	150 pcs				


 		<p>Pressure gauges</p> <ul style="list-style-type: none"> • casing: high resistance ABS • cover: scratch-resistant plastic • dial: powder-coated aluminium • type: pressure gauge with Bourdon tube spring • dial diameter: 63 mm • range: 0 - 10 bar • connection: 1/4" brass – side connection 				
		<p>Packaging</p> <table border="1"> <thead> <tr> <th>Index</th> <th>individual</th> <th>bulk</th> </tr> </thead> <tbody> <tr> <td>M6310R</td> <td>1 pcs</td> <td>120 pcs</td> </tr> </tbody> </table>	Index	individual	bulk	M6310R
Index	individual	bulk				
M6310R	1 pcs	120 pcs				

Description


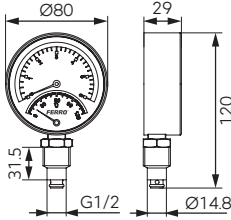
Thermomanometer

- casing: high resistance ABS
- cover: scratch-resistant plastic
- dial: powder-coated aluminium
- mechanism:
 - pressure gauge - Bourdon tube spring
 - thermometer - bimetallic spiral
- 1/2" brass rear connector
- temperature range: 0 - 120°C
- pressure range: 0 - 6 bar
- dial diameter: 63 mm



Packaging


Index	individual	bulk
TM63A	1 pcs	90 pcs

Description


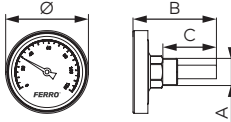
Thermomanometer

- casing: high resistance ABS
- cover: scratch-resistant plastic
- dial: powder-coated aluminium
- mechanism:
 - pressure gauge - Bourdon tube spring
 - thermometer - bimetallic spiral
- 1/2" brass side connector
- temperature range: 0 - 120°C
- pressure range: 0 - 6 bar
- dial diameter: 80 mm



Packaging


Index	individual	bulk
TM80R	1 pcs	60 pcs

Description

Axial thermometer


- rear brass connection
- casing: zinc-plated steel
- cover: scratch-resistant plastic
- dial: powder-coated aluminium
- mechanism: bimetallic spiral
- range: 0 - 120°C



Packaging

Index	individual	bulk
T40120A	1 pcs	400 pcs
T63120A	1 pcs	150 pcs
T80120A	1 pcs	80 pcs
T100120A	1 pcs	40 pcs


Ø [mm]	A	B [mm]	C [mm]
40	G1/4 with O-ring	44,5	26
63	G1/2	64,5	41,5
80	G1/2	63	41,3
100	G1/2	67	41,3



Description

Bar thermometer for central heating boilers

- aluminium casing



Packaging

Range	Index	individual	bulk
0 - 120°C	TK01E	1 pcs	200 pcs
0 - 100°C	TK12100	1 pcs	50 pcs
0 - 150°C	TK12150	1 pcs	50 pcs
0 - 100°C	TK34100	1 pcs	50 pcs
0 - 150°C	TK34150	1 pcs	50 pcs

Gas fittings



VALVES
63

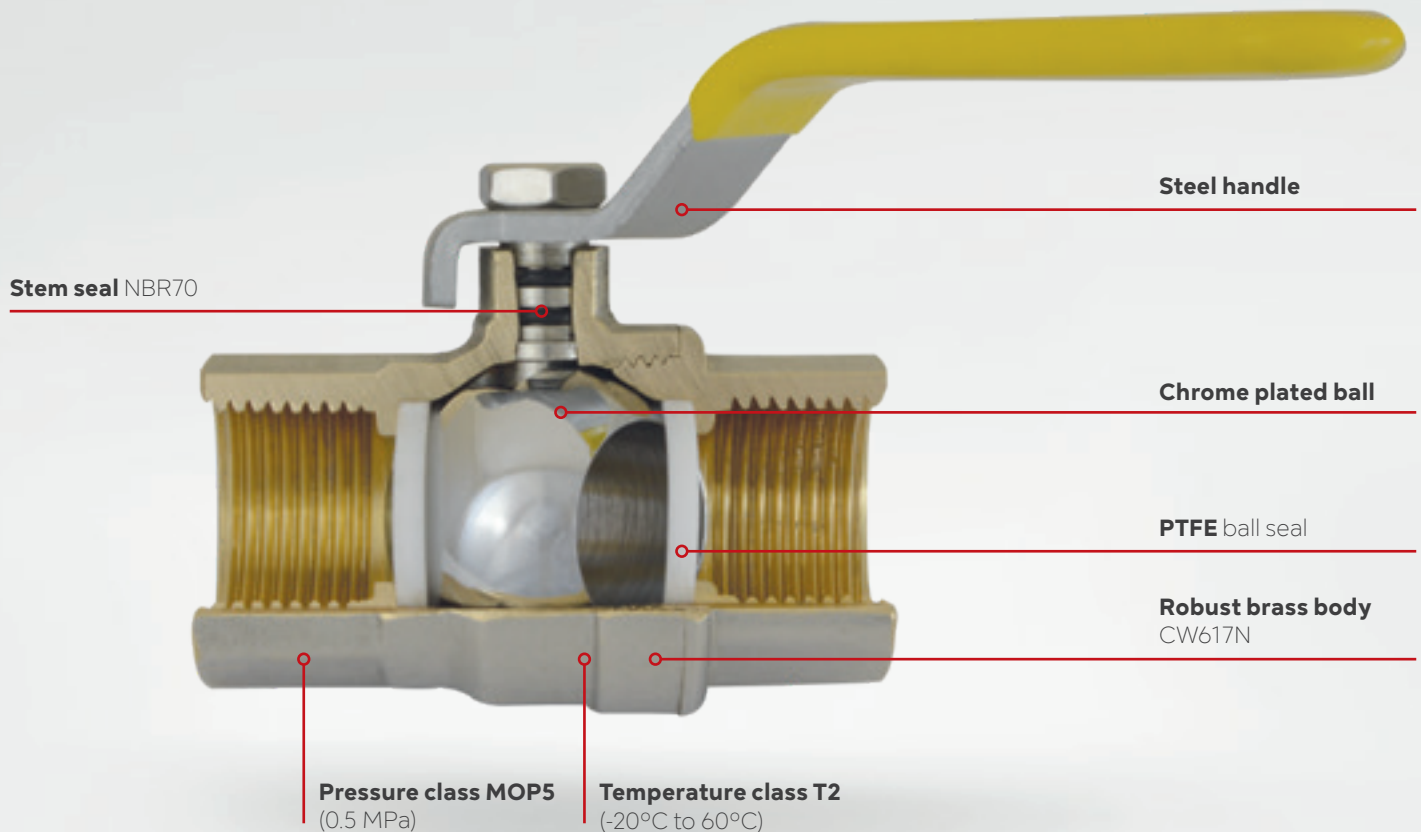


FILTERS
65



HOSES
66

Gas valves



Advantages:

- valves meet the requirements of European standards
- are made of high quality materials
- have a Certificate of Constasy of Performance

Certificates:

Gas ball valves have been tested and audited in the production plant by the Oil and Gas Institute - National Research Institute in Krakow. On the basis of these tests and the audit, the Certificate of Constasy of Performance was issued.

Operating parameters and scope of application:

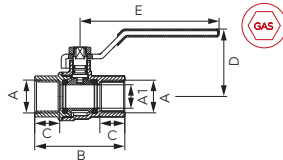
- pressure class: MOP 5 (0.5 MPa)
- temperature class: T2 (-20°C to 60°C)
- gas family: 1, 2, 3

Workmanship and materials:

- body: high quality CW617N brass
- brass ball finish: chrome plated, polished
- ball seal: PTFE
- stem seal: double O-ring with NBR70 (on KGN models)
- PTFE and O-ring with NBR70 (KGS and KGMS models)
- lever: zinc-plated steel, yellow plastic-coated

GAS VALVES

Description

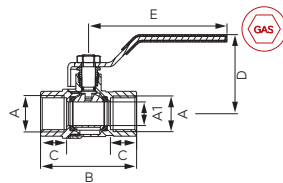


Gas ball valve - type G61

- female - female
- handle: metal lever
- body and ball material: high quality brass CW617N
- ball sealing: PTFE
- stem seal: double O-ring with NBR70
- max. working pressure: MOP5 (0.5 MPa)
- working temperature: T2 (-20°C to 60°C)

Packaging

DN	A	A1 [mm]	B [mm]	C [mm]	D [mm]	E [mm]	Index	individual	bulk
15	Rp 1/2	15	57,7	16	43	89	KGN1	12 pcs	108 pcs
20	Rp 3/4	20	67	17	47	89	KGN2	9 pcs	81 pcs
25	Rp 1	25	80,8	20,5	61	112,3	KGN3	4 pcs	36 pcs
32	Rp 1 1/4	30,5	95,5	23	72,3	131,3	KGN4	2 pcs	18 pcs
40	Rp 1 1/2	38,5	105,5	23	78,4	131,3	KGN5	2 pcs	18 pcs
50	Rp 2	47,5	126	27,5	89,5	159,5	KGN6	2 pcs	12 pcs

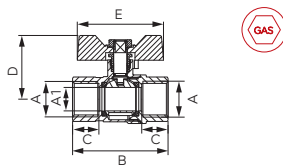


Gas ball valve - type G18

- female - female
- with gland
- handle: metal lever
- body and ball material: high quality brass CW617N
- ball sealing: PTFE
- stem sealing: PTFE and O-ring with NBR70
- max. working pressure: MOP5 (0.5 MPa)
- working temperature: T2 (-20°C to 60°C)

Packaging

DN	A	A1 [mm]	B [mm]	C [mm]	D [mm]	E [mm]	Index	individual	bulk
15	Rp 1/2	14	57	15,7	46,8	82	KGS1	14 pcs	126 pcs
20	Rp 3/4	19	64	17,3	48,5	104	KGS2	9 pcs	81 pcs
25	Rp 1	24	77,5	20,5	55,3	104	KGS3	9 pcs	54 pcs

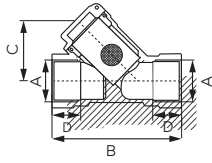


Gas ball valve - type G18

- female - female
- with gland
- handle: metal butterfly
- body and ball material: high quality brass CW617N
- ball sealing: PTFE
- stem sealing: PTFE and O-ring with NBR70
- max. working pressure: MOP5 (0.5 MPa)
- working temperature: T2 (-20°C to 60°C)

Packaging

DN	A	A1 [mm]	B [mm]	C [mm]	D [mm]	E [mm]	Index	individual	bulk
15	Rp 1/2	14	57	15,7	38	51,5	KGMS1	16 pcs	144 pcs
20	Rp 3/4	19	64	17,3	41	51,5	KGMS2	12 pcs	108 pcs
25	Rp 1	24	77,5	20,5	52,8	67	KGMS3	7 pcs	63 pcs



Description

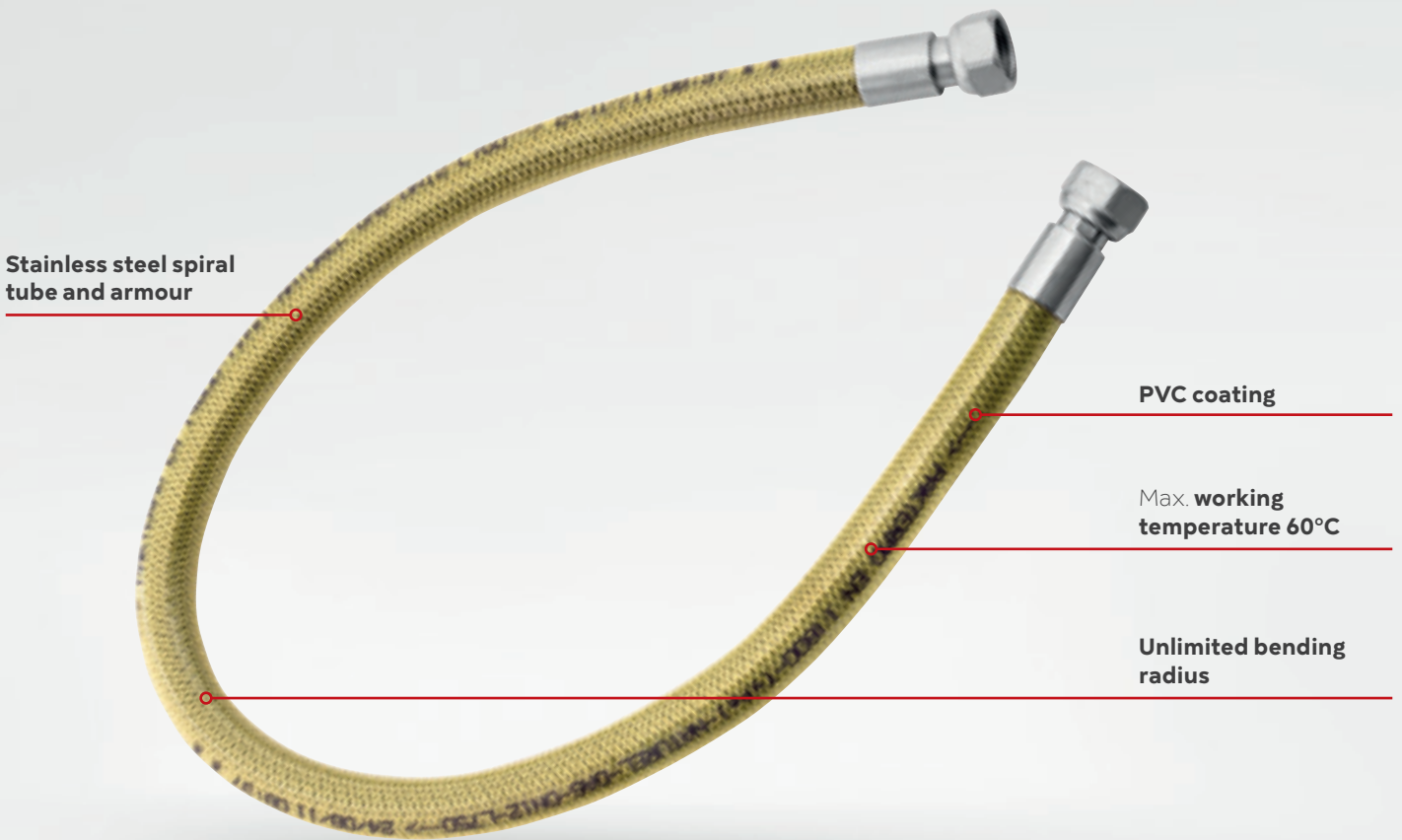
Mesh gas filter - type G41

- female - female
- body and plug material: high quality CW617N brass
- plug sealing: NBR
- filter cartridge: AISI 304 stainless steel
- filter cartridge hole diameter: 0.2 ± 0.02 mm
- max. working pressure: MOP 5 (0.5 MPa)
- working temperature: T2 (-20°C to 60°C)

Packaging

DN	A	B [mm]	C [mm]	D [mm]	Index	Packaging	
						individual	bulk
15	Rp 1/2	67	33,6±1	min. 15,0	F2G	12 pcs	108 pcs
20	Rp 3/4	80	37,5±1	min. 16,3	F3G	8 pcs	72 pcs
25	Rp 1	85	45,6±1	min. 19,1	F6G	6 pcs	54 pcs
32	Rp 5/4	98	54,8±1	min. 21,4	F4G	2 pcs	18 pcs
40	Rp 6/4	116	58,7±1	min. 21,4	F5G	2 pcs	18 pcs
50	Rp 2	136	70,7±1	min. 25,7	F7G	2 pcs	12 pcs

Gas hoses



Advantages:

- available in a wide range of lengths - up to 200 cm
- available with three different types of connections, including an elbow connection
- unlimited bending radius

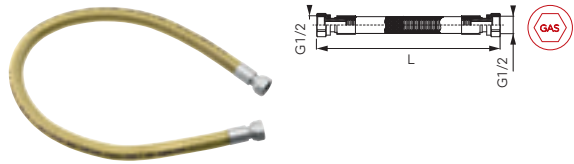
Operating parameters and scope of application:

- reaction to fire: B s2 d0
- working temperature T2 from -20°C to +60°C
- gas type: natural gas (2nd family gas fuels according to EN 437)
- max. working pressure: up to 0.5 bar
- in accordance with standard PN-EN 14800:2010
- application: for connecting domestic appliances inside and outside the apartments, with gas supply of a pressure lower than 0.5 bar. Suitable for use in locations subject to regulations on reaction to fire

Workmanship and materials:

- 3 types of protection: PVC coating
stainless steel armour
stainless steel spiral tube
- Nominal diameter: DN12

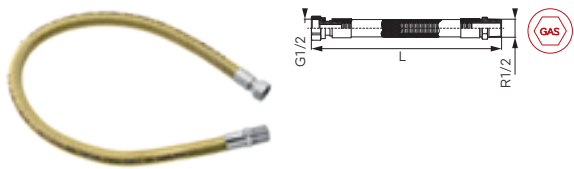
Description



1/2" female - female gas hose with two rotating nuts and PVC sheath



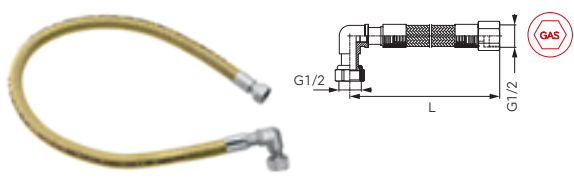
Index	L [mm]	Packaging	
		individual	bulk
WG0500	500	1 pcs	50 pcs
WG0750	750	1 pcs	50 pcs
WG1000	1000	1 pcs	50 pcs
WG1250	1250	1 pcs	50 pcs
WG1500	1500	1 pcs	50 pcs
WG2000	2000	1 pcs	50 pcs



1/2" female - male gas hose with two rotating nuts and PVC sheath



Index	L [mm]	Packaging	
		individual	bulk
WGN0500	500	1 pcs	50 pcs
WGN0750	750	1 pcs	50 pcs
WGN1000	1000	1 pcs	50 pcs
WGN1250	1250	1 pcs	50 pcs
WGN1500	1500	1 pcs	50 pcs
WGN2000	2000	1 pcs	50 pcs



1/2" female - female gas hose with elbow connector
• rotating nuts and PVC sheath



Index	L [mm]	Packaging	
		individual	bulk
WGK0500	500	1 pcs	50 pcs
WGK0750	750	1 pcs	50 pcs
WGK1000	1000	1 pcs	50 pcs
WGK1250	1250	1 pcs	50 pcs
WGK1500	1500	1 pcs	50 pcs
WGK2000	2000	1 pcs	50 pcs

Control and safety fittings

CONTROL AND SAFETY FITTINGS



INSTALLATION FILLING VALVES
69



THERMOSTATIC MIXING VALVES
69



PRESSURE REDUCERS
69



ANTI-CONTAMINATION VALVES
70








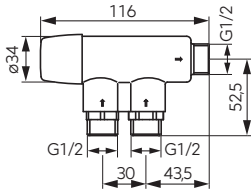



SAFETY VALVES
70






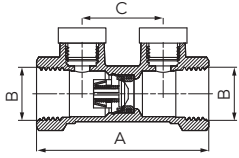







SAFETY GROUPS
71



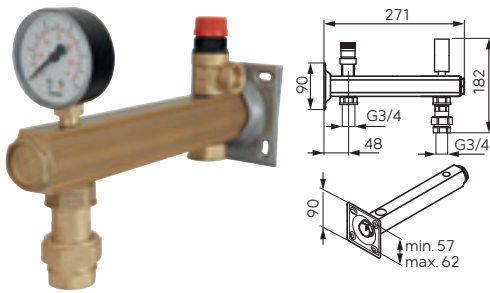
DRAUGHT REGULATING DEVICES
73

		Description		
		<p>1/2" automatic installation filling valve</p> <ul style="list-style-type: none"> • with filter, check valve and manual shut-off • outlet pressure regulation: 1-4 bar • max. inlet pressure: 10 bar • max. working temperature: 80°C • 1/4" pressure gauge connection with union 		
		<p></p>		
		<p>Packaging</p>		
Index	Size of connectors	individual	bulk	
ZN15	1/2"	1 pcs	25 pcs	
ZN15M	1/2" with manometer	1 pcs	25 pcs	
		<p>Thermostatic mixing valve</p> <ul style="list-style-type: none"> • $K_v = 2.3 \text{ m}^3/\text{h}$ • equipped with scalding protection • regulation range: 30°C - 65°C • max. working temperature: 90°C • max. static pressure: 1.0 MPa (10 bar) • accuracy of adjustment: $\pm 2^\circ\text{C}$ 		
		<p></p>		
		<p>Packaging</p>		
Index	Size of connectors	individual	bulk	
MT20S	3/4"	1 pcs	-	
MT25S	1"	1 pcs	-	
 		<p>1/2" thermostatic mixer for touchless mixers</p> <ul style="list-style-type: none"> • permissible water temperature: 90°C • permissible working pressure: 0.5 bar - 10.0 bar • connection to water system: 3 x 1/2" MT • temperature control range: 30-70°C • check valves: 2 pcs. (on inlets) • max. flow rate at $\Delta p = 1.5 \text{ bar}$: 25 l/min • K_vs: 1.2 m^3/h • stability of mixed temperature: 3°C with a hot water temperature change of 15°C • protection against scalding: flow cut-off function in the absence of cold water • additional security features: body with anti-scaling coating 		
		<p></p>		
		<p>Packaging</p>		
Index	Size of connectors	individual	bulk	
MT15B		1 pcs	-	
		<p>Pressure reducer</p> <ul style="list-style-type: none"> • outlet pressure regulation: 0.5 - 6 bar (factory setting: 3 bar) • max. inlet pressure: 25 bar • max. working temperature: 80°C • with 1/4" pressure gauge connection • with pipe unions 		
		<p></p>		
		<p>Packaging</p>		
K_v [m^3/h]	Size	Index	individual	bulk
2,5	1/2"	RC15	1 pcs	24 pcs
3,1	3/4"	RC20	1 pcs	15 pcs
7	1"	RC25	1 pcs	10 pcs
12,5	1 1/4"	RC32	1 pcs	10 pcs
14,4	1 1/2"	RC40	1 pcs	10 pcs
17,8	2"	RC50	1 pcs	5 pcs
2,5	1/2" with manometer	RC15M	1 pcs	24 pcs
3,1	3/4" with manometer	RC20M	1 pcs	15 pcs
7	1" with manometer	RC25M	1 pcs	10 pcs

CONTROL AND SAFETY FITTINGS

		Description					
		Pressure reducer - standard <ul style="list-style-type: none"> • outlet pressure regulation: 1-4 bar • max. inlet pressure: 16 bar • max. working temperature: 80°C • with 1/4" pressure gauge connection 					
				Packaging			
K_v [m ³ /h]	Size	Index	individual	bulk			
1,6	1/2"	RC15S	1 pcs	25 pcs			
1,85	3/4"	RC20S	1 pcs	25 pcs			
1,6	1/2" with manometer	RC15SM	1 pcs	25 pcs			
1,85	3/4" with manometer	RC20SM	1 pcs	25 pcs			
 		Anti-contamination check valve <ul style="list-style-type: none"> • nominal pressure: 1.0 MPa (10 bar) • working temperature: 65°C • max. temperature: 90°C for 1 h • working position: any • class EA 					
				Packaging			
A [mm]	B	C [mm]	Index	individual	bulk	Index	Retail (bags)
68	G1/2	32	1/2"	ZZA01	20 pcs	240 pcs	ZZA01W
78	G3/4	32	3/4"	ZZA02	22 pcs	132 pcs	ZZA02W
90	G1	32	1"	ZZA03	14 pcs	84 pcs	ZZA03W
110	G1 1/4	32	1 1/4"	ZZA04	8 pcs	48 pcs	
120	G1 1/2	38	1 1/2"	ZZA05	3 pcs	24 pcs	
150	G2	50	2"	ZZA06	3 pcs	18 pcs	
				Safety valve for central heating and hot water installations <ul style="list-style-type: none"> • max. working pressure: 10 bar • max. working temperature: 110°C 			
				Packaging			
Setting [bar]	Size	Index	individual	bulk			
1,5	1/2"x1/2"	Z1515	1 pcs	25 pcs			
2,5	1/2"x1/2"	Z1525	1 pcs	25 pcs			
2,5	3/4"x3/4"	Z2025	1 pcs	25 pcs			
3	1/2"x1/2"	Z1530	1 pcs	25 pcs			
3	3/4"x3/4"	Z2030	1 pcs	25 pcs			
6	1/2"x1/2"	Z1560	1 pcs	25 pcs			
6	3/4"x3/4"	Z2060	1 pcs	25 pcs			
8	1/2"x1/2"	Z1580	1 pcs	25 pcs			
				Safety valve for central heating and hot water installations <ul style="list-style-type: none"> • M-F threads • max. working pressure: 10 bar • max. working temperature: 110°C 			
				Packaging			
Setting [bar]	Size	Index	individual	bulk			
1,5	1/2"x1/2"	Z1515MF	1 pcs	50 pcs			
2,5	1/2"x1/2"	Z1525MF	1 pcs	50 pcs			
3	1/2"x1/2"	Z1530MF	1 pcs	50 pcs			
6	1/2"x1/2"	Z1560MF	1 pcs	50 pcs			

Description



Safety groups for DHW

- max. working temperature: 95°C
- max. working pressure: 6 bar
- max. instantaneous water temperature: 110°C
- for expansion vessels with a capacity up to 35 l and a diameter not more than 320 mm
- CW617N brass beam
- stainless steel mounting plate

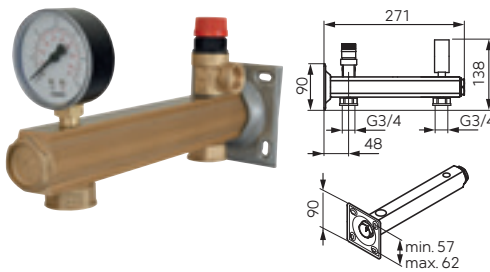
accessories:

- safety valve
- pressure gauge
- with a quick-connector for expansion vessels



Packaging

Safety valve	Pressure gauges	Index	individual	bulk
6 bar	0-10 bar	GBMW60SN01	1 pcs	-



Safety groups for DHW

- max. working temperature: 95°C
- max. working pressure: 6 bar
- max. instantaneous water temperature: 110°C
- for expansion vessels with a capacity up to 35 l and a diameter not more than 320 mm
- CW617N brass beam
- stainless steel mounting plate

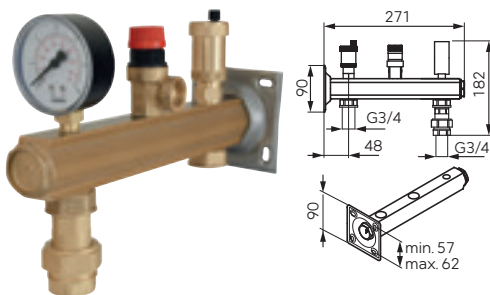
accessories:

- safety valve
- pressure gauge



Packaging

Safety valve	Pressure gauges	Index	individual	bulk
6 bar	0-10 bar	GBMW60	1 pcs	-



Safety groups for central heating

- max. working temperature: 95°C
- max. working pressure: 6 bar
- max. instantaneous water temperature: 110°C
- for expansion vessels with a capacity up to 35 l and a diameter not more than 320 mm
- CW617N brass beam
- stainless steel mounting plate

accessories:

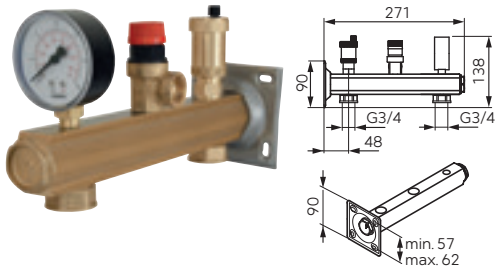
- safety valve
- pressure gauge
- automatic air vent with foot valve
- with a quick-connector for expansion vessels



Packaging

Safety valve	Pressure gauges	Index	individual	bulk
1,5 bar	0-4 bar	GBM15SN01	1 pcs	-
2,5 bar	0-4 bar	GBM25SN01	1 pcs	-
3 bar	0-6 bar	GBM30SN01	1 pcs	-

Description



Safety groups for central heating

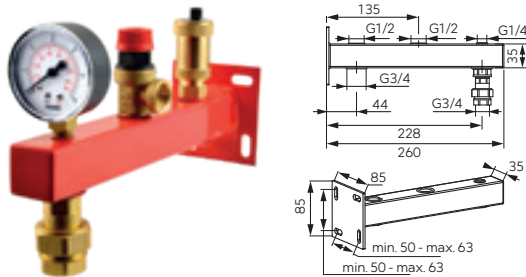
- max. working temperature: 95°C
- max. working pressure: 6 bar
- max. instantaneous water temperature: 110°C
- for expansion vessels with a capacity up to 35 l and a diameter not more than 320 mm
- CW617N brass beam
- stainless steel mounting plate

accessories:

- safety valve
- pressure gauge
- automatic air vent with foot valve



		Packaging	
Safety valve	Pressure gauges	Index	
1,5 bar	0-4 bar	GBM15	individual bulk
2,5 bar	0-4 bar	GBM25	1 pcs -
3 bar	0-6 bar	GBM30	1 pcs -



Safety group sets

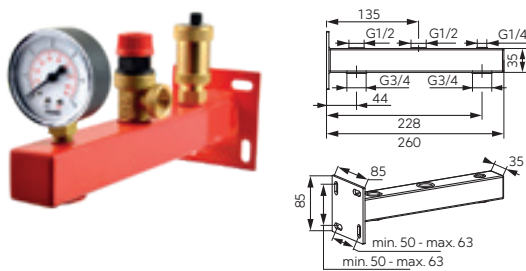
- The safety group set is a system protecting the installation against dangerous pressure increase caused by water temperature increase and its thermal expansion.
- working temperature: 95°C
- working pressure: up to 6 bar
- max. instantaneous water temperature: 110°C
- for expansion vessels with a capacity up to 35 l and a diameter not more than 320 mm
- 2 mm thick steel beam

Self-assembly kit. The set includes:

- safety valve
- pressure gauge
- automatic air vent with foot valve
- quick connector for expansion vessel



		Packaging	
Safety valve	Pressure gauges	Index	
3 bar	0-6 bar	GB30SN01	individual bulk
			1 pcs -



Safety group sets

- The safety group set is a system protecting the installation against dangerous pressure increase caused by water temperature increase and its thermal expansion.
- working temperature: 95°C
- working pressure: up to 6 bar
- max. instantaneous water temperature: 110°C
- for expansion vessels with a capacity up to 35 l and a diameter not more than 320 mm
- 2 mm thick steel beam

Self-assembly kit. The set includes:

- safety valve
- pressure gauge
- automatic air vent with foot valve



		Packaging	
Safety valve	Pressure gauges	Index	
1,5 bar	0-4 bar	GB15	individual bulk
2,5 bar	0-4 bar	GB25	1 pcs -
3 bar	0-6 bar	GB30	1 pcs -
6 bar	0-10 bar	GB60	1 pcs -



Description

Boiler safety valve with check valve



Bar	Index	Packaging		Retail (bags)
		individual	bulk	
6	1/2"	1 pcs	50 pcs	Z1560B
6	3/4"	1 pcs	50 pcs	Z2060B
8	1/2"	1 pcs	50 pcs	Z1580B
8	3/4"	1 pcs	50 pcs	Z2080B



3/4" draft regulator

- temperature control range: 30°C - 100°C
- chain length: 1200 mm
- can be mounted vertically and horizontally



Packaging

Index	individual	bulk
MC20	1 pcs	-

Expansion vessels

EXPANSION VESSELS



**VESSELS FOR HEATING
SYSTEMS**
75



**VESSELS FOR SOLAR
SYSTEMS**
78

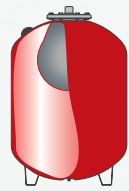


VESSELS FOR DHW
79

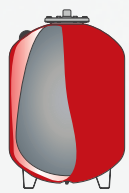


ACCESSORIES
81

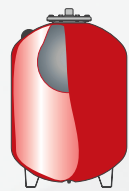
Expansion vessels for central heating



When the system is turned on, the temperature of the water increases and thus it increases also its volume. Water fills the membrane that enlarges by filling gradually the vessel.



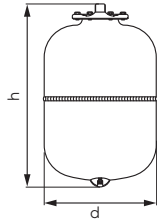
The volume of water increases until it reaches maximum working temperature. Then the membrane takes up practically the entire inside of the tank. An airbag stabilizes the pressure and the membrane prevents direct contact between water and the internal surface of the tank.



When the temperature gradually drops and the volume of water is reduced, it is pushed out from the tank until the membrane reaches its initial volume at that point a new cycle begins.

VESSELS FOR HEATING SYSTEMS

Description



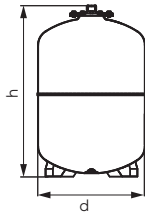
Vessels for heating systems - hanging

- max. working pressure: 8 bar
- precharge pressure: 1.5 bar
- working temperature: from -10°C to +100°C
- membrane (replaceable): EPDM
- colour: RAL 3000



Packaging

Model	h [mm]	d [mm]	Connection	Volume [l]	Index	Packaging	
						individual	bulk
R5	300	160	3/4"	5	CO5W	1 pcs	-
R8	316	200	3/4"	8	CO8W	1 pcs	-
R12	295	280	3/4"	12	CO12W	1 pcs	-
R18	430	280	3/4"	18	CO18W	1 pcs	-
R24	483	280	3/4"	24	CO24W	1 pcs	-
R35	440	365	3/4"	35	CO35W	1 pcs	-
R50	585	365	3/4"	50	CO50W	1 pcs	-



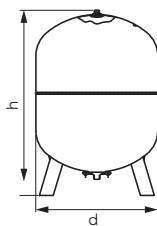
Vessels for heating systems - standing

- max. working pressure: 8 bar
- precharge pressure: 1.5 bar
- working temperature: from -10°C to +100°C
- membrane (replaceable): EPDM
- colour: RAL 3000



Packaging

Model	h [mm]	d [mm]	Connection	Volume [l]	Index	Packaging	
						individual	bulk
RV35	450	365	3/4"	35	CO35S	1 pcs	-
RV50	582	365	3/4"	50	CO50S	1 pcs	-
RV60	668	365	3/4"	60	CO60S	1 pcs	-
RV80	717	415	1"	80	CO80S	1 pcs	-
RV100	663	495	1"	100	CO100S	1 pcs	-
RV150	795	550	1"	150	CO150S	1 pcs	-



Vessels for heating systems - standing

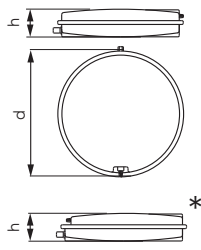
- max. working pressure: 8 bar
- precharge pressure: 1.5 bar
- working temperature: from -10°C to +100°C
- membrane (replaceable): EPDM
- colour: RAL 3000



Packaging

Model	h [mm]	d [mm]	Connection	Volume [l]	Index	Packaging	
						individual	bulk
RV200	1081	600	1"	200	CO200S	1 pcs	-
RV250	1051	650	1"	250	CO250S	1 pcs	-
RV300	1212	650	1"	300	CO300S	1 pcs	-
RV400	1198	750	1 1/4"	400	CO400S	1 pcs	-
RV500	1438	750	1 1/4"	500	CO500S	1 pcs	-

Description



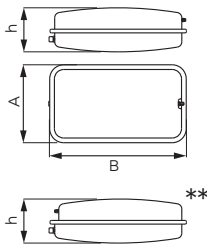
Flat vessels for heating systems

- max. working pressure: 3 bar
- precharge pressure: 1.5 bar
- working temperature: from -10°C to + 90°C
- membrane: SBR
- colour: galvanized steel



Packaging

Model	h [mm]	d [mm]	Connection	Volume [l]	Index	Packaging	
						individual	bulk
VCP387-6	60	387	3/8"	6	CO6PL7	1 pcs	-
VCP387-8	85	387	3/8"	8	CO8PL7	1 pcs	-
VCP387-10	100	387	3/4"	10	CO10PL7	1 pcs	-
VCP387-12	120	387	3/4"	12	CO12PL7	1 pcs	-
VCP387-18	180	387	3/4"	18	CO18PL7	1 pcs	-



Flat vessels for heating systems

- max. working pressure: 3 bar
- precharge pressure: 1.5 bar
- working temperature: from -10°C to + 90°C
- membrane: SBR
- colour: galvanized steel



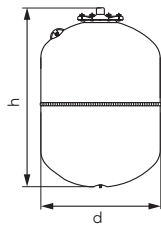
Packaging

Model	h [mm]	AxB [mm]	Connection	Volume [l]	Index	Packaging	
						individual	bulk
VRP205-8	110	200x515	3/4"	8	CO8PR	1 pcs	-
VRP205-10	120	200x515	3/4"	10	CO10PR	1 pcs	-
VRP205-12	145	200x515	3/4"	12	CO12PR	1 pcs	-

* refers to: CO12PL5, CO10PL7, CO18PL

** refers to: CO12PR

Description



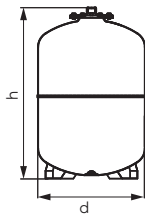
Vessels for solar installations – hanging

- max. working pressure: 10 bar
- precharge pressure: 2.5 bar
- working temperature: from -10°C to +140°C
- membrane (replaceable): EPDM HT
- colour: RAL 9010



Packaging

Model	h [mm]	d [mm]	Connection	Volume [l]	Index	individual	bulk
S8	316	200	3/4"	8	SO8W	1 pcs	-
S12	295	280	3/4"	12	SO12W	1 pcs	-
S18	430	280	3/4"	18	SO18W	1 pcs	-
S24	483	280	3/4"	24	SO24W	1 pcs	-



Vessels for solar installations – standing

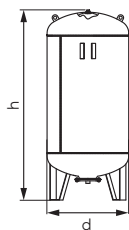
- max. working pressure: 10 bar
- precharge pressure: 2.5 bar
- working temperature: from -10°C to +140°C
- membrane (replaceable): EPDM HT
- colour: RAL 9010

SO



Packaging

Model	h [mm]	d [mm]	Connection	Volume [l]	Index	individual	bulk
SV35	450	365	3/4"	35	SO35S	1 pcs	-
SV50	582	365	3/4"	50	SO50S	1 pcs	-
SV80	717	415	1"	80	SO80S	1 pcs	-
SV100	663	495	1"	100	SO100S	1 pcs	-
SV150	795	550	1"	150	SO150S	1 pcs	-



Vessels for solar installations – standing

- max. working pressure: 10 bar
- precharge pressure: 2.5 bar
- working temperature: from -10°C to +140°C
- membrane (replaceable): EPDM HT
- colour: RAL 9010

SO



Packaging

Model	h [mm]	d [mm]	Connection	Volume [l]	Index	individual	bulk
SV200	1085	600	1"	200	SO200S	1 pcs	-
SV300	1212	650	1"	300	SO300S	1 pcs	-

Expansion vessels for domestic water



Pre-load valve

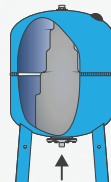
Air chamber under pre-pressure

Durable deep-drawn steel tank

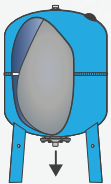
The ethylene-propylene diaphragm prevents contact between the water and the inner surface of the tank thus ensuring the purity of the medium in the system and preventing corrosion.

External epoxy coating prevents corrosion

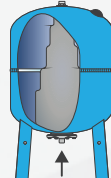
Water connection



The membrane separates the water from the walls of the vessel, prevents corrosion and contamination of the installation and stabilizes the pressure. The first time the tank is connected to the system, the hydrophore pump is started, the pressure increases and the water fills the membrane.



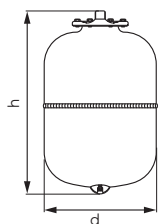
When the pressure reaches its maximum value, the pump stops. At that point the tank contains the maximum amount of water. The diaphragm expands and occupies almost the entire volume of the tank. When water is drawn, it starts to flow out of the tank without the need for the pump to operate, using the air cushion pressure.



The process continues, the diaphragm shrinks and the pressure drops to a minimum. The diaphragm returns to its original size the pump restarts and a new cycle begins. Since the tank always ensures maximum water flow, the pump's operating periods are reduced to a minimum.

VESSELS FOR DHW

Description



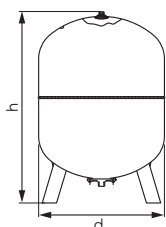
Sanitary water vessels - hanging

- max. working pressure: 10 bar
- pre-pressure: 3 bar
- working temperature: from -10°C to +100°C
- membrane (replaceable): EPDM
- colour: RAL 5015 (for M2: RAL 9010)



Packaging

Model	h [mm]	d [mm]	Connection	Volume [l]	Index	Packaging	
						individual	bulk
M2	250	120	3/4"	2	CWU2W	1 pcs	-
A5	300	160	3/4"	5	CWU5W	1 pcs	-
A8	316	200	3/4"	8	CWU8W	1 pcs	-
A12	295	280	3/4"	12	CWU12W	1 pcs	-
A18	430	280	3/4"	18	CWU18W	1 pcs	-
A24	483	280	3/4"	24	CWU24W	1 pcs	-
A35	440	365	1"	35	CWU35W	1 pcs	-




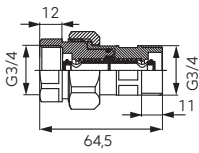



Sanitary water vessels - standing

- max. working operating pressure: 10 bar
- pre-pressure: 1.5 bar
- for AV200 and AV300 models: 2 bar
- working temperature: from -10°C to +100°C
- membrane (replaceable): EPDM
- colour: RAL 5015



Packaging

Model	h [mm]	d [mm]	Connection	Volume [l]	Index	Packaging	
						individual	bulk
AV50	720	365	1"	50	CWU50S	1 pcs	-
AV60	808	365	1"	60	CWU60S	1 pcs	-
AV80	856	415	1"	80	CWU80S	1 pcs	-
AV100	855	495	1"	100	CWU100S	1 pcs	-
AV150	975	550	1"	150	CWU150S	1 pcs	-
AV200	1085	600	1 1/4"	200	CWU200S	1 pcs	-
AV300	1240	650	1 1/4"	300	CWU300S	1 pcs	-

		Description	
		<p>3/4" quick connector for expansion vessel</p>	
			
		<p>Packaging</p>	
<p>Index</p>	<p>individual</p>	<p>bulk</p>	<p>Index</p>
<p>SN01</p>	<p>12 pcs</p>	<p>96 pcs</p>	<p>SN01W</p>
	<p>Mounting strap for hanging vessels 8-35l</p>		
			
		<p>Packaging</p>	
<p>Index</p>	<p>individual</p>	<p>bulk</p>	
<p>TNACZ</p>	<p>1 pcs</p>	<p>50 pcs</p>	

Fittings

BRASS FITTINGS



RAW BRASS FITTINGS

83



CHROME PLATED BRASS FITTINGS

88



BRASS UNIONS

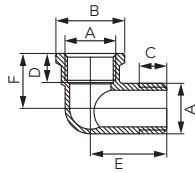
91



PUMP HALF UNION

94

Description

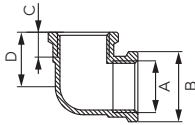


Elbow female - male



Packaging

A	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	Index	individual	bulk
G3/8	22,5	9	8,5	24,5	17	K09Z	10 pcs	600 pcs
G1/2	27	10,5	11	29	22	K12Z	10 pcs	300 pcs
G3/4	34	12,5	13	33,5	28	K10Z	10 pcs	160 pcs
G1	40	13	14	38	32	K11Z	5 pcs	90 pcs
G1 1/4	49	15	15	45	37	K13Z	5 pcs	50 pcs
G1 1/2	55	16	16	48	40	K14Z	5 pcs	40 pcs
G2	68	19	20	62	52	K15Z	1 pcs	20 pcs

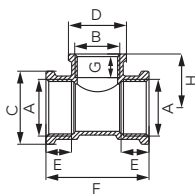


Elbow female - female



Packaging

A	B [mm]	C [mm]	D [mm]	Index	individual	bulk
G3/8	22,5	8,5	17,5	K02Z	10 pcs	600 pcs
G1/2	27	11	22	K03Z	10 pcs	300 pcs
G3/4	34	13,5	28	K04Z	10 pcs	150 pcs
G1	40	14	32	K05Z	5 pcs	100 pcs
G1 1/4	49	16	38	K06Z	5 pcs	50 pcs
G1 1/2	55	16	40,5	K07Z	5 pcs	40 pcs
G2	68	20	51	K08Z	1 pcs	20 pcs




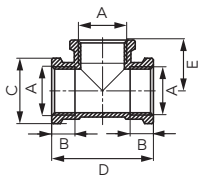

Reduction tee female


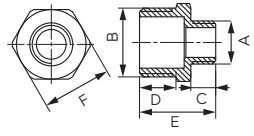




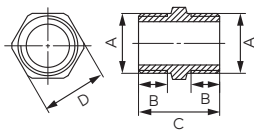

Packaging


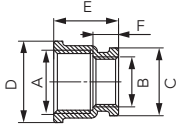

A	B	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	Index	individual	bulk
G3/4	G1/2	34	27	13	48	11	25	T08Z	10 pcs	150 pcs
G1	G1/2	40	27	14	52	11	27,5	T09Z	5 pcs	80 pcs
G1	G3/4	40	34	14	57	13,5	30	T10Z	5 pcs	60 pcs


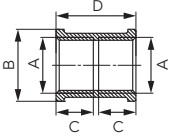

RAW BRASS FITTINGS


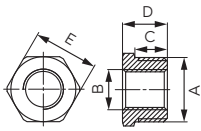

		Description						
 		Tee female						
							Packaging	
A	B[mm]	C[mm]	D[mm]	E[mm]	Index	individual	bulk	
G3/8	8,5	22,5	35	17,5	T01Z	10 pcs	350 pcs	
G1/2	11	27	44	22	T02Z	10 pcs	180 pcs	
G3/4	13,5	34	56	28	T03Z	10 pcs	100 pcs	
G1	14	40	64	32	T04Z	5 pcs	70 pcs	
G1 1/4	16	49	76	38	T05Z	5 pcs	40 pcs	
G1 1/2	16	55	81	40,5	T06Z	5 pcs	30 pcs	
G2	20	68	102	51	T07Z	1 pcs	18 pcs	

		Description						
 		Reduction nipple						
							Packaging	
A	B	C[mm]	D[mm]	E[mm]	F[mm]	Index	individual	bulk
G1/4	G1/2	7,5	11	23	21	N09Z	10 pcs	800 pcs
G3/8	G1/2	9	11	24,5	21	N11Z	10 pcs	700 pcs
G1/2	G3/4	11,5	12,5	29	26,5	N10Z	10 pcs	400 pcs
G1/2	G1	11,5	14	30	33,5	N12Z	5 pcs	320 pcs
G3/4	G1	12	14	31	33	N13Z	5 pcs	280 pcs
G3/4	G1 1/4	13	16	34,5	42	N14Z	5 pcs	150 pcs
G1	G1 1/4	13,5	16	35	42	N15Z	5 pcs	150 pcs
G1	G1 1/2	13	16,5	35	48,5	N16Z	5 pcs	110 pcs
G1 1/4	G1 1/2	16	16,5	38	48,5	N17Z	5 pcs	100 pcs
G1	G2	14	20	40	60	N18Z	1 pcs	48 pcs
G1 1/4	G2	16	20	40	60	N19Z	1 pcs	48 pcs
G1 1/2	G2	16,5	20	42,5	60	N20Z	1 pcs	48 pcs


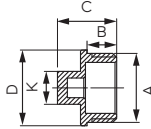

		Description					
 		Nipple					
						Packaging	
A	B[mm]	C[mm]	D[mm]	Index	individual	bulk	
G3/8	9	22,5	18	N02Z	10 pcs	1000 pcs	
G1/2	10,5	25,5	23	N03Z	10 pcs	600 pcs	
G3/4	12	29	28	N04Z	10 pcs	380 pcs	
G1	13	31,5	35	N05Z	5 pcs	200 pcs	
G1 1/4	15	31,5	44	N06Z	5 pcs	120 pcs	
G1 1/2	16,5	39	50	N07Z	5 pcs	90 pcs	
G2	19	45	62	N08Z	1 pcs	48 pcs	


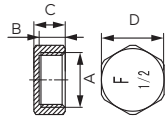

Description								
							Reduction muff	
								
Packaging								
A	B	C [mm]	D [mm]	E [mm]	F [mm]	Index	individual	bulk
G1/2	G3/8	22,5	27	3,05	8,5	M08Z	10 pcs	470 pcs
G3/4	G1/2	27	34	26	11,5	M09Z	10 pcs	350 pcs
G1	G3/4	27	40	28	12	M10Z	5 pcs	150 pcs
G1	G1/2	34	40	29	13	M11Z	5 pcs	280 pcs
G1 1/4	G1	40	49	33	14,5	M12Z	5 pcs	130 pcs
G1 1/2	G1	40	56	33	13,5	M13Z	5 pcs	100 pcs
G1 1/2	G1 1/4	49	56	35	16,5	M14Z	5 pcs	85 pcs
G2	G1	40	70	37	14	M15Z	1 pcs	60 pcs
G2	G1 1/4	49	70	39	16	M16Z	1 pcs	60 pcs
G2	G1 1/2	55	70	40	17	M17Z	1 pcs	60 pcs


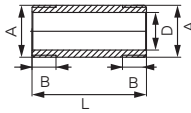

Description						
					Muff	
						
Packaging						
A	B [mm]	C [mm]	D [mm]	Index	individual	bulk
G3/8	22,5	12	25	M01Z	10 pcs	700 pcs
G1/2	27	14	30	M02Z	10 pcs	400 pcs
G3/4	34	16	34	M03Z	10 pcs	200 pcs
G1	41	17	36	M04Z	10 pcs	140 pcs
G1 1/4	49,5	20	43	M05Z	5 pcs	80 pcs
G1 1/2	57	25	53	M06Z	5 pcs	50 pcs
G2	70	27	65	M07Z	1 pcs	30 pcs


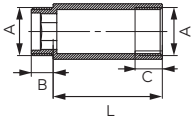

Description							
					Reduction		
							
Packaging							
A	B	C [mm]	D [mm]	E [mm]	Index	individual	bulk
G1/2	G1/4	10,5	14,5	21	R01Z	10 pcs	1000 pcs
G1/2	G3/8	10,5	14,5	21	R02Z	10 pcs	1000 pcs
G3/4	G1/2	11	16	26,5	R03Z	10 pcs	700 pcs
G1	G3/4	12	17,5	35	R04Z	5 pcs	320 pcs
G1	G1/2	14	19,5	42	R06Z	5 pcs	400 pcs
G1 1/4	G3/4	15	20,5	48,5	R09Z	5 pcs	200 pcs
G1 1/4	G1	12	17,5	35	R05Z	5 pcs	240 pcs
G1 1/2	G1	14	19,5	42	R07Z	5 pcs	170 pcs
G1 1/2	G1 1/4	15	20,5	48,5	R08Z	5 pcs	170 pcs
G2	G1	19	25,5	60	R10Z	1 pcs	80 pcs
G2	G1 1/4	19	25,5	60	R11Z	1 pcs	80 pcs
G2	G1 1/2	19	25,5	60	R12Z	1 pcs	80 pcs


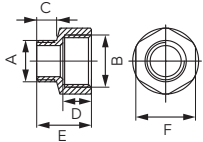

RAW BRASS FITTINGS


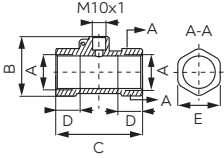

Description							
						<p>Plug</p>	
							
Packaging							
A	B [mm]	C [mm]	D [mm]	K [mm]	Index	individual	bulk
G3/8	8	13	-	17	KOR2Z	10 pcs	1000 pcs
G1/2	9	18	23	10	KOR3Z	10 pcs	1000 pcs
G3/4	11	20	30	13	KOR4Z	10 pcs	550 pcs
G1	11,5	21,5	37	16	KOR5Z	5 pcs	350 pcs
G1 1/4	12,5	25,5	45	22	KOR6Z	5 pcs	200 pcs
G1 1/2	13	28,5	52	23	KOR7Z	5 pcs	140 pcs
G2	17	34,5	63	30	KOR8Z	1 pcs	60 pcs

						<p>Cap</p>
						
Packaging						
A	B [mm]	C [mm]	D [mm]	Index	individual	bulk
G3/8	9	11	19	ZAS1Z	10 pcs	1000 pcs
G1/2	10	12	24	ZAS2Z	10 pcs	1000 pcs
G3/4	11,5	13,5	30	ZAS3Z	10 pcs	600 pcs
G1	13	15	36	ZAS4Z	5 pcs	350 pcs
G1 1/4	13	15	45,5	ZAS5Z	5 pcs	220 pcs
G1 1/2	13,5	16	52	ZAS6Z	5 pcs	200 pcs
G2	16,5	19	63,5	ZAS7Z	1 pcs	96 pcs


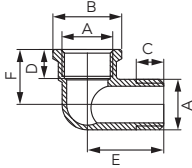

						<p>Stub pipe</p>
						
Packaging						
A	B [mm]	L [mm]	D [mm]	Index	individual	bulk
G1	15	107	25	KR107Z	1 pcs	60 pcs
G1	15	165	25	KR165Z	1 pcs	48 pcs


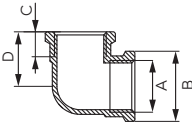

		Description				
 		Extension				
						
		Packaging				
A	B[mm]	C[mm]	L[mm]	Index	individual	bulk
G1/2	10	8,5	10	G1/2 x 10 mm P10Z	10 pcs	540 pcs
G3/4	12	8	10	G3/4 x 10 mm P110Z	10 pcs	400 pcs
G1/2	10	12	15	G1/2 x 15 mm P15Z	10 pcs	460 pcs
G3/4	12	13	15	G3/4 x 15 mm P115Z	10 pcs	330 pcs
G1/2	10	12	20	G1/2 x 20 mm P20Z	10 pcs	420 pcs
G3/4	12	15	20	G3/4 x 20 mm P120Z	10 pcs	290 pcs
G1/2	10	12	25	G1/2 x 25 mm P25Z	10 pcs	360 pcs
G3/4	12	15	25	G3/4 x 25 mm P125Z	10 pcs	240 pcs
G1/2	10	12	30	G1/2 x 30 mm P30Z	10 pcs	300 pcs
G3/4	12	15	30	G3/4 x 30 mm P130Z	10 pcs	200 pcs
G1/2	10	12	40	G1/2 x 40 mm P40Z	10 pcs	240 pcs
G3/4	12	15	40	G3/4 x 40 mm P140Z	10 pcs	160 pcs
G1/2	10	12	50	G1/2 x 50 mm P50Z	10 pcs	200 pcs
G3/4	12	15	50	G3/4 x 50 mm P150Z	10 pcs	120 pcs
G1/2	10	12	60	G1/2 x 60 mm P60Z	5 pcs	180 pcs
G3/4	12	15	60	G3/4 x 60 mm P160Z	5 pcs	120 pcs


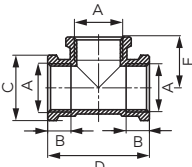

		Description						
 		Reduction female – male						
								
		Packaging						
A	B[mm]	C[mm]	D[mm]	E[mm]	F[mm]	Index	individual	bulk
G1/4	G3/8	8	10	20	20	RN01Z	10 pcs	1200 pcs
G3/8	G1/2	8,5	11	21,5	24	RN02Z	10 pcs	700 pcs
G1/2	G3/4	11	12	25	30	RN03Z	10 pcs	450 pcs
G1/2	G1	11	13,5	28	37	RN04Z	10 pcs	250 pcs
G3/4	G1	12	14,5	29	37	RN05Z	10 pcs	250 pcs
G1	G1 1/4	13	16	32	46	RN06Z	5 pcs	150 pcs


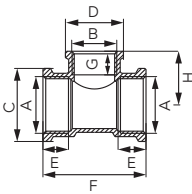

		Description						
 		Tee for assembling temperature sensor						
		<ul style="list-style-type: none"> • max. working temperature: 95°C • max. working pressure: 1.0 MPa (10 bar) 						
								
		Packaging		Detail				
A	B[mm]	C[mm]	D[mm]	E[mm]	Index	individual	bulk	Index
G1/2	44,1	56,0	14,5	24,9	1/2" x M10x1 SGT1	20 pcs.	240 pcs.	SGT1W
G3/4	43,8	64,0	18,0	31,5	3/4" x M10x1 SGT2	15 pcs.	180 pcs.	SGT2W



CHROME PLATED BRASS FITTINGS

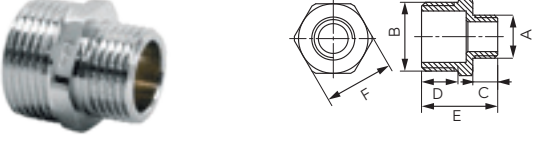

						Description		
						Elbow female - male		
								
						Packaging		
A	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	Index	individual	bulk
G3/8	22,5	9	8,5	24,5	17	K09C	1 pcs	25 pcs
G1/2	27	10,5	11	29	22	K12C	1 pcs	10 pcs
G3/4	34	12,5	13	33,5	28	K10C	1 pcs	10 pcs

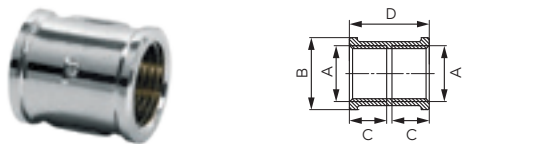

						Elbow female - female	
							
						Packaging	
A	B [mm]	C [mm]	D [mm]	E [mm]	Index	individual	bulk
G3/8	22,5	8,5	17,5		K02C	1 pcs	25 pcs
G1/2	27	11	T22		K03C	1 pcs	10 pcs
G3/4	34	13,5	28		K04C	1 pcs	10 pcs

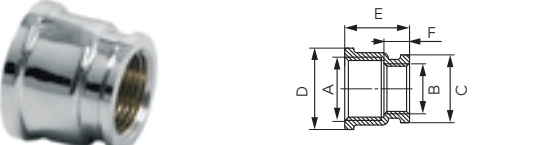

						Tee female	
							
						Packaging	
A	B [mm]	C [mm]	D [mm]	E [mm]	Index	individual	bulk
G3/8	8,5	22,5	35	17,5	T01C	1 pcs	25 pcs
G1/2	11	27	44	22	T02C	1 pcs	10 pcs
G3/4	13,5	34	56	28	T03C	1 pcs	10 pcs

						Reduction tee female				
										
						Packaging				
A	B	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	Index	individual	bulk
G3/4	G1/2	34	27	13	28	11	25	T08C	1 pcs	10 pcs


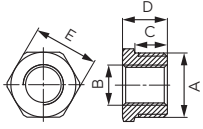


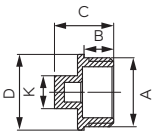


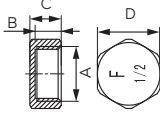


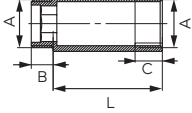

				Description		
				Nipple		
						
				Packaging		
A	B [mm]	C [mm]	D [mm]	Index	individual	bulk
G3/8	9	22,5	18	N02C	1 pcs	25 pcs
G1/2	10,5	22,5	23	N03C	1 pcs	25 pcs
G3/4	12	29	28	N04C	1 pcs	10 pcs


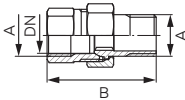

				Reduction nipple				
								
				Packaging				
A	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	Index	individual	bulk
G1/4	G1/2	7,5	11	23	21	N09C	1 pcs	25 pcs
G3/8	G1/2	9	11	24,5	21	N11C	1 pcs	10 pcs
G1/2	G3/4	11,5	12,5	29	26,5	N10C	1 pcs	25 pcs


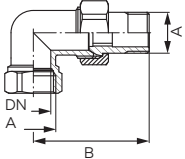

				Muff		
						
				Packaging		
A	B [mm]	C [mm]	D [mm]	Index	individual	bulk
G3/8	22,5	12	25	M01C	1 pcs	25 pcs
G1/2	27	14	30	M02C	1 pcs	25 pcs
G3/4	34	16	34	M03C	1 pcs	10 pcs


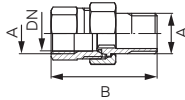

				Reduction muff			
							
				Packaging			
A	B [mm]	C [mm]	D [mm]	E [mm]	Index	individual	bulk
G1/2	G3/8	22,5	27	21,5	M08C	1 pcs	25 pcs
G3/4	G1/2	27	34	11,5	M09C	1 pcs	10 pcs


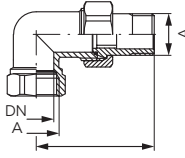

CHROME PLATED BRASS FITTINGS

						Description		
						Reduction		
								
						Packaging		
A	B[mm]	C[mm]	D[mm]	E[mm]	Index	individual	bulk	
G1/2	G1/4	10,5	14,5	21	R01C	1 pcs	25 pcs	
G1/2	G3/8	10,5	14,5	21	R02C	1 pcs	10 pcs	
G3/4	G1/2	11	16	26,5	R03C	1 pcs	10 pcs	
						Plug		
								
						Packaging		
A	B[mm]	C[mm]	D[mm]	K[mm]	Index	individual	bulk	
G1/2	9	18	23	10	KOR3C	1 pcs	10 pcs	
G3/4	11	20	30	13	KOR4C	1 pcs	10 pcs	
						Cap		
								
						Packaging		
A	B[mm]	C[mm]	D[mm]	K[mm]	Index	individual	bulk	
G1/2	9	18	23	10	ZAS2C	1 pcs	25 pcs	
G3/4	11	20	30	13	ZAS3C	1 pcs	10 pcs	
						Extension		
								
						Packaging		
A	B[mm]	C[mm]	L[mm]	Index		individual	bulk	
G1/2	10	8,5	10	G1/2 x 10 mm		P10C	1 pcs	25 pcs
G3/4	12	8	10	G3/4 x 10 mm		P110C	1 pcs	25 pcs
G1/2	10	12	15	G1/2 x 15 mm		P15C	1 pcs	25 pcs
G3/4	12	13	15	G3/4 x 15 mm		P115C	1 pcs	25 pcs
G1/2	10	12	20	G1/2 x 20 mm		P20C	1 pcs	25 pcs
G3/4	12	15	20	G3/4 x 20 mm		P120C	1 pcs	25 pcs
G1/2	10	12	25	G1/2 x 25 mm		P25C	1 pcs	25 pcs
G3/4	12	15	25	G3/4 x 25 mm		P125C	1 pcs	25 pcs
G1/2	10	12	30	G1/2 x 30 mm		P30C	1 pcs	10 pcs
G3/4	12	15	30	G3/4 x 30 mm		P130C	1 pcs	10 pcs
G1/2	10	12	40	G1/2 x 40 mm		P40C	1 pcs	10 pcs
G3/4	12	15	40	G3/4 x 40 mm		P140C	1 pcs	10 pcs
G1/2	10	12	50	G1/2 x 50 mm		P50C	1 pcs	10 pcs
G3/4	12	15	50	G3/4 x 50 mm		P150C	1 pcs	10 pcs



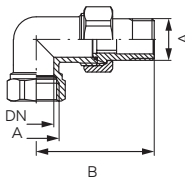


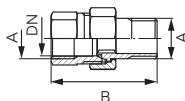


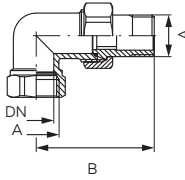
		Description			
 		Straight pipe union without O-ring			
				Packaging	
DN	A	B [mm]	Index	individual	bulk
10	G3/8	41,5 3/8"	SG1	1 pcs	220 pcs
15	G1/2	45,7 1/2"	SG2	1 pcs	160 pcs
20	G3/4	50,5 3/4"	SG3	1 pcs	120 pcs
25	G1	59 1"	SG7	1 pcs	70 pcs
32	G1 1/4	64 1 1/4"	SG9	1 pcs	50 pcs

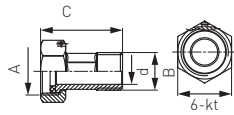
 		Angle pipe union without O-ring			
				Packaging	
DN	A	B [mm]	Index	individual	bulk
10	G3/8	47 3/8"	SG4	1 pcs	200 pcs
15	G1/2	52,2 1/2"	SG5	1 pcs	140 pcs
20	G3/4	59 3/4"	SG6	1 pcs	80 pcs
25	G1	72 1"	SG8	1 pcs	45 pcs
32	G1 1/4	81,2 1 1/4"	SG10	1 pcs	25 pcs

 		Straight pipe union with O-ring			
				Packaging	
DN	A	B [mm]	Index	individual	bulk
10	G3/8	41,5 3/8"	SGU1	1 pcs	220 pcs
15	G1/2	45,7 1/2"	SGU2	1 pcs	160 pcs
20	G3/4	50,5 3/4"	SGU3	1 pcs	120 pcs
25	G1	59 1"	SGU7	1 pcs	70 pcs
32	G1 1/4	63 1 1/4"	SGU9	1 pcs	50 pcs

 		Angle pipe union with O-ring			
				Packaging	
DN	A	B [mm]	Index	individual	bulk
10	G3/8	47 3/8"	SGU4	1 pcs	200 pcs
15	G1/2	52,5 1/2"	SGU5	1 pcs	140 pcs
20	G3/4	59 3/4"	SGU6	1 pcs	80 pcs
25	G1	72 1"	SGU8	1 pcs	45 pcs
32	G1 1/4	81,2 1 1/4"	SGU10	1 pcs	25 pcs

BRASS UNIONS

				Description		
				Straight pipe union with O-ring • chrome plated		
						
				Packaging		
DN	A	B [mm]		Index	individual	bulk
10	G3/8	41,5	3/8"	SGC1	1 pcs	220 pcs
15	G1/2	45,7	1/2"	SGC2	1 pcs	160 pcs
20	G3/4	50,5	3/4"	SGC3	1 pcs	120 pcs
25	G1	59	1"	SGC7	1 pcs	70 pcs
32	G1 1/4	64	1 1/4"	SGC9	1 pcs	50 pcs
				Angle pipe union with O-ring • chrome plated		
						
				Packaging		
DN	A	B [mm]		Index	individual	bulk
10	G3/8	41,5	3/8"	SGC4	1 pcs	200 pcs
15	G1/2	45,7	1/2"	SGC5	1 pcs	140 pcs
20	G3/4	50,5	3/4"	SGC6	1 pcs	80 pcs
25	G1	59	1"	SGC8	1 pcs	45 pcs
32	G1 1/4	64	1 1/4"	SGC10	1 pcs	25 pcs
				1/2" straight pipe union without O-ring • chrome plated		
						
				Packaging		
DN	A	B [mm]		Index	individual	bulk
15	G1/2	45,7	straight	SGCC2	1 pcs	160 pcs
				Available while stock lasts		
				1/2" angle pipe union without O-ring • chrome plated		
						
				Packaging		
DN	A	B [mm]		Index	individual	bulk
15	G1/2	52,2	angle	SGCC5	1 pcs	140 pcs
				Available while stock lasts		



Description

Half pipe union for water meter

- possibility of placing a lead seal
- lead seal not included in the set
- 1 set - 2 pcs



Packaging

A	B [mm]	d [mm]	C [mm]	6-kt [mm]	Index	Packaging		
						individual	bulk	
G3/4	G1/2	14,5	36	30	1/2"	SG11	1 set (2 pcs)	120 set
G1	G3/4	19,6	45	36	3/4"	SG12	1 set (2 pcs)	70 set
G1 1/4	G1	26	67,5	46	1"	SG13	1 set (2 pcs)	30 set
G1 1/2	G1 1/4	30	71	52	1 1/4"	SG14	1 set (2 pcs)	25 set
G2	G1 1/2	36,6	82	65	1 1/2"	SG15	1 set (2 pcs)	18 set
G2 1/2	G2	49	98	84	2"	SG16	1 set (2 pcs)	10 set

PUMP HALF UNIONS

		Description									
		<p>Brass pump half pipe union 6/4"x1"</p> <p></p> <table border="1"> <thead> <tr> <th colspan="3">Packaging</th> </tr> <tr> <th>Index</th> <th>individual</th> <th>bulk</th> </tr> </thead> <tbody> <tr> <td>SG18</td> <td>1 set (2 pcs)</td> <td>56 set</td> </tr> </tbody> </table>	Packaging			Index	individual	bulk	SG18	1 set (2 pcs)	56 set
Packaging											
Index	individual	bulk									
SG18	1 set (2 pcs)	56 set									
		<p>Cast iron half pipe union 6/4"x1"</p> <p></p> <table border="1"> <thead> <tr> <th colspan="3">Packaging</th> </tr> <tr> <th>Index</th> <th>individual</th> <th>bulk</th> </tr> </thead> <tbody> <tr> <td>SG17</td> <td>1 set (2 pcs)</td> <td>35 set</td> </tr> </tbody> </table>	Packaging			Index	individual	bulk	SG17	1 set (2 pcs)	35 set
Packaging											
Index	individual	bulk									
SG17	1 set (2 pcs)	35 set									
		<p>Cast iron half pipe union 2"x5/4"</p> <p></p> <table border="1"> <thead> <tr> <th colspan="3">Packaging</th> </tr> <tr> <th>Index</th> <th>individual</th> <th>bulk</th> </tr> </thead> <tbody> <tr> <td>SG19</td> <td>1 set (2 pcs)</td> <td>20 set</td> </tr> </tbody> </table>	Packaging			Index	individual	bulk	SG19	1 set (2 pcs)	20 set
Packaging											
Index	individual	bulk									
SG19	1 set (2 pcs)	20 set									

Central heating & domestic hot water installation kits

CENTRAL HEATING & DOMESTIC HOT WATER INSTALLATION KITS



HEAT EXCHANGERS
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MIXING VALVES
100



DIFFERENTIAL VALVES
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PUMPING GROUPS
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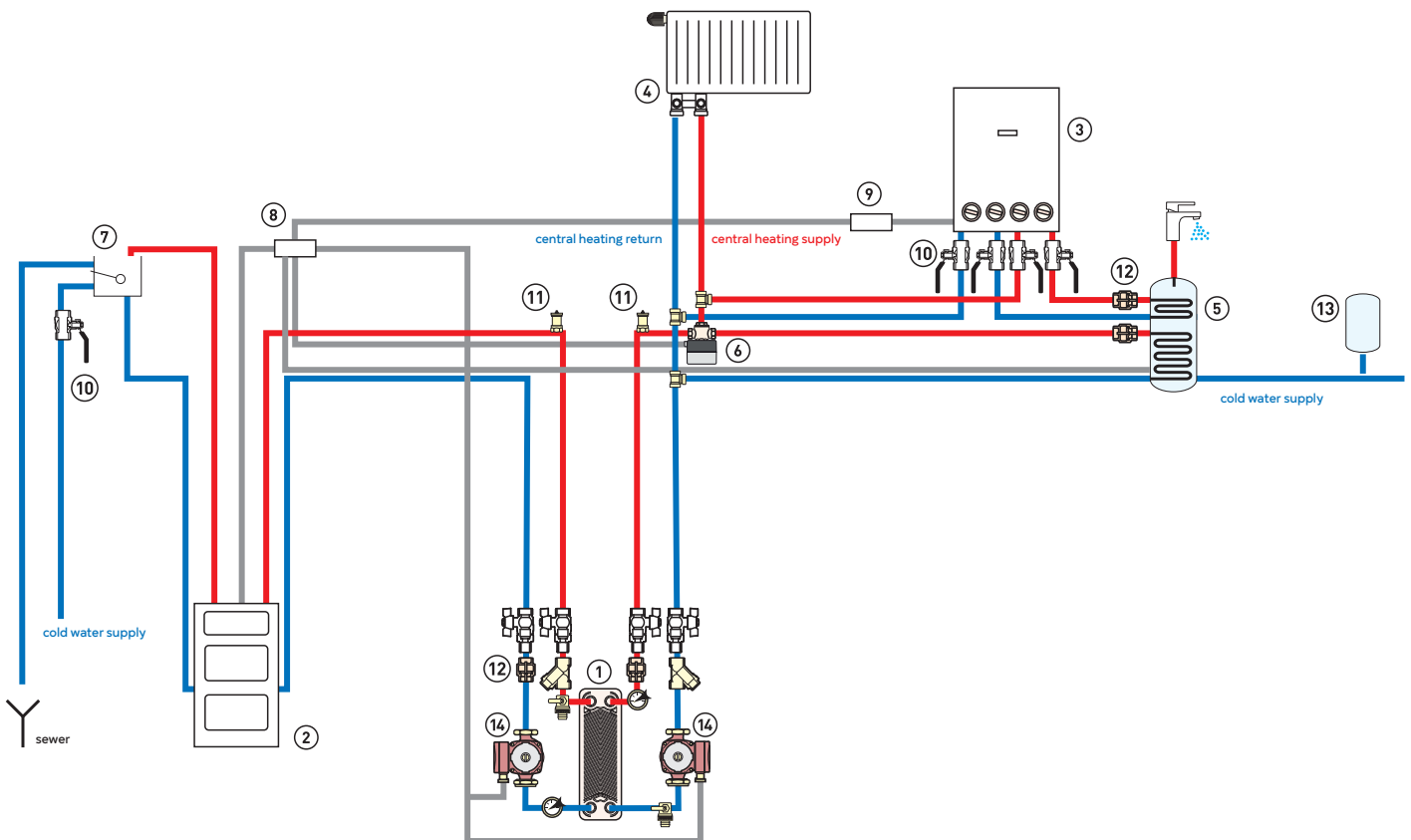
STEEL MANIFOLDS AND HYDRAULIC COUPLINGS
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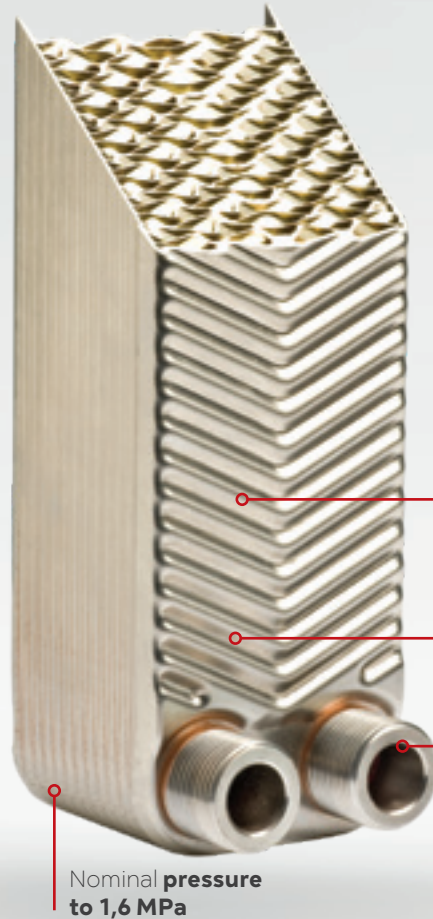
Installation diagram

The installation combining two heat sources
operating in an open and closed system
- overview diagram



1. Heat exchangers
2. Solid fuel boiler
3. Gas boiler
4. Central heating installation
5. Central heating reservoir
6. 3-way valve with actuator
7. Open transfer vessel
8. Solid fuel boiler controller
9. Gas boiler controller
10. Cut-off ball valve
11. Automatic air vent
12. Check valve
13. Expansion vessel for hot water
14. Circulation pump

Heat exchangers



Maximum **working**
temperature **135°C**

Maximum
flow rate 4 m³/h

Connections
3/4" male thread

Nominal **pressure**
to **1,6 MPa**

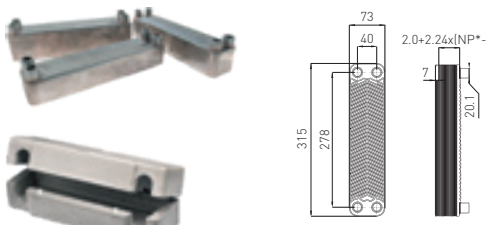







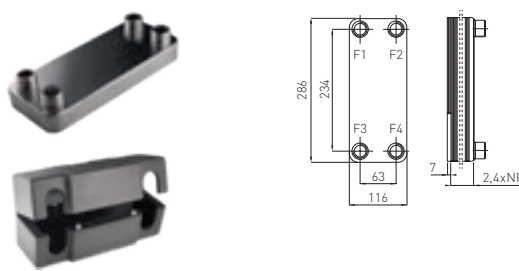




GLYCOL
40%

Operating parameters and scope of application:

- central heating installations
- thermocouples
- solid fuel boilers
- hot water installations
- solar installations

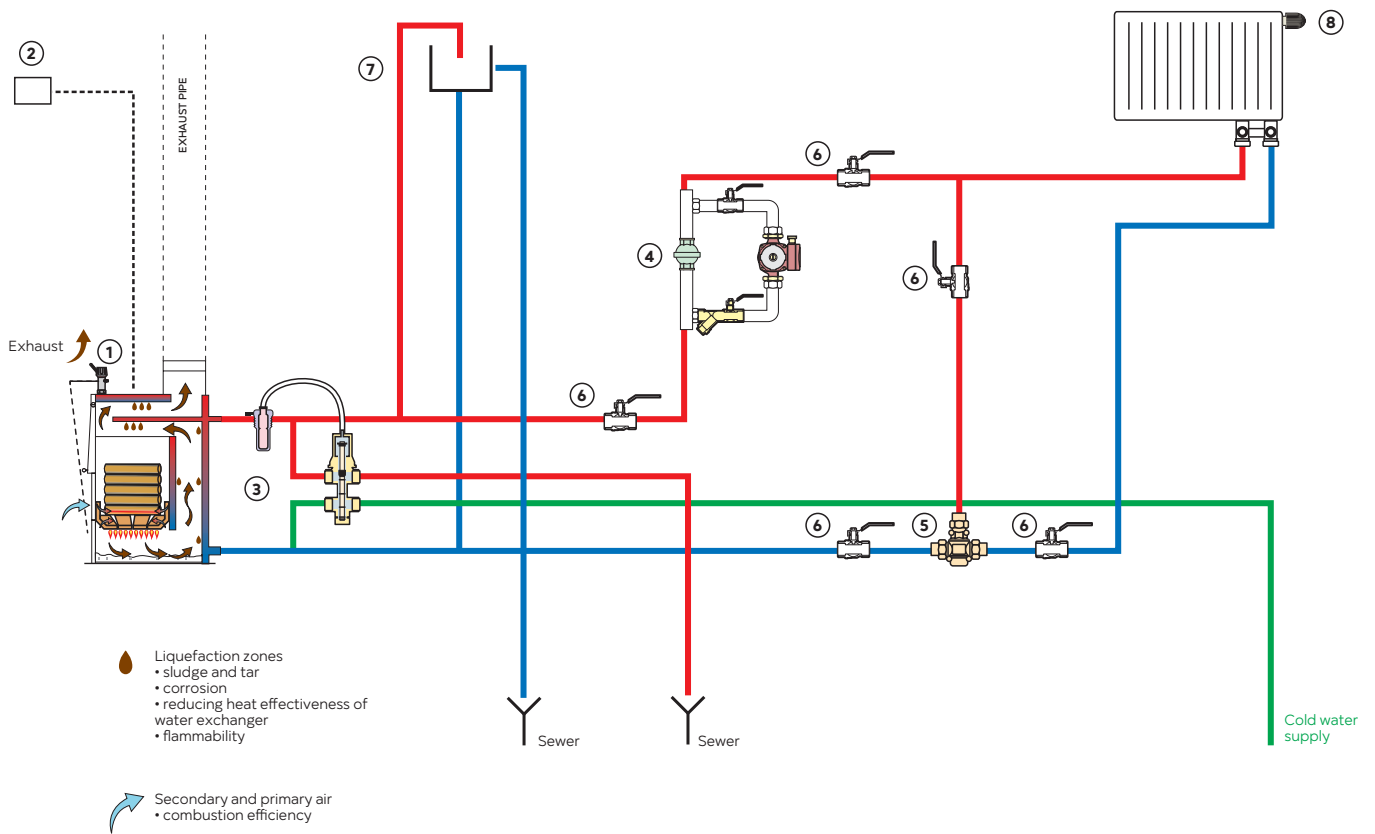
Flow: 4 m³/h (max)
Working pressure: 16 bar (max)
Working temperature: 135°C (max)
Test pressure: 20 bar
Connections: 3/4" male thread

HEAT EXCHANGERS

			Description		
				3/4" exchangers <ul style="list-style-type: none"> • with insulation for installations with a thermo fireplace or solid fuel boiler Application: <ul style="list-style-type: none"> • central heating systems • thermal chimney • solid fuel boilers • hot water systems • solar systems Characteristics: <ul style="list-style-type: none"> • flow rate: 4 m³/h (max) • working pressure: 16 bar (max) • working temperature: 135°C (max) • testing pressure: 20 bar • connections: 3/4" male thread 	
				Packaging	
Power range [kW]	Heat source side [°C]	Installation side [°C]	Index	individual	bulk
10-15			IC8THx10	1 pcs	-
15-25	90/70	50/70	IC8THx20	1 pcs	-
25-30	85/65	45/65	IC8THx24	1 pcs	-
35-45	80/60	40/60	IC8THx30	1 pcs	-
				Insulated exchangers with insulation for solar systems containing 40% propylene glycol	
				Packaging	
Power range [kW]	Heat source side [°C]	Installation side [°C]	Index	individual	bulk
4			IC8THx20	1 pcs	-
8	80/40	30/65	IC8THx24	1 pcs	-
12			IC8THx30	1 pcs	-
				Packaging	
			Index	individual	bulk
			IZTH	1 pcs	-
				1" exchangers with insulation for systems with a thermo fireplace or solid fuel boiler	
				Packaging	
Power range [kW]	Heat source side [°C]	Installation side [°C]	Index	individual	bulk
15-20			IC9THx15	1 pcs	-
20-30	90/70	50/70	IC9THx20	1 pcs	-
30-45	85/65	45/65	IC9THx30	1 pcs	-
				Packaging	
			Index	individual	bulk
			IZTH1	1 pcs	-


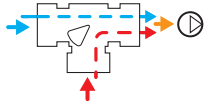
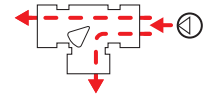


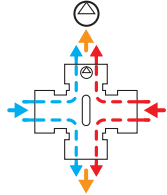



Installation diagram

Solid fuel boiler protection – overview



1. Chimney draught regulator
2. Boiler controller
3. Thermal safety drop valve
4. Pumping set with gravity-assisted differential valve
5. Thermostatic mixing valve to protect the return temperature
6. Cut-off ball valve
7. Open expansion vessel
8. Central heating installation.

MIXING VALVES

		Description
	mixing function 	3-way valves <ul style="list-style-type: none"> • max. working pressure: 1.0 MPa (10 bar) • max. working temperature: 110°C
	diverting function 	
		
		Packaging
		Index
		individual
		bulk
3-way mixing valve Rp 3/4 - $K_v = 6 \text{ m}^3/\text{h}$	ZM31	1 pcs
3-way mixing valve Rp 1 - $K_v = 8 \text{ m}^3/\text{h}$	ZM32	1 pcs
3-way mixing valve Rp 1 1/4" - $K_v = 18 \text{ m}^3/\text{h}$	ZM33	1 pcs
		10 pcs
	mixing function 	4-way valves <ul style="list-style-type: none"> • max. working pressure: 1.0 MPa (10 bar) • max. working temperature: 110°C
		
		Packaging
		Index
		individual
		bulk
4-way mixing valve Rp 3/4 - $K_v = 6 \text{ m}^3/\text{h}$	ZM41	1 pcs
4-way mixing valve Rp 1 - $K_v = 8 \text{ m}^3/\text{h}$	ZM42	1 pcs
4-way mixing valve Rp 1 1/4" - $K_v = 18 \text{ m}^3/\text{h}$	ZM43	1 pcs
		10 pcs
		Electric actuator for ZM rotary mixing valves <ul style="list-style-type: none"> • ambient temperature: from -10°C to + 55°C • the degree of protection provided by the housing: IP 44 • protection class: II • power supply: 230V 50-60Hz • energy consumption: 4W • moment: 10Nm • cable length: 1.5 m (3 x 0.5 mm²) • working time: 120 s • rotation angle: 90 degrees • type of control: 3-point
		
		Packaging
		Index
		individual
		bulk
	SE230	1 pcs
		10 pcs



Description

Differential valves

- max. instantaneous working temperature: 110°C
- max. working pressure: 0.7 MPa (7 bar)
- EPDM rubber ball
- vertical or horizontal assembly



Packaging

size	Index	individual	bulk
1"	ZR1	1 pcs	15 pcs
1 1/4"	ZR2	1 pcs	16 pcs
1 1/2"	ZR3	1 pcs	12 pcs
2"	ZR4	1 pcs	8 pcs

Description



Pump group 6/4"

Equipment:

- 25-6-180 electronic circulation pump
- cut-off ball valve
- ball valves with built-in thermometers in handles
- check valve on the return side
- lower connections: 6/4" M for flat gasket
- upper connections: 1" F

Parameters:

- max. working temperature: 90°C
- max. working pressure: 1.0 MPa (10 bar)
- thermometer measuring scope: 0 - 120°C
- sealing: PTFE, EPDM



Packaging

Index	individual	bulk
GP60GPA	1 pcs	-



Mixing group for low-temperature installations

Equipment:

- 25-6-180 electronic circulation pump
- 3-way mixing valve with flow Kv = 10 m³/h
- ball valves with built-in thermometers in handles
- check valve on the return side
- lower connections: 6/4" M for flat gasket
- upper connections: 1" F

Parameters:

- max. working temperature: 90°C
- max. working pressure: 1.0 MPa (10 bar)
- thermometer measuring scope: 0 - 120°C
- 3-way mixing valve body: CW617N brass
- sealing: PTFE, EPDM



Packaging

Index	individual	bulk
GMP602GPA	1 pcs	-



Thermostatic mixing group for low-temperature installations

Equipment:

- 25-6-180 electronic circulation pump
- thermostatic 3-way mixing valve with flow Kv = 3.5 m³/h
- ball valves with built-in thermometers in handles
- check valve on the return side
- lower connections: 6/4" M for flat gasket
- upper connections: 1" F

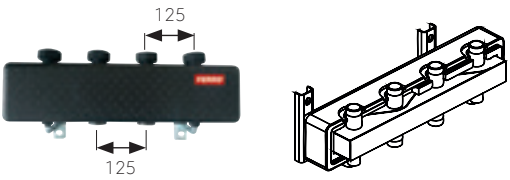

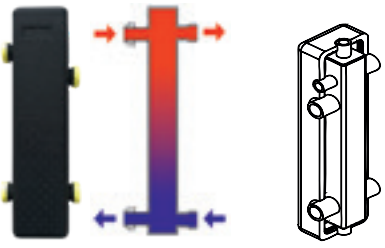

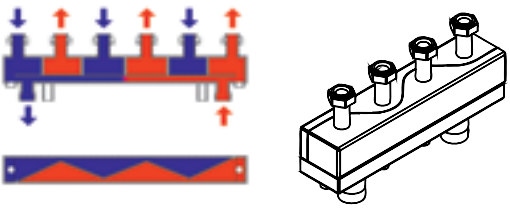

Parameters:




- max. working temperature: 90°C
- max. working pressure: 1.0 MPa (10 bar)
- thermometer measuring scope: 0 - 120°C
- temperature adjustment range: 30°C - 60°C
- thermostatic valve body: CB752S (DZR) brass- dezincification resistant
- thermostatic valve spring: stainless steel AISI 302
- sealing: PTFE, EPDM



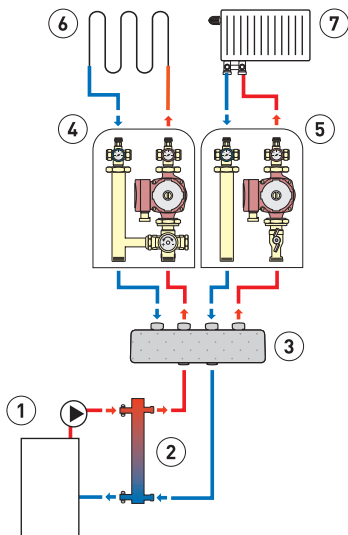
Packaging

Index	individual	bulk
GMPT60GPA	1 pcs	-

		Description		
		<p>Steel manifold with insulation, mounting kit</p> <ul style="list-style-type: none"> • upper connections: 6/4" running nut • lower connections: 6/4" M, flat sealing • flow: 3 m³/h 		
				
		Packaging		
		Index	individual	bulk
2 circuits	RSI02	1 pcs	-	
3 circuits	RSI03	1 pcs	-	
4 circuits	RSI04	1 pcs	-	
5 circuits	RSI05	1 pcs	-	
6 circuits	RSI06	1 pcs	-	
		<p>Steel hydraulic separator with insulation, mounting kit</p> <ul style="list-style-type: none"> • connections 6/4" M, flat sealing 		
				
		Packaging		
		Index	individual	bulk
flow of 3 m³/h	SHI30	1 pcs	-	
flow of 4,5 m³/h	SHI45	1 pcs	-	
		<p>Hydraulic separator with manifold, insulation, mounting kit</p> <ul style="list-style-type: none"> • upper connections: 6/4" running nut • lower connections: 6/4" M, flat gasket • flow: 3 m³/h 		
				
		Packaging		
		Index	individual	bulk
2 circuits	RSHI02	1 pcs	-	
3 circuits	RSHI03	1 pcs	-	

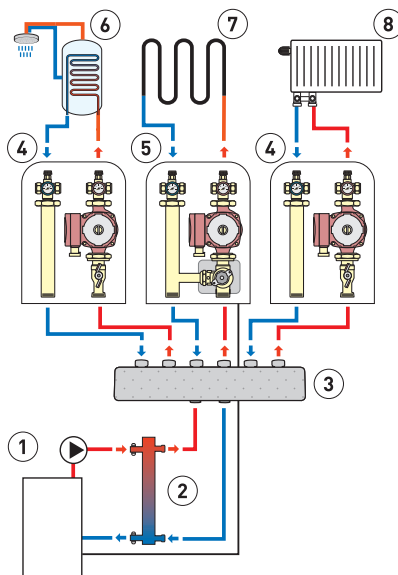
Description		
	Mounting console for GP and GMP • with rawplugs	
		
Packaging		
Index	individual	bulk
UCH-GP	1 pcs	-
	Pressure differential valve 2 - 6.5 m H2O for GMP • for installation in GMP mixing groups • opening pressure: 0.2 - 0.65 bar	
		
Packaging		
Index	individual	bulk
ZRC1	1 pcs	-

Central heating overview installation diagram using GP60GPA, GMPT60GPA, SHI30 and RSI02



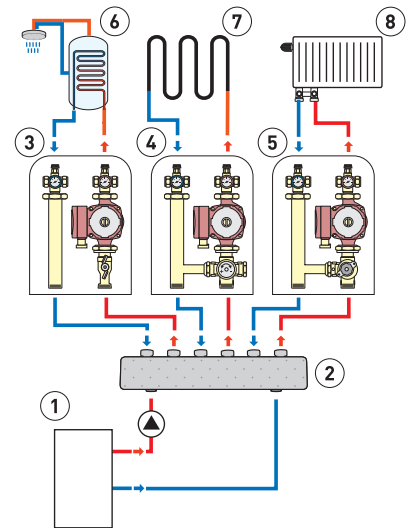
1. Heat source
2. SHI30 hydraulic separator
3. RSI02 directional control valve
4. Thermostatic mixing group GMPT60GPA
5. Mixing group GP60GPA
6. Underfloor heating
7. High-parameter central heating installation

Overview diagram of central heating installation and hot water installations using GP60GPA, GMP602GPA, SHI30 and RSI02



1. Heat source
2. SHI30 hydraulic separator
3. RSI03 manifold
4. Mixing group GP60GPA
5. Mixing group GMP602GPA with SE230 actuator
6. Hot water storage tank
7. Underfloor heating
8. High-parameter central heating installation

Overview diagram of central heating installation and hot water installations using GP60GPA, GMPT60GPA, GMP602GPA and RSHI02



1. Heat source
2. SHI30 hydraulic separator
3. Mixing group GP60GPA
4. Thermostatic mixing group GMPT60GPA
5. Mixing group GMP602GPA with SE230 actuator
6. Hot water storage tank
7. Underfloor heating
8. High-parameter central heating installation

Pumps

PUMPS



DRINKING WATER CIRCULATION PUMPS
107



CIRCULATION PUMPS
111

Circulation pumps

Highest class of winding resistance to overheating



High-quality electronically commutated motor

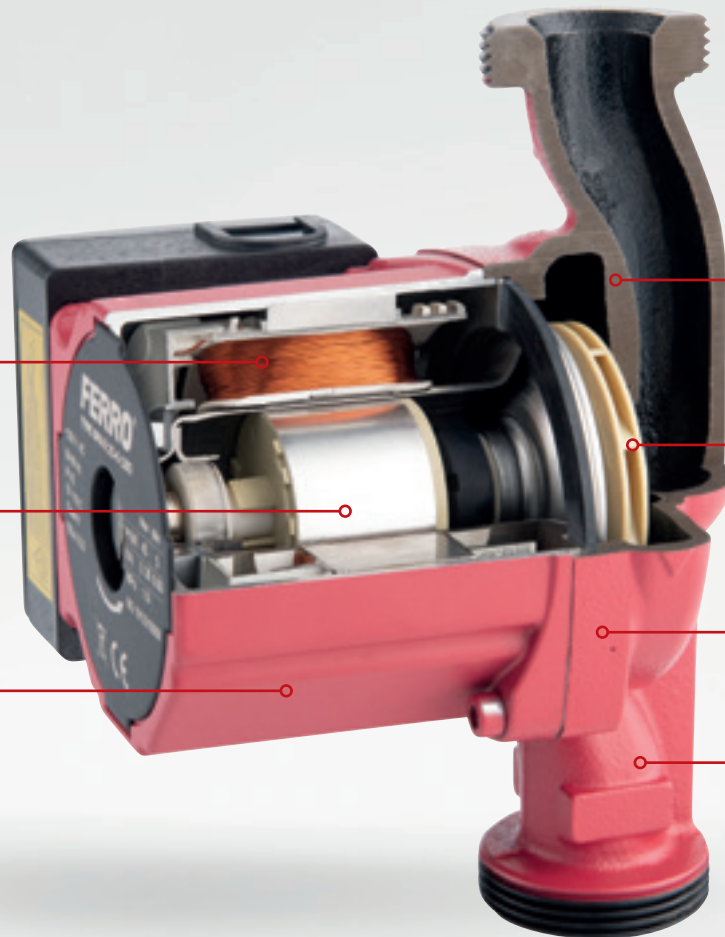
Cast aluminium housing

Robust cast iron body

Impeller made of durable plastic

Maximum pressure 1,0 MPa

Max. working temperature 110°C



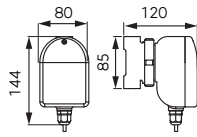
Characteristics:

The pump body is made of cast iron, the casing is cast aluminium and the impeller is plastic moulded. The high-quality bipolar, asynchronous motor does not require overload protection. It has three speeds, regulated by a special switch mounted on the terminal box, which allows to adjust the pump operation to the characteristics of the system. The device complies with European standards EN 60335-1 and EN 60335-2-51.

Energy efficiency is one of the main challenges facing modern heating technology. Therefore, FERRO's product portfolio also includes such models - these are energy-efficient, electronic circulation pumps of the latest GPA II generation for heating and solar systems. The GPA II pumps comply with ErP, RoHS, EMC and LVD directives. Depending on the operating mode, the GPA II electronic pumps have two to five times less power requirements compared to manual pumps with the same lifting height. An equally important advantage is the function of automatic adaptation of the pump to the system in which it is installed, which means that it adjusts its efficiency, torque and energy consumption in such a way as to optimize the correct operation of the system. In addition, these devices are equipped with a potentiometer with which we can smoothly control the lifting height of the pump and its capacity.



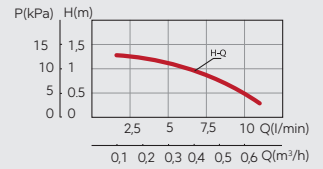
Description



CP 15-1.5 drinking water circulation pump

Characteristics:

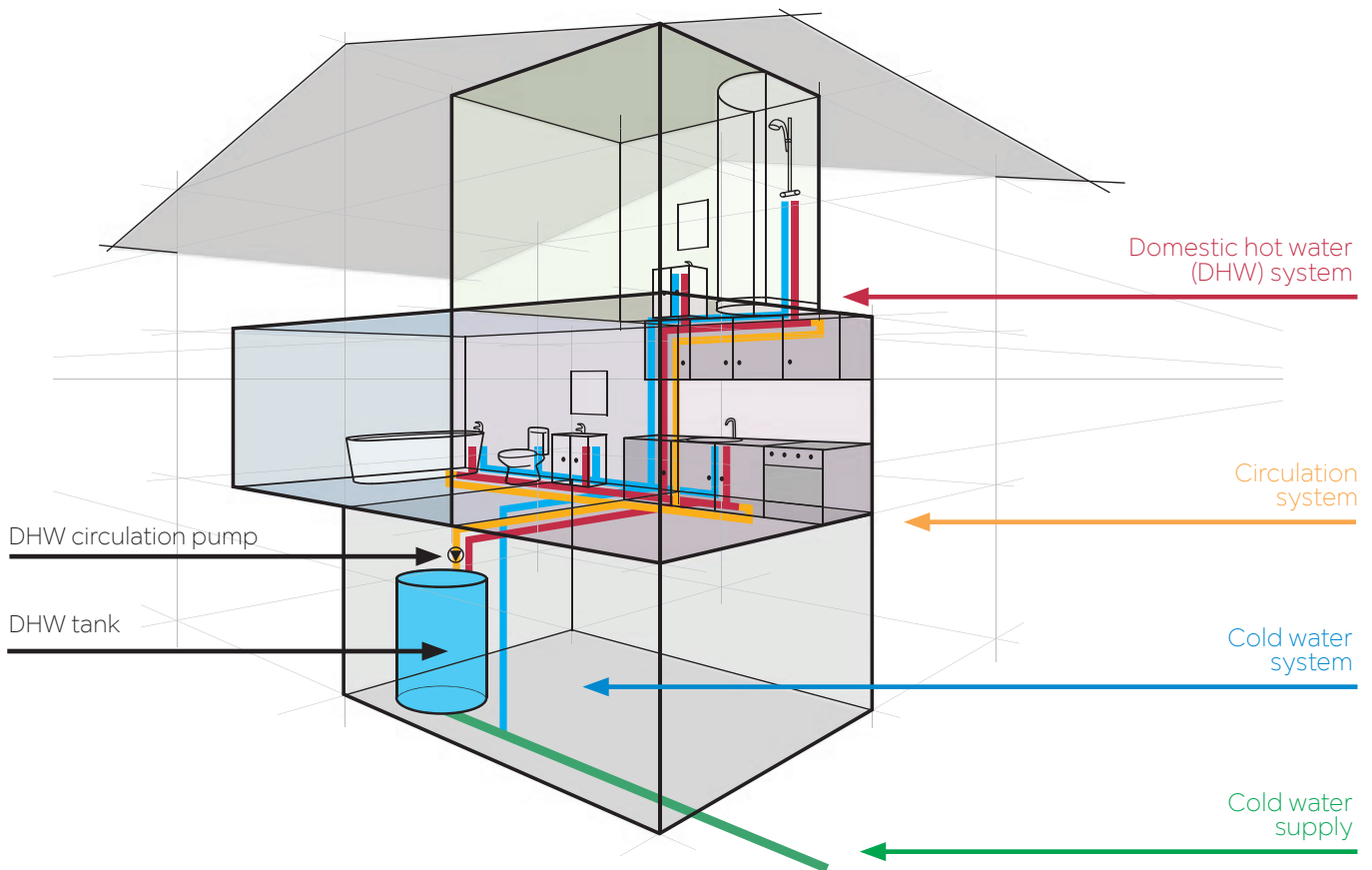
- Operating range: 0.1 - 0.7 m³/h
- Lifting height: max. 1.3 m
- Liquid temperature: min. +2°C, max. +95°C
- Application: intended for drinking water only
- Maximum pressure: 10 bar
- Protection class: IP 42
- Insulation class: F
- Voltage: 50-60 Hz, ~230 V
- Power consumption: 28 W
- Connection spacing: 85 mm
- Connection: G1/2
- Ambient temperature: min. +2°C, max. +40°C



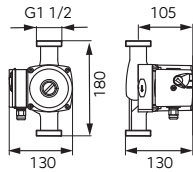
Index
0101W

Packaging

	individual	bulk
	1 pcs	8 pcs



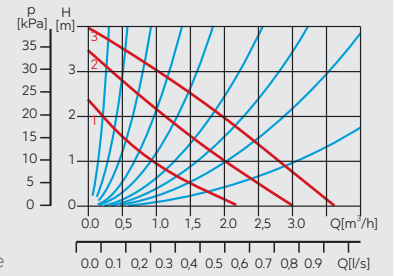
Description



25-40-180 drinking water circulation pump

Characteristics:

- Operating range: 0.2 - 3.5 m³/h
- Lifting height: max. 3.8 m
- Liquid temperature: min. +2°C, max. +110°C
- Application: intended for drinking water only
- Maximum pressure: 10 bar
- Protection class: IP 44
- Insulation class: H
- Cable gland: PG 11
- Installation: axel shaft in horizontal position and terminal box located as desired except under the pump
- Voltage: 50-60 Hz, ~230 V
- Power consumption (I, II, III): 35/45/65 W
- Connection spacing: 180 mm
- Connection: G1 1/2
- Ambient temperature: min. +2°C, max. +40°C

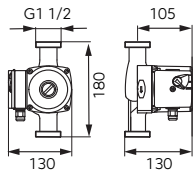


Index

0201W

Packaging

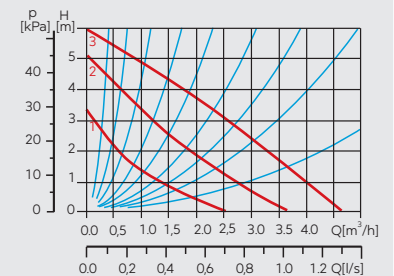
individual	bulk
1 pcs	8 pcs



25-60-180 drinking water circulation pump

Characteristics:

- Operating range: 0.2 - 4.5 m³/h
- Lifting height: max. 5.5 m
- Liquid temperature: min. +2°C, max. +110°C
- Application: intended exclusively for drinking water
- Maximum pressure: 10 bar
- Protection class: IP 44
- Insulation class: H
- Cable gland: PG 11
- Installation: axel shaft in horizontal position and terminal box located as desired except under the pump
- Voltage: 50-60 Hz, ~230 V
- Power consumption (I,II,III): 55/70/100 W
- Connection spacing: 180 mm
- Connection: G1 1/2
- Ambient temperature: min. +2°C, max. +40°C

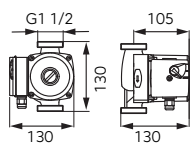


Index

0202W

Packaging

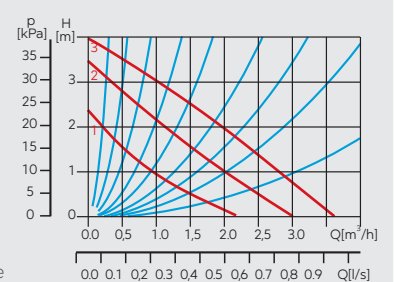
individual	bulk
1 pcs	8 pcs



25-40-130 drinking water circulation pump

Characteristics:

- Operating range: 0.2 - 3.5 m³/h
- Lifting height: max. 3.8 m
- Liquid temperature: min. +2°C, max. +110°C
- Application: intended for drinking water only
- Maximum pressure: 10 bar
- Protection class: IP 44
- Insulation class: H
- Cable gland: PG 11
- Installation: axel shaft in horizontal position and terminal box located as desired except under the pump
- Voltage: 50-60 Hz, ~230 V
- Power consumption (I, II, III): 35/45/65 W
- Connection spacing: 130 mm
- Connection: G1 1/2
- Ambient temperature: min. +2°C, max. +40°C



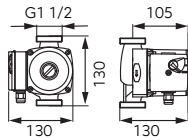
Index

0203W

Packaging

individual	bulk
1 pcs	8 pcs

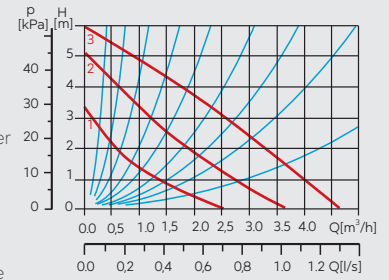
Description



25-60-130 drinking water circulation pump

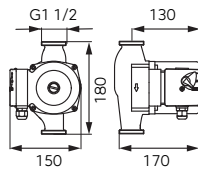
Characteristics:

- Operating range: 0.2 - 4.5 m³/h
- Lifting height: max. 5.5 m
- Liquid temperature: min. +2°C, max. +110°C
- Application: intended exclusively for drinking water
- Maximum pressure: 10 bar
- Protection class: IP 44
- Insulation class: H
- Cable gland: PG 11
- Installation: axel shaft in horizontal position and terminal box located as desired except under the pump
- Voltage: 50-60 Hz, ~230 V
- Power consumption (I,II,III): 55/70/100 W
- Connection spacing: 130 mm
- Connection: G1 1/2
- Ambient temperature: min. +2°C, max. +40°C



Packaging

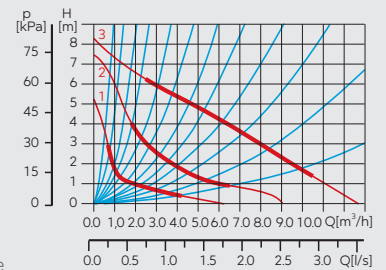
Index	individual	bulk
0204W	1 pcs	8 pcs



25-80-180 drinking water circulation pump

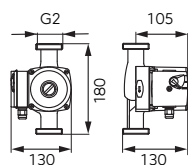
Characteristics:

- Operating range: 0.2 - 10.5 m³/h
- Lifting height: max. 8 m
- Liquid temperature: min. +2°C, max. +110°C
- Application: intended for drinking water only
- Maximum pressure: 10 bar
- Protection class: IP 44
- Insulation class: H
- Cable gland: PG 9
- Installation: axel shaft in horizontal position and terminal box located as desired except under the pump
- Voltage: 50-60 Hz, ~230 V
- Power consumption (I,II,III): 135/190/245 W
- Connection spacing: 180 mm
- Connection: G1 1/2
- Ambient temperature: min. +2°C, max. +40°C



Packaging

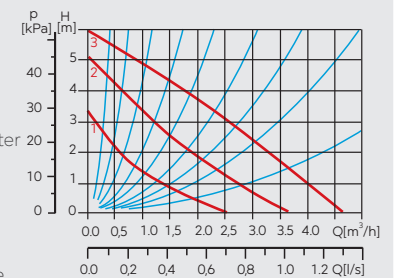
Index	individual	bulk
0301W	1 pcs	4 pcs



32-60-180 drinking water circulation pump

Characteristics:

- Operating range: 0.2 - 4.5 m³/h
- Lifting height: max. 5.5 m
- Liquid temperature: min. +2°C, max. +110°C
- Application: intended exclusively for drinking water
- Maximum pressure: 10 bar
- Protection class: IP 44
- Insulation class: H
- Cable gland: PG 9
- Installation: axel shaft in horizontal position and terminal box located as desired except under the pump
- Voltage: 50-60 Hz, ~230 V
- Power consumption (I,II,III): 55/70/100 W
- Connection spacing: 180 mm
- Connection: G2
- Ambient temperature: min. +2°C, max. +40°C

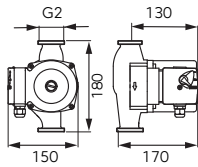


Packaging

Index	individual	bulk
0302W	1 pcs	8 pcs

DRINKING WATER CIRCULATION PUMPS

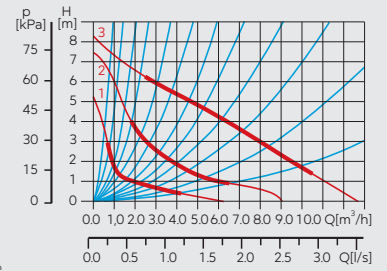
Description



32-80-180 drinking water circulation pump

Characteristics:

- Operating range: 0.2 - 10.5 m³/h
- Lifting height: max. 8 m
- Liquid temperature: min. +2°C, max. +110°C
- Application: intended for drinking water only
- Maximum pressure: 10 bar
- Protection class: IP 44
- Insulation class: H
- Cable gland: PG 9
- Installation: axel shaft in horizontal position and terminal box located as desired except under the pump
- Voltage: 50-60 Hz, ~230 V
- Power consumption (I,II,III): 135/190/245 W
- Connection spacing: 180 mm
- Connection: G2
- Ambient temperature: min. +2°C, max. +40°C



Index

0401W

Packaging

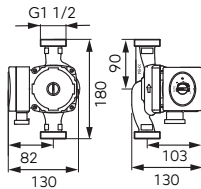
individual

1 pcs

bulk

4 pcs

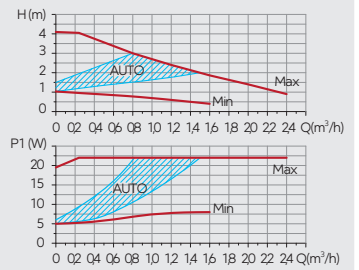
Description



GPA II 25-4-180 circulation pump

Characteristics:

- operating range: max. 2.4 m³/h
- lifting height: max. 4.1 m
- liquid temperature: min. +2°C, max. +110°C
- application: Clean, free of solids, fibres and mineral oily substances, non-adhesive, chemically neutral, non-corrosive and non-explosive, with parameters similar to that of water. Pumping in liquids of a viscosity significantly higher than water will cause significant deterioration of the operating parameters, the pump may not operate properly. The pump can be used with a glycol concentration of up to 30%, and in such cases the pump will operate at a reduced efficiency.
- minimal inlet pressure depending on the liquid temperature: 0.50 bar (up to 85°C), 0.28 bar (up to 90°C), 1.00 bar (up to 110°C)
- maximum pressure: 10 bar
- protection class: IP 42
- insulation class: H
- energy Efficiency Index: ≤0.23
- installation: with the shaft in a horizontal position, cable gland pointing down or to the side
- voltage: ~230 V (-6% - +10%), 50/60 Hz
- power consumption: 5 – 22 W; 0,05 - 0,19 A
- connection spacing: 180 mm
- connection: G1 1/2
- ambient parameters: 0°C - 40°C; RH <95%

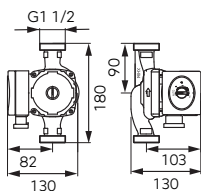


Index

0601W

Packaging

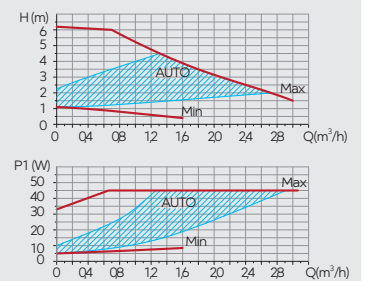
individual	bulk
1 pcs	4 pcs



GPA II 25-6-180 circulation pump

Characteristics:

- operating range: max. 3 m³/h
- lifting height: max. 6.2 m
- liquid temperature: min. +2°C, max. +110°C
- application: Clean, free of solids, fibres and mineral oily substances, non-adhesive, chemically neutral, non-corrosive and non-explosive, with parameters similar to that of water. Pumping in liquids of a viscosity significantly higher than water will cause significant deterioration of the operating parameters, the pump may not operate properly. The pump can be used with a glycol concentration of up to 30%, and in such cases the pump will operate at a reduced efficiency.
- minimal inlet pressure depending on the liquid temperature: 0.50 bar (up to 85°C), 0.28 bar (up to 90°C), 1.00 bar (up to 110°C).
- maximum pressure: 10 bar
- protection class: IP 42
- Insulation class: H
- energy Efficiency Index: ≤0.23
- Installation: with the shaft in a horizontal position, cable gland pointing down or to the side
- voltage: ~230 V (-6% - +10%), 50/60 Hz
- power consumption: 5 – 45 W; 0.05 - 0.38 A
- connection spacing: 180 mm
- connection: G1 1/2
- ambient parameters: 0°C - 40°C; RH <95%



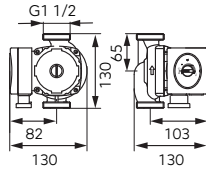
Index

0602W

Packaging

individual	bulk
1 pcs	4 pcs

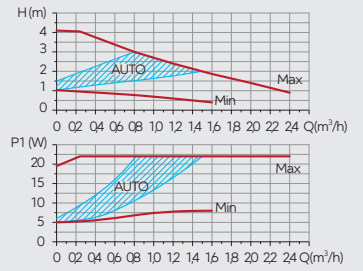
Description



GPA II 25-4-130 circulation pump

Characteristics:

- operating range: max. 2.4 m³/h
- lifting height: max. 4.1 m
- liquid temperature: min. +2°C, max. +110°C
- application: Clean, free of solids, fibres and mineral oily substances, non-adhesive, chemically neutral, non-corrosive and non-explosive, with parameters similar to that of water. Pumping in liquids of a viscosity significantly higher than water will cause significant deterioration of the operating parameters, the pump may not operate properly. The pump can be used with a glycol concentration of up to 30%, and in such cases the pump will operate at a reduced efficiency.
- minimal inlet pressure depending on the liquid temperature: 0.50 bar (up to 85°C), 0.28 bar (up to 90°C), 1.00 bar (up to 110°C)
- maximum pressure: 10 bar
- protection class: IP 42
- insulation class: H
- energy Efficiency Index: ≤0.23
- installation: with the shaft in a horizontal position, cable gland pointing down or to the side
- voltage: ~230 V (-6% - +10%), 50/60 Hz
- power consumption: 5 – 22 W; 0,05 - 0,19 A
- connection spacing: 130 mm
- connection: G1 1/2
- ambient parameters: 0°C - 40°C; RH <95%

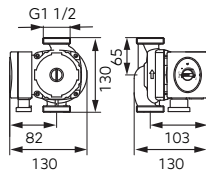


Index

0603W

Packaging

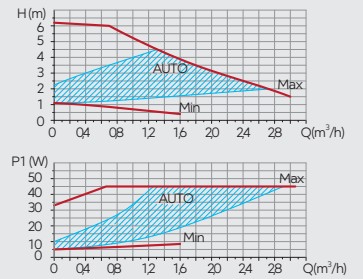
	individual	bulk
	1 pcs	4 pcs



GPA II 25-6-130 circulation pump

Characteristics:

- operating range: max. 3 m³/h
- lifting height: max. 6.2 m
- liquid temperature: min. +2°C, max. +110°C
- application: Clean, free of solids, fibres and mineral oily substances, non-adhesive, chemically neutral, non-corrosive and non-explosive, with parameters similar to that of water. Pumping in liquids of a viscosity significantly higher than water will cause significant deterioration of the operating parameters, the pump may not operate properly. The pump can be used with a glycol concentration of up to 30%, and in such cases the pump will operate at a reduced efficiency.
- minimal inlet pressure depending on the liquid temperature: 0.50 bar (up to 85°C), 0.28 bar (up to 90°C), 1.00 bar (up to 110°C)
- maximum pressure: 10 bar
- protection class: IP 42
- insulation class: H
- energy Efficiency Index: ≤0.23
- installation: with the shaft in a horizontal position, cable gland pointing down or to the side
- voltage: ~230 V (-6% - +10%), 50/60 Hz
- power consumption: 5 - 45W; 0.05 - 0.38A
- connection spacing: 130 mm
- connection: G1 1/2
- ambient parameters: 0°C - 40°C; RH <95%

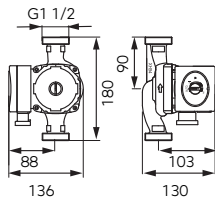


Index

0604W

Packaging

	individual	bulk
	1 pcs	4 pcs



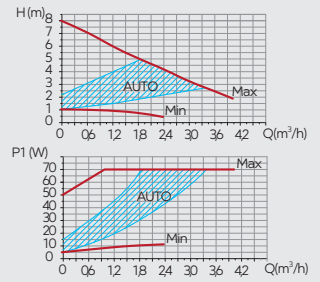
GLYCOL 30%

Description

GPA II 25-8-180 circulation pump

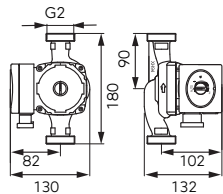
Characteristics:

- operating range: max. 4.0 m³/h
- lifting height: max. 8 m
- liquid temperature: min. +2°C, max. +110°C
- application: Clean, free of solids, fibres and mineral oily substances, non-adhesive, chemically neutral, non-corrosive and non-explosive, with parameters similar to that of water. Pumping in liquids of a viscosity significantly higher than water will cause significant deterioration of the operating parameters, the pump may not operate properly. The pump can be used with a glycol concentration of up to 30%, and in such cases the pump will operate at a reduced efficiency.
- minimal inlet pressure depending on the liquid temperature: 0.50 bar (up to 85°C), 0.28 bar (up to 90°C), 1.00 bar (up to 110°C)
- maximum pressure: 10 bar
- protection class: IP 42
- insulation class: H
- energy Efficiency Index: ≤0.23
- Installation: with the shaft in a horizontal position, cable gland pointing down or to the side
- voltage: ~230 V (-6% - +10%), 50/60 Hz
- power consumption: 5 – 70 W; 0,05 - 0,52 A
- connection spacing: 180 mm
- connection: G1 1/2
- ambient parameters: 0°C - 40°C; RH <95%



Packaging

Index	individual	bulk
0605W	1 pcs	4 pcs

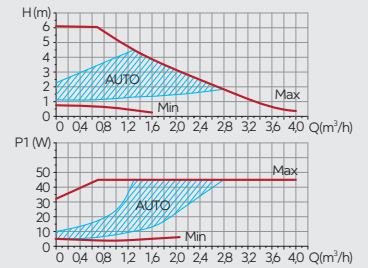


GLYCOL 30%

GPA II 32-6-180 circulation pump

Characteristics:

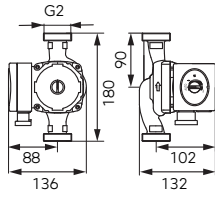
- operating range: max. 4 m³/h
- lifting height: max. 6.2 m
- liquid temperature: min. +2°C, max. +110°C
- application: Clean, free of solids, fibres and mineral oily substances, non-adhesive, chemically neutral, non-corrosive and non-explosive, with parameters similar to that of water. Pumping in liquids of a viscosity significantly higher than water will cause significant deterioration of the operating parameters, the pump may not operate properly. The pump can be used with a glycol concentration of up to 30%, and in such cases the pump will operate at a reduced efficiency.
- Minimal inlet pressure depending on the liquid temperature: 0.50 bar (up to 85°C), 0.28 bar (up to 90°C), 1.00 bar (up to 110°C)
- maximum pressure: 10 bar
- Protection class: IP 42
- Insulation class: H
- energy Efficiency Index: ≤0.23
- Installation: with the shaft in a horizontal position, cable gland pointing down or to the side
- voltage: ~230 V (-6% - +10%), 50/60 Hz
- power consumption: 5 – 45 W; 0,05 - 0,38 A
- connection spacing: 180 mm
- connection: G2
- ambient parameters: 0°C - 40°C; RH <95%



Packaging

Index	individual	bulk
0606W	1 pcs	4 pcs

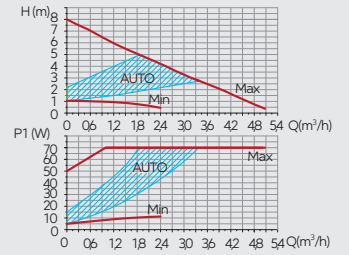
Description



GPA II 32-8-180 circulation pump

Characteristics:

- operating range: max. 5.0 m³/h
- lifting height: max. 8 m
- liquid temperature: min. +2°C, max. +110°C
- application: Clean, free of solids, fibres and mineral oily substances, non-adhesive, chemically neutral, non-corrosive and non-explosive, with parameters similar to that of water. Pumping in liquids of a viscosity significantly higher than water will cause significant deterioration of the operating parameters, the pump may not operate properly. The pump can be used with a glycol concentration of up to 30%, and in such cases the pump will operate at a reduced efficiency.
- minimal inlet pressure depending on the liquid temperature: 0.50 bar (up to 85°C), 0.28 bar (up to 90°C), 1.00 bar (up to 110°C)
- maximum pressure: 10 bar
- protection class: IP 42
- Insulation class: H
- energy Efficiency Index: ≤0.23
- Installation: with the shaft in a horizontal position, cable gland pointing down or to the side
- voltage: ~230 V (-6% - +10%), 50/60 Hz
- power consumption: 5 – 70 W; 0,05 - 0,52 A
- connection spacing: 180 mm
- connection: G2
- ambient parameters: 0°C - 40°C; RH <95%



Index
0607W

Packaging

	individual	bulk
	1 pcs	4 pcs

Pex system

PEX SYSTEM



PEX-AL-PEX PIPES
116



COMPRESSION FITTINGS
117

Pex system



Characteristics:

- external diameter Ø16 mm
- wall thickness: 2 mm
- material: PEXb-AL-PEXb, internal and outer layer
- AL layer thickness: 0.2 mm
- max. working pressure: 1.0 MPa (PN10)
- max. working temperature: 95°C
- TIG butt welding
- packaging: 200 m rolls



Description

PEX-AL-PEX 16x2 mm multilayer pipe

- external diameter: Ø16 mm
- wall thickness: 2 mm
- material: PEX_b-AL-PEX_b, both inner and outer layers cross-linked
- AL layer thickness: 0.2 mm
- max. working pressure: 10 bar (PN10)
- max. working temperature: 95°C
- TIG butt welding
- packaging: 200 m rolls
- application in the construction industry:
- drinking water installations
- floor heating
- connection of central heating radiators
- hot water
- cold water
- compressed air

Packaging

Index	individual	bulk
PEX16		



1/2" threaded compression fitting

- for 16 x 2 mm multilayer pipes



Packaging Retail

Index	individual	bulk	Index
set – 2 pcs.			
ZL15PEXAL	1 set (2 pcs)	50 set	ZL15PEXAL
1 pcs./sales only in bulk packaging - 10 pcs/			
ZL15PEXAL-10	-	10 pcs	



1/2" threaded compression fitting

- for 16 x 2 mm homogeneous plastic pipes



Packaging Retail

Index	individual	bulk	Index
set – 2 pcs.			
ZL15PEX	1 set (2 pcs)	50 set	ZL15PEX
1 pcs./sales only in bulk packaging - 10 pcs/			
ZL15PEX-10	-	10 pcs	



1/2" threaded compression fitting

- for 15 mm copper pipes












Packaging Retail

Index	individual	bulk	Index
set – 2 pcs.			
ZL15CU15	1 set (2 pcs)	50 set	ZL15CU15
1 pcs./sales only in bulk packaging - 10 pcs/			
ZL15CU15-10	-	10 pcs	




APPLICATION OF 1/2" COMPRESSION FITTINGS →
 Manifolds series SN-RO, SN-RZP, N-RZP, N-RNZ
 Nipples: N10PORT-C7NEW, N10ZORZL-C7NEW
 Sanitary manifolds: RDW

COMPRESSION FITTINGS



		Description	
		3/4" threaded compression fitting • for 16 x 2 mm multilayer pipes	
			
		Packaging	Retail
set – 2 pcs.	Index	individual 1 set (2 pcs)	bulk 130 set Index 67861612Y
		3/4" threaded compression fitting • for 16 x 2 mm homogeneous plastic pipes	
			
		Packaging	Retail
set – 2 pcs.	Index	individual 1 set (2 pcs)	bulk 130 set Index 67841612Y
		3/4" threaded compression fitting • for 15 mm copper pipes	
			
		Packaging	Retail
set – 2 pcs.	Index	individual 1 set (2 pcs)	bulk 130 set Index 67761500Y

APPLICATION OF 3/4" COMPRESSION FITTINGS →



Manifolds series SN-RZPU, SN-ROU, RO, RZP, RPN.
 Radiator valves: LZ06YK, LZ07YK, LZ06YKN, LZ07YKN.
 Thermostatic sets: ZTV01, ZTV02, ZTV07, ZTV08, ZTV20, ZTV21
 Nipples: N10ZOR, N10POR, N10POR-C7

		 <p>Compression fitting</p> <ul style="list-style-type: none"> • with 1/2" male thread • with O-ring, for 15 mm copper pipes 		

	Index	individual	bulk	Index
chrome	ZL1501C	1 pcs	10 pcs	ZL1501CW
nickel	ZL1501N	-	10 pcs	

		 <p>Compression fitting</p> <ul style="list-style-type: none"> • with 1/2" male thread • with O-ring, for 16 x 2 mm multilayer pipes 	

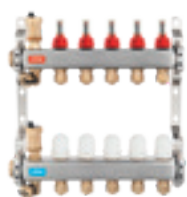
	Index	individual	bulk
chrome	ZL1601C	1 pcs	10 pcs
nickel	ZL1601N	1 pcs	10 pcs

		<p>G3/4xG1/2 radiator nipple</p> <ul style="list-style-type: none"> • with O-ring 		

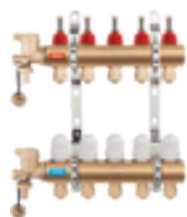
	Index	individual	bulk	Index
flat gasket	69190000Y	100 pcs	800 pcs	69190000YW
conical gasket	69190001Y	100 pcs	800 pcs	69190001YW

Manifolds and accessories

MANIFOLDS



**STAINLESS STEEL
MANIFOLDS**
122



**BRASS
MANIFOLDS**
125



**MANIFOLD
CABINETS**
129



**MIXING
GROUPS**
131

ACCESSORIES

SANITARY MANIFOLDS

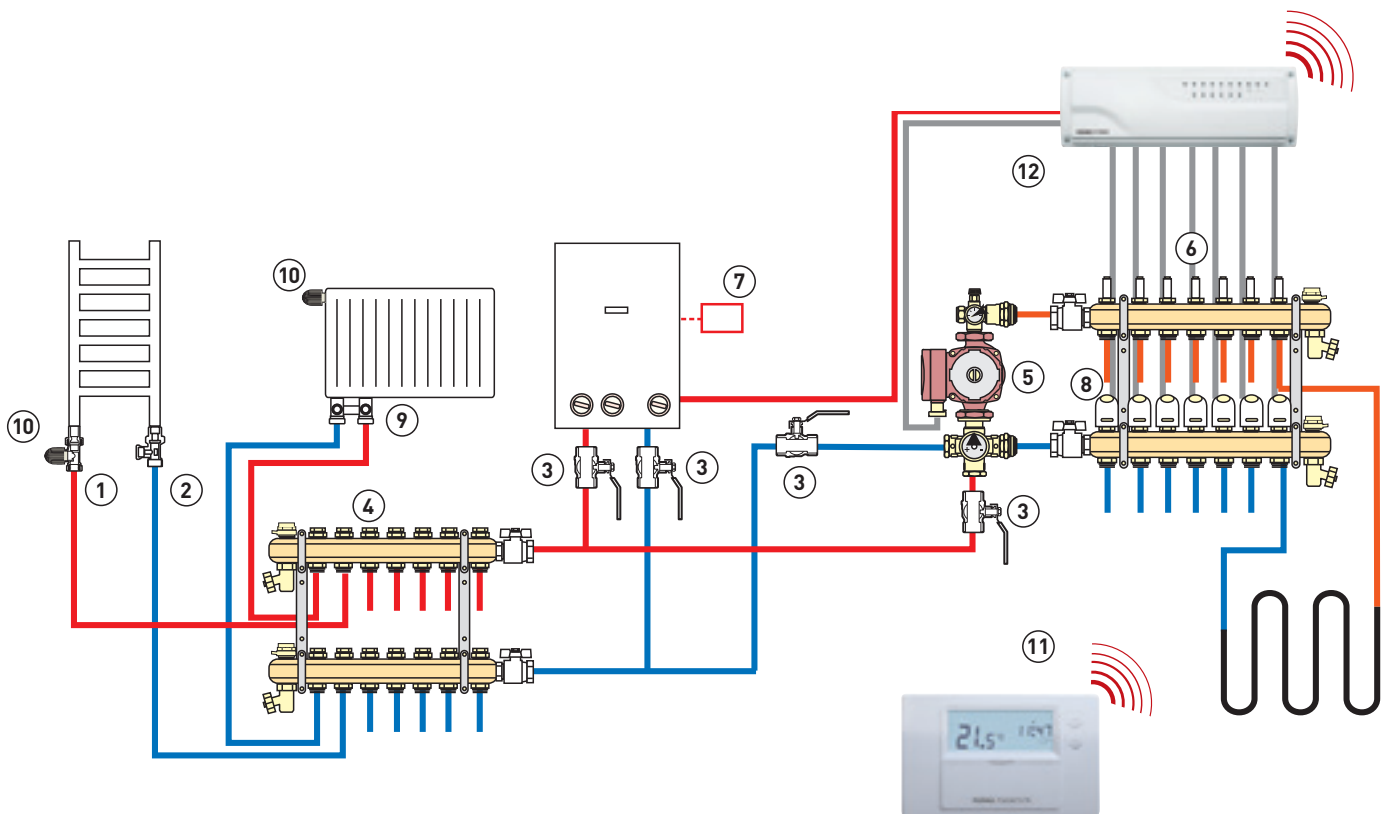
NEW



**SANITARY
MANIFOLDS**
136

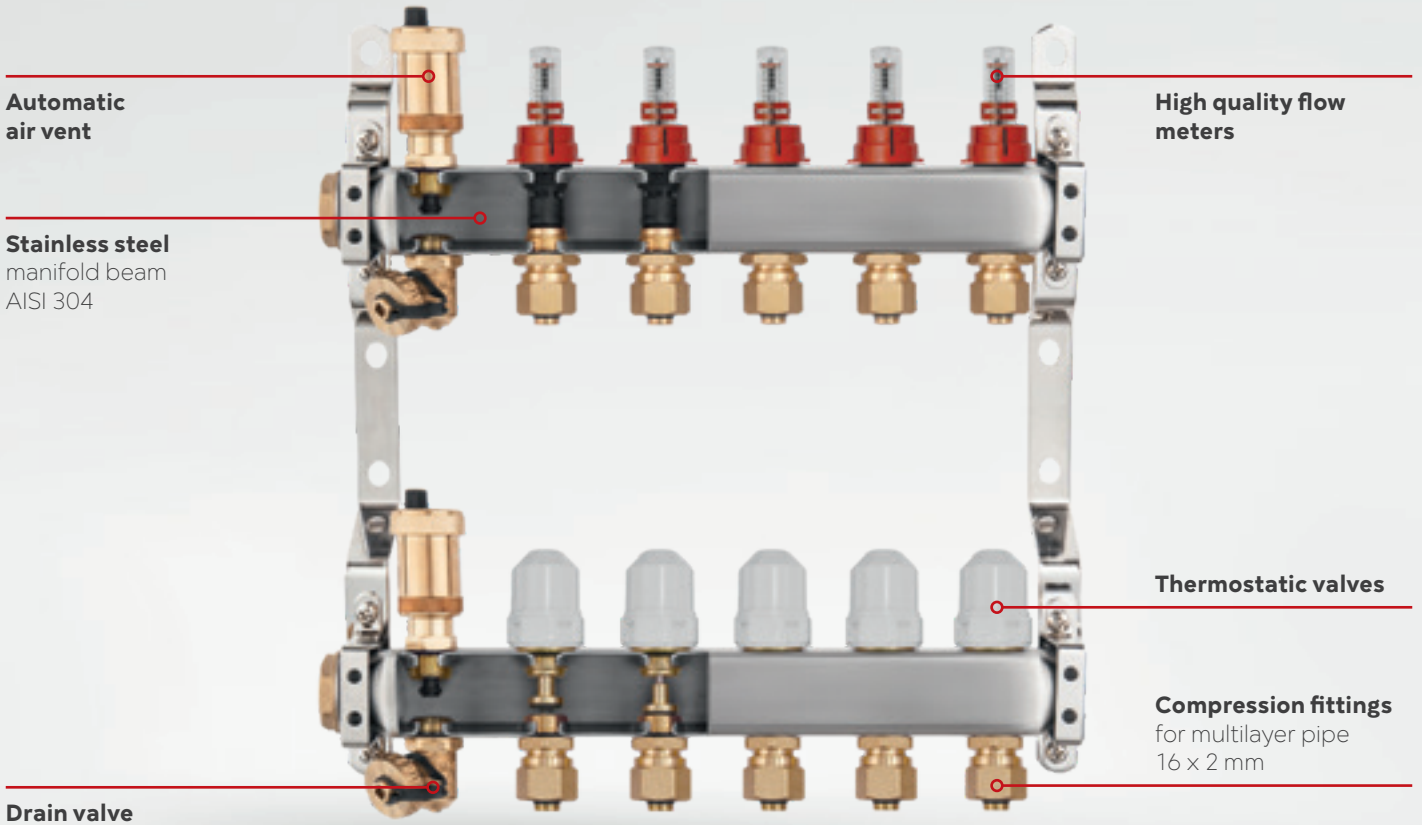
Installation diagram

Mixed systems combining floor heating with a traditional radiator system
- overview



- 1. Thermostatic valve ZT
- 2. Return valve ZP
- 3. Cut-off ball valve
- 4. RO manifold
- 5. Thermostatic mixing group GM
- 6. RZP manifold
- 7. Room temperature regulator
- 8. Thermoelectric head
- 9. Composite valve LZ
- 10. Thermostatic head
- 11. Weekly regulator
- 12. Floor heating control strip

Stainless steel manifolds

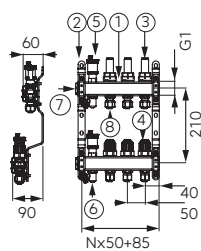
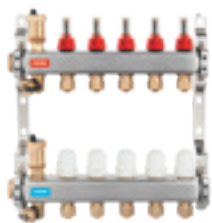


Advantages:

- precise and robust design
- high quality materials
- 11 models of each type
- execution: stainless steel AISI 304 (manifold beams)

Characteristics:

Manifolds consist of two beams with 1" connection diameter, made of AISI 304 stainless steel, which ensures maximum resistance to corrosion and thus guarantees long-term, failure-free operation. An additional element of the durability of the devices are special grips with rubber insulation that suppresses vibrations and noise. Grips give the structure rigidity and at the same time maintain a constant distance between beams. Designed to work in systems with convection heaters or for installation in surface heating - they perfectly fulfil the function of a connector of heating system elements while optimizing the fitter's work.



Description

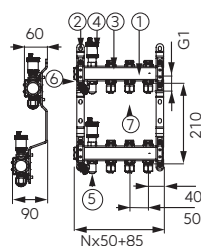
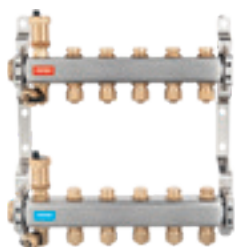
SN-RZP 1" manifold

- 2 - 12-way bar, 2 pcs (1)
- set of steel brackets (2)
- flow meters on supply bars regulating flow (3)
- thermostatic valves on the return bars fitted with knobs for manual regulation with possibility of connecting thermoelectric head (4)
- G1/2 automatic vent valves, 2 pcs (5)
- G1/2 swivel drain valves, 2 pcs (6)
- G1 brass plugs, 2 pcs (7)
- G1/2 nipples with 16 x 2 mm multilayer pipe connectors (8)



Packaging

Index	Packaging	
	individual	bulk
1" 2-way manifold	1 pcs	-
1" 3-way manifold	1 pcs	-
1" 4-way manifold	1 pcs	-
1" 5-way manifold	1 pcs	-
1" 6-way manifold	1 pcs	-
1" 7-way manifold	1 pcs	-
1" 8-way manifold	1 pcs	-
1" 9-way manifold	1 pcs	-
1" 10-way manifold	1 pcs	-
1" 11-way manifold	1 pcs	-
1" 12-way manifold	1 pcs	-



SN-RO 1" manifold

- 2 - 12-way bar, 2 pcs (1)
- set of steel brackets (2)
- cut-off valves on supply and return bar (3)
- G1/2 automatic vent valves, 2 pcs (4)
- G1/2 swivel drain valves, 2 pcs (5)
- G1 brass plugs, 2 pcs (6)
- G1/2 nipples with 16 x 2 mm multilayer pipe connectors (7)

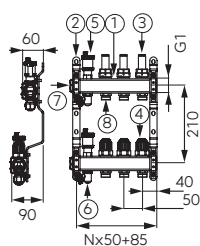
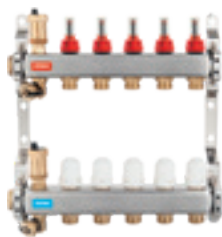


Packaging

Index	Packaging	
	individual	bulk
1" 2-way manifold	1 pcs	-
1" 3-way manifold	1 pcs	-
1" 4-way manifold	1 pcs	-
1" 5-way manifold	1 pcs	-
1" 6-way manifold	1 pcs	-
1" 7-way manifold	1 pcs	-
1" 8-way manifold	1 pcs	-
1" 9-way manifold	1 pcs	-
1" 10-way manifold	1 pcs	-
1" 11-way manifold	1 pcs	-
1" 12-way manifold	1 pcs	-

STAINLESS STEEL MANIFOLDS

Description



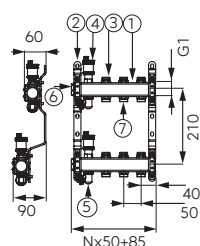
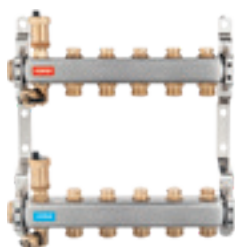
SN-RZPU 1" manifold

- 2 - 12-way bar, 2 pcs (1)
- set of steel brackets (2)
- flow meters on supply bars regulating flow (3)
- thermostatic valves on the return bars fitted with knobs for manual regulation with possibility of connecting thermoelectric head (4)
- G1/2 automatic vent valves, 2 pcs (5)
- G1/2 swivel drain valves, 2 pcs (6)
- G1 brass plugs, 2 pcs (7)
- G1/2 x G3/4 nipples (8)



Packaging

	Index	Packaging	
		individual	bulk
1" 2-way manifold	SN-RZPU02S	1 pcs	-
1" 3-way manifold	SN-RZPU03S	1 pcs	-
1" 4-way manifold	SN-RZPU04S	1 pcs	-
1" 5-way manifold	SN-RZPU05S	1 pcs	-
1" 6-way manifold	SN-RZPU06S	1 pcs	-
1" 7-way manifold	SN-RZPU07S	1 pcs	-
1" 8-way manifold	SN-RZPU08S	1 pcs	-
1" 9-way manifold	SN-RZPU09S	1 pcs	-
1" 10-way manifold	SN-RZPU10S	1 pcs	-
1" 11-way manifold	SN-RZPU11S	1 pcs	-
1" 12-way manifold	SN-RZPU12S	1 pcs	-



SN-ROU 1" manifold

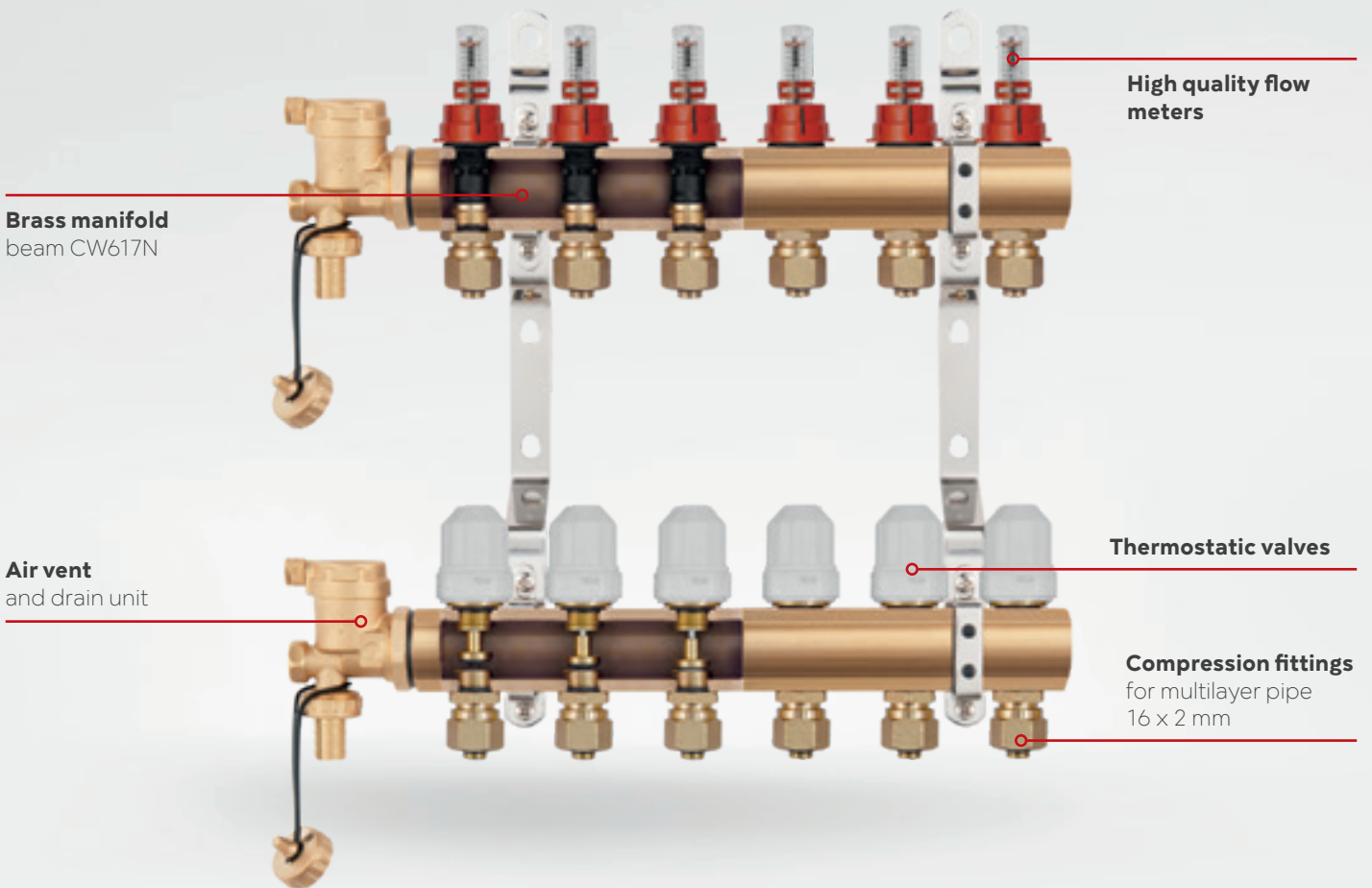
- 2 - 12-way bar, 2 pcs (1)
- set of steel brackets (2)
- cut-off valves on supply and return bar (3)
- G1/2 automatic vent valves, 2 pcs (4)
- G1/2 swivel drain valves, 2 pcs (5)
- G1 brass plugs, 2 pcs (6)
- G1/2 x G3/4 nipples (7)



Packaging

	Index	Packaging	
		individual	bulk
1" 2-way manifold	SN-ROU02S	1 pcs	-
1" 3-way manifold	SN-ROU03S	1 pcs	-
1" 4-way manifold	SN-ROU04S	1 pcs	-
1" 5-way manifold	SN-ROU05S	1 pcs	-
1" 6-way manifold	SN-ROU06S	1 pcs	-
1" 7-way manifold	SN-ROU07S	1 pcs	-
1" 8-way manifold	SN-ROU08S	1 pcs	-
1" 9-way manifold	SN-ROU09S	1 pcs	-
1" 10-way manifold	SN-ROU10S	1 pcs	-
1" 11-way manifold	SN-ROU11S	1 pcs	-
1" 12-way manifold	SN-ROU12S	1 pcs	-

Brass manifolds



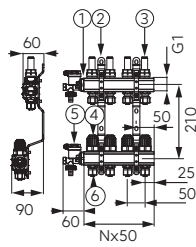
Advantages:

- precise and robust design
- high quality materials
- 11 models of each type
- execution: brass CW617N (manifold beams)

Characteristics:

Brass manifolds are the basic element of a central heating system. They are used in systems with convection radiators, floor radiators and mixed systems. Manifolds enable precise regulation of installations and reliable operation of the whole heating system.

BRASS MANIFOLDS



Description

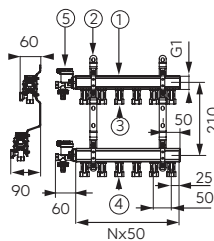
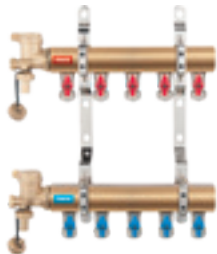
N-RZP 1" manifold

- 2 - 12-way manifold bar, 2 pcs (1)
- set of steel brackets (2)
- flow meters on the supply bars for regulating flow (3)
- thermostatic valves on the return bar fitted with knobs for manual regulation with possibility of connecting thermoelectric head (4)
- G1 automatic air vents and drain units with brass hose connectors, 2 pcs (5)
- G1/2 nipples with 16 x 2 mm multilayer pipe connectors (6)



Packaging

Index	Packaging	
	individual	bulk
1" 2-way manifold	1 pcs	-
1" 3-way manifold	1 pcs	-
1" 4-way manifold	1 pcs	-
1" 5-way manifold	1 pcs	-
1" 6-way manifold	1 pcs	-
1" 7-way manifold	1 pcs	-
1" 8-way manifold	1 pcs	-
1" 9-way manifold	1 pcs	-
1" 10-way manifold	1 pcs	-
1" 11-way manifold	1 pcs	-
1" 12-way manifold	1 pcs	-



N-RO 1" manifold

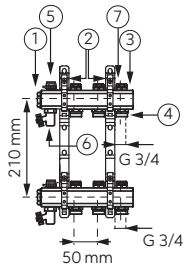
- 2 - 12-way manifold bar, 2 pcs (1)
- set of steel brackets (2)
- G1/2 ball valves with 16 x 2 mm multilayer pipe connection on supply bar (with red butterfly handle) (3) and return bar (with blue butterfly) (4)
- G1 automatic air vents and drain units with brass hose connectors, 2 pcs (5)



Packaging

Index	Packaging	
	individual	bulk
1" 2-way manifold	1 pcs	-
1" 3-way manifold	1 pcs	-
1" 4-way manifold	1 pcs	-
1" 5-way manifold	1 pcs	-
1" 6-way manifold	1 pcs	-
1" 7-way manifold	1 pcs	-
1" 8-way manifold	1 pcs	-
1" 9-way manifold	1 pcs	-
1" 10-way manifold	1 pcs	-
1" 11-way manifold	1 pcs	-
1" 12-way manifold	1 pcs	-

Description

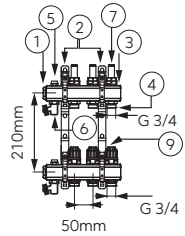
**RO 1" manifold**

- 2-12-way 1", 2 pcs (3)
- set of steel brackets (2)
- cut-off valves on the supply and return bar (7)
- G1/2 manual air vent valve, 2 pcs (5)
- G1/2 swivel drain valve 2 pcs (6)
- G1 plug (1)
- G1/2 x G3/4 nipples (4)



Packaging

Index	Packaging	
	individual	bulk
1" 2-way manifold	1 pcs	-
1" 3-way manifold	1 pcs	-
1" 4-way manifold	1 pcs	-
1" 5-way manifold	1 pcs	-
1" 6-way manifold	1 pcs	-
1" 7-way manifold	1 pcs	-
1" 8-way manifold	1 pcs	-
1" 9-way manifold	1 pcs	-
1" 10-way manifold	1 pcs	-
1" 11-way manifold	1 pcs	-
1" 12-way manifold	1 pcs	-

**RZP 1" manifold**

- 2-12-way 1", 2 pcs (3)
- set of steel brackets (2)
- flow meters on the supply bars for regulating flow (7)
- thermostatic valves on the return bar fitted with knobs for manual regulation with possibility of connecting thermoelectric head (9)
- G1/2 manual air vent valve, 2 pcs (5)
- G1/2 swivel drain valve, 2 pcs (6)
- G1 plug (1)
- G1/2 x G3/4 nipples(4)

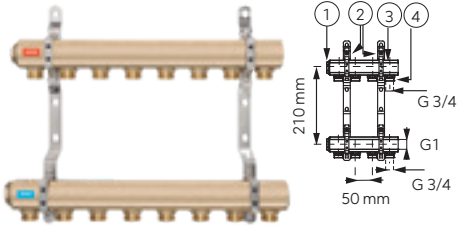


Packaging

Index	Packaging	
	individual	bulk
1" 2-way manifold	1 pcs	-
1" 3-way manifold	1 pcs	-
1" 4-way manifold	1 pcs	-
1" 5-way manifold	1 pcs	-
1" 6-way manifold	1 pcs	-
1" 7-way manifold	1 pcs	-
1" 8-way manifold	1 pcs	-
1" 9-way manifold	1 pcs	-
1" 10-way manifold	1 pcs	-
1" 11-way manifold	1 pcs	-
1" 12-way manifold	1 pcs	-

BRASS MANIFOLDS

Description



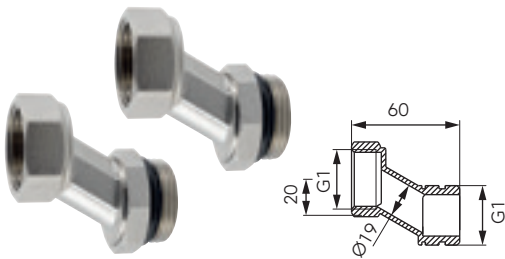
RPN 1" manifold with nipples

- 1" manifold bar 2-12-way, 2 pcs (3)
- set of steel brackets (2)
- G1 plug, 2 pcs (1)
- G1/2 x G3/4 nipples(4)



Packaging

Index	Packaging	
	individual	bulk
1" 2-way manifold	1 pcs	-
1" 3-way manifold	1 pcs	-
1" 4-way manifold	1 pcs	-
1" 5-way manifold	1 pcs	-
1" 6-way manifold	1 pcs	-
1" 7-way manifold	1 pcs	-
1" 8-way manifold	1 pcs	-
1" 9-way manifold	1 pcs	-
1" 10-way manifold	1 pcs	-
1" 11-way manifold	1 pcs	-
1" 12-way manifold	1 pcs	-

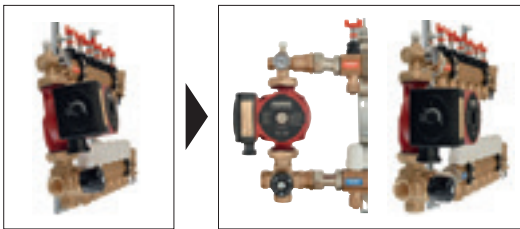


1" eccentric for manifold

- allows to adjust spacing of manifold connections
- simple and easy mounting of mixing groups allowing to achieve vertical position
- 2 pcs per set

mixing group assembly without eccentrics


mixing group assembly by means of eccentrics



Packaging


Index	individual	bulk
MR-SET	1 set (2 pcs)	-

Description




Flush-mounted depth-adjustable cabinet with front panel

- made entirely of 0.8 mm galvanized sheet metal
- laser-cut
- removable powder coated front panel
- colour: white
- adjustable depth
- adjustable height
- manifold mounting strips included in the set
- coin lock system




Outside width [mm]	Inside width [mm]	Height [mm]	Depth [mm]	Index	Packaging	
					individual	bulk
380	335	575 - 665	110 - 175	SZP-0	1 pcs	-
480	435			SZP-1	1 pcs	-
610	565			SZP-2	1 pcs	-
760	715			SZP-3	1 pcs	-
840	795			SZP-4	1 pcs	-
1010	965			SZP-5	1 pcs	-
1100	1085			SZP-6	1 pcs	-

Description




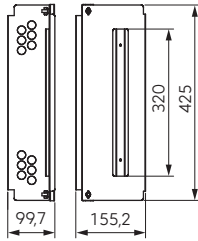
Surface mounted cabinet 120 mm or 170 mm

- made entirely of 0.8 mm galvanized sheet metal
- laser-cut
- removable powder coated front panel
- colour: white
- manifold mounting strips included in the set
- coin lock system



Outside width [mm]	Inside width [mm]	Height [mm]	Depth [mm]	Index	Packaging	
					individual	bulk
385	355	580	120	SZN-0	1 pcs	-
485	455			SZN-1	1 pcs	-
615	585			SZN-2	1 pcs	-
760	730			SZN-3	1 pcs	-
845	815			SZN-4	1 pcs	-
1015	985			SZN-5	1 pcs	-
1125	1095			SZN-6	1 pcs	-
615	585		170	SZN-2-170	1 pcs	-
845	815			SZN-4-170	1 pcs	-
1125	1095			SZN-6-170	1 pcs	-


Description

Shelf for mounting control unit

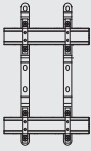
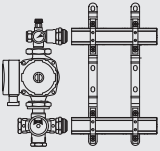
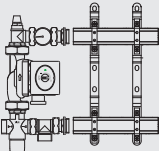
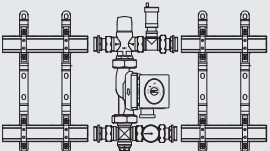










NEW

- enables installing actuator control unit in cabinet close to the manifold
- suitable for wall-mounted and flush-mounted cabinets
- universal DIN 35 rail
- set including montage rails, rubber grommets and wing screws
- material: galvanized steel 0.8 mm thick

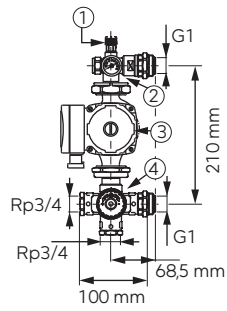


Index	Packaging	
	individual	bulk
SZL01	1 pcs	6 pcs

MANIFOLD CABINETS SELECTION

Index	R	R+GM	R+GM1F	R+GM2F
				
 SZP-0	2	-	-	-
 SZP-1	5	2	2	-
 SZP-2	8	5	4	-
 SZP-3	10	8	7	6
 SZP-4	12	10	8	8
 SZP-5	15	13	12	11
 SZP-6	17	15	14	14
 SZN-0	2	-	-	-
 SZN-1	5	-	-	-
 SZN-2	8	-	-	-
SZN-3	10	-	-	-
SZN-4	12	-	-	-
SZN-5	15	-	-	-
SZN-6	17	-	-	-
SZN-2-170	8	5	4	-
SZN-4-170	12	10	8	8
SZN-6-170	17	15	14	14
		maximum number of manifold circuits		maximum circuit total of two manifolds
SZL01	When using the shelf for mounting the control unit values from the table should be reduced by 3 circuits.			

Description



1" underfloor heating mixing group

The group includes:

- 4-way thermostatic valve Rp3/4, temperature adjustment range 25 - 50°C (4)
- electronic circulation pump (3)
- thermometer 0 - 80°C (2)
- manual air vent (1)

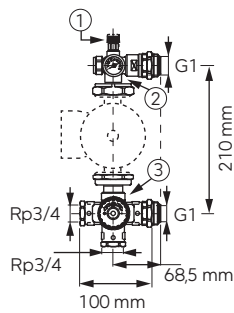
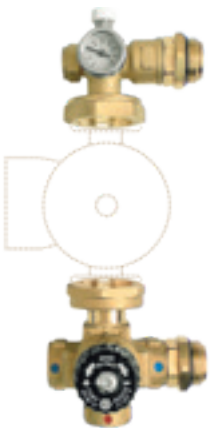
Advantages:

- universal for all types of manifolds with a bar spacing of 210 mm
- accurate and easy to control
- pump included
- only 120 mm width of the mounted set



Packaging

	Index	individual	bulk
with electronic pump 25-4-130 GPAlI, $Q_{max} = 2,4 \text{ m}^3/\text{h}$	GM40GPA	1 pcs	-
with electronic pump 25-6-130 GPAlI, $Q_{max} = 3,0 \text{ m}^3/\text{h}$	GM60GPA	1 pcs	-



1" manifold mixing group for 130 mm pump

The group includes:

- 4-way thermostatic valve Rp3/4, $K_v = 3,5 \text{ m}^3/\text{h}$ with temperature adjustment range 25 - 50°C (3)
- thermometer 0 - 80°C (2)
- manual air vent (1)
- 1 1/2" half unions for pump
- connections to the manifold with O-ring seal

Advantages:

- universal for all types of manifolds with a bar spacing of 210 mm
- accurate and easy to control

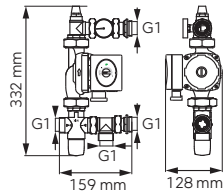


Packaging

Index	individual	bulk
GM-WP	1 pcs	-

MIXING GROUPS

Description



Mixing group GM1F

- The mixing group serves to lower and maintain the desired temperature of the heating medium in the surface heating system.

Parameters:

- static pressure (PN): max. 0.4 MPa (4 bar)
- dynamic working pressure: max. 0.3 MPa (3 bar)
- Kv: 1.9 m³/h
- temperature regulation range: 20 - 40°C
- accuracy of regulation: +/- 3°C

The group contains:

- 3-way thermostatic mixing valve
- air vent
- thermometer
- set of unions

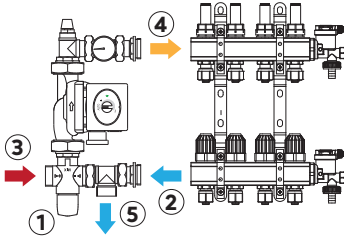
Advantages:

- universal group for all manifolds with 210 mm bar spacing
- accurate and easy to control
- reversible



Packaging

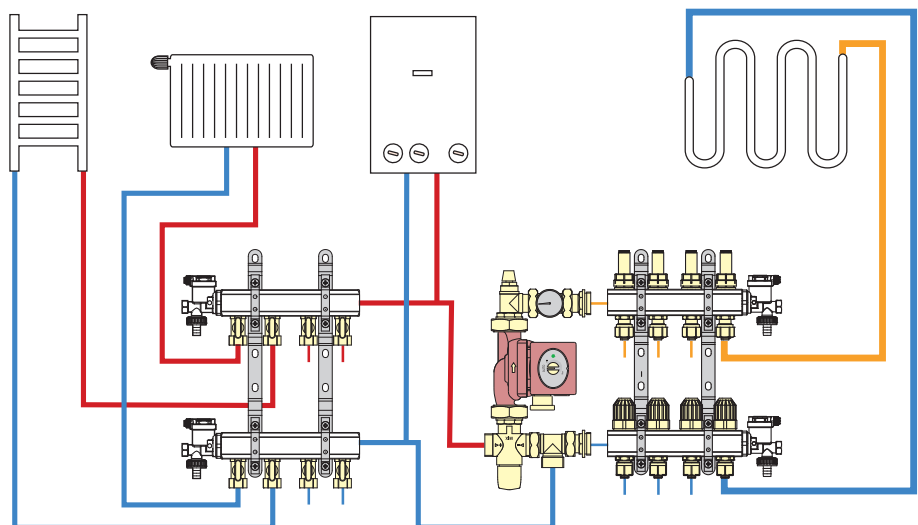
	Index	Packaging	
		individual	bulk
with electronic pump 25-4-130 GPAlI, Q _{max} = 2,4 m ³ /h	GM1F-40GPA	1 pcs	-
with electronic pump 25-6-130 GPAlI, Q _{max} = 3,0 m ³ /h	GM1F-60GPA	1 pcs	-
without pump	GM1F-WP	1 pcs	-



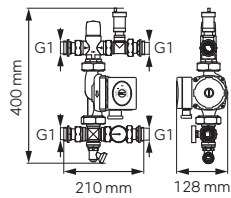
1. Thermostatic mixing valve (controls the temperature in the floor system)
2. Return of cold water from the floor heating system
3. Hot medium supply of floor heating system
4. Supplying the floor heating system with a medium of the desired temperature
5. Return to the boiler

Mixed systems with GM1F group

The group reduces and maintains the desired temperature of the heating medium in the surface heating system.



Description



Mixing group GM2F

• The dual-function mixing group serves to lower and maintain the desired temperature of the heating agent of the surface heating system and to connects it with the high-parameter radiator system.

Parameters:

- static pressure (PN): max. 0.4 MPa (4 bar)
- dynamic working pressure: max. 0.3 MPa (3 bar)
- Kv: 1.9 m³/h
- temperature regulation range: 20 - 40°C

The group includes:

- 3-way thermostatic mixing valve
- automatic air vent with foot valve
- thermometer
- swivel drain valve
- set of unions

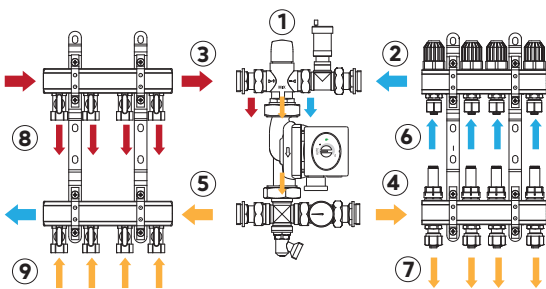
Advantages:

- double-function - allows to connect radiator and floor manifolds into a single system
- universal group for all manifolds with 210 mm bar spacing
- accurate and easy to control
- reversible



Packaging

	Index	Packaging	
		individual	bulk
with electronic pump 25-4-130 GPAlI, Q _{max} = 2,4 m³/h	GM2F-40GPA	1 pcs	-
with electronic pump 25-6-130 GPAlI, Q _{max} = 3,0 m³/h	GM2F-60GPA	1 pcs	-
without pump	GM2F-WP	1 pcs	-

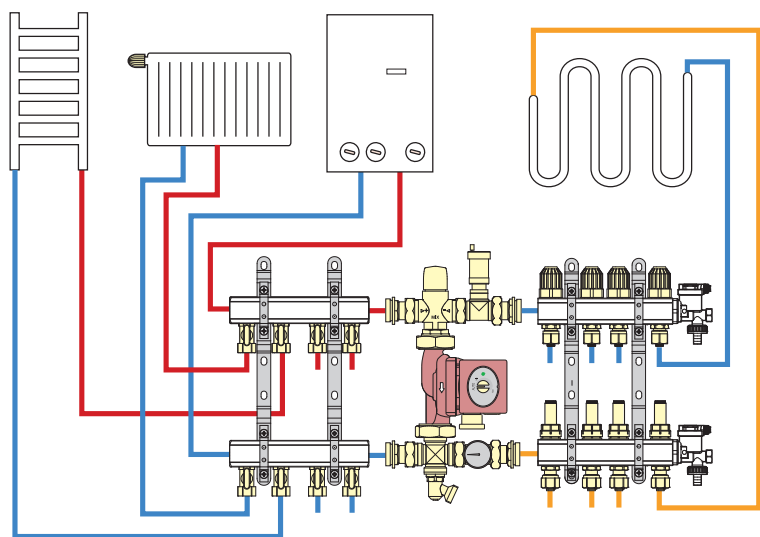
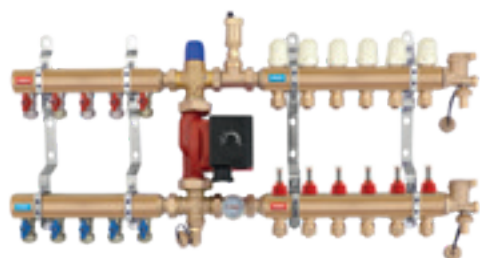


1. Thermostatic mixing valve (controls the temperature in the floor system)
2. Return of cold water from the floor heating system
3. Hot medium supply of floor heating system
4. Supplying the floor heating system with a medium of the desired temperature
5. Return to the boiler
6. Return from floor heating system
7. Floor heating system supply
8. Radiator heating system supply
9. Return from the radiator heating system

System with dual-function mixing group GM2F

The group reduces and maintains the desired temperature of the heating medium in the surface heating system.

Two-functional - possibility of connecting the manifold for convection and surface heaters in one system.



Application example

Installation diagram

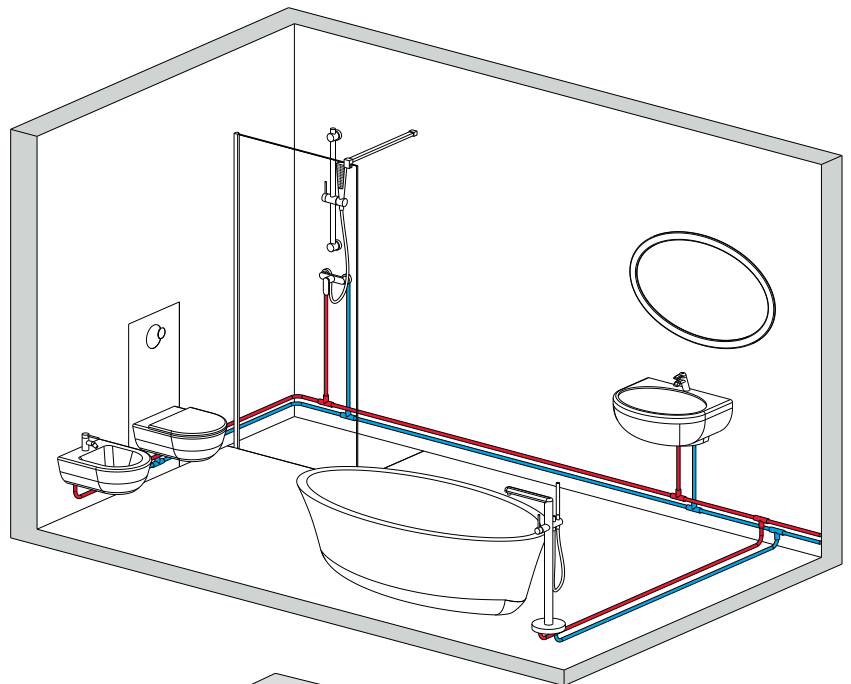
When doing installation with manifolds, each distribution point (bathroom, kitchen, toilet, washing machine, dishwasher, etc.) is connected directly with a separate outlet in the manifold, which allows to cut off any point if necessary, without having to turn off the flow in entire apartment or building.

Comparison of expenditures with the use of each system

Type of installation	Branch system	Manifold system
Number of fittings (T-pieces)	7	0
Number of connections	30	20

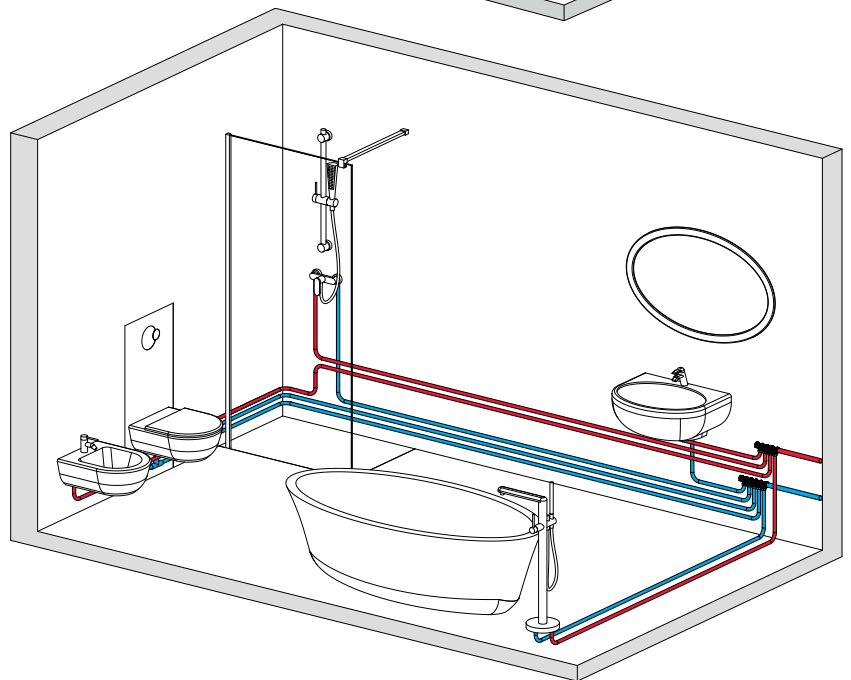
Branch distribution

example →



Manifold distribution

example →



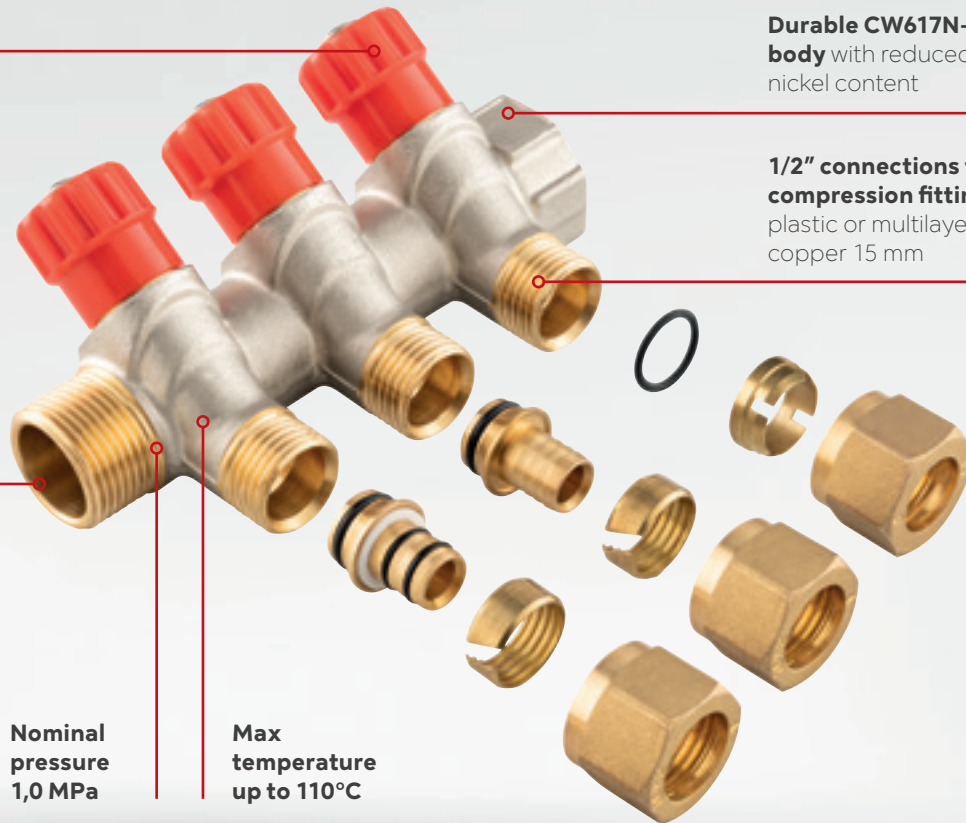
Sanitary manifolds

Exchangeable knobs
blue/red

Durable CW617N-4MS brass body with reduced lead and nickel content

1/2" connections for compression fittings for pipes:
plastic or multilayer 16x2 mm,
copper 15 mm

Suitable for potable water (nickel-free contact surfaces)



Nominal pressure
1,0 MPa

Max temperature
up to 110°C



Workmanship and materials:

- the forged brass body of the manifold was made with use of Advanced Body Technology of CW617N-4MS brass with reduced lead and nickel content
- the 1/2" outlets are integral elements of the brass beam, and the valve heads are placed at an angle so that they had the least possible influence on the flow through the manifold
- manifolds are adapted for potable water - the surface that is in contact with water (inside of the body and connection threads) is not nickel-plated
- the design of the beam as male-female fitting allows to create manifolds with a greater number of outputs with the modules
- The flow at each output is controlled by poppet type valves, and pipes are connected with 1/2" eurocone type fittings – for 16x2 mm plastic or multi-layer pipes and for 15 mm copper pipes
- due to the fact that usually the number of cold and hot water outlets in buildings is different - manifolds are offered as single beams, and the offer is complemented by sets of dedicated steel brackets for assembling sets consisting of two beams

Application and advantages:

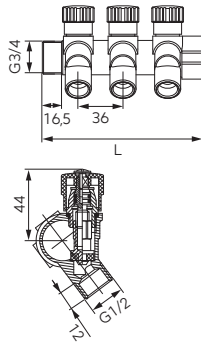
Sanitary manifolds are an increasingly popular alternative to branch distribution of domestic water. The main advantage of this solution is the elimination of the risk associated with making tee pipe connections in hard-to-reach places, e.g. in floors or walls, the repair of which in the event of leakage comes at a high cost. Pipe connections are made only at manifolds and water distribution points, which, together with the saving of time needed to complete the installation, allows to compensate the cost of purchasing the manifold and additional meters of pipe.

Another advantage of using manifolds is the pressure equalization at all points. When the flow is opened at one point, the pressure drop in the others is much lower than when using a branch distribution, thanks to which, for example, the troublesome effect of water temperature instability is eliminated. It's most often experienced when taking a shower and someone opens other cold water outlet which causes pressure drop in cold water line and rising the temperature in the shower.

Sanitary manifolds are used not only in houses and flats, but also in commercial buildings and public facilities - e.g. in hotels, dormitories, public toilets - where an additional advantage is control over individual outlets from places inaccessible to users. In such cases, sanitary manifolds are most often installed next to the domestic water risers and allow for shutting off the flow in only one device or room, thus ensuring the uninterrupted operation of the rest of the system.

SANITARY MANIFOLDS

Description



3/4" x 1/2" sanitary manifold

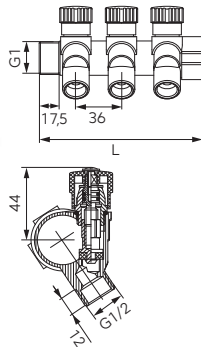
NEW

- 3/4" M-F beam, 2-4 ways
- poppet type shut-off valves
- blue and red knobs included
- nominal pressure: 10 bar (PN10)
- maximum temperature: 110°C



Packaging

	L [mm]	Index	individual	bulk
2-way manifold	93	RDW200200	1 pcs	40 pcs
3-way manifold	129	RDW200300	1 pcs	40 pcs
4-way manifold	165	RDW200400	1 pcs	32 pcs



1" x 1/2" sanitary manifold

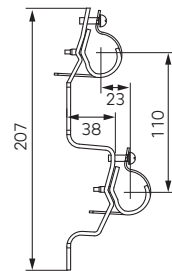
NEW

- 1" M-F brass beam, 2-4 ways
- poppet type shut-off valves
- blue and red knobs included
- nominal pressure: 10 bar (PN10)
- maximum temperature: 110°C



Packaging

	L [mm]	Index	individual	bulk
2-way manifold	95	RDW250200	1 pcs	40 pcs
3-way manifold	131	RDW250300	1 pcs	40 pcs
4-way manifold	167	RDW250400	1 pcs	32 pcs



Set of brackets for sanitary manifolds

NEW

- two bracekt in the set
- equipped with rubber pads
- material: galvanized steel



Packaging

	Index	individual	bulk
brackets for manifolds			
3/4"	LC2RDW20	1 pcs	30 pcs
1"	LC2RDW25	1 pcs	30 pcs

Heating control

HEATING CONTROL



**DAILY ELECTRONIC
CONTROLLER**
138



**WEEKLY ELECTRONIC
CONTROLLER**
138



**UNDERFLOOR HEATING
CONTROL UNITS**
139

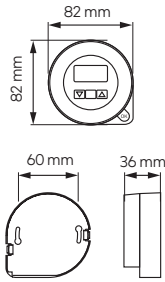


**THERMOELECTRIC
HEADS**
139



**CONTROLLERS
AND THERMOSTATS**
139

Description



Daily electronic controller, wired

- designed heating and air-conditioning systems
- simple and easy temperature setting
- innovative automatic function storing two daily settings
- heating device operation signalling
- battery low signalling
- temperature adjustment indication
- test mode permitting to check correct functioning of controller
- controller switch-off function after heating season
- compliance with EMC, LVD, RoHS directives
- voltage: 3V DC (2 AA batteries)
- temperature measuring range: from -9.9°C to +45°C
- temperature adjustment range: 5 - 45°C
- temperature indication precision: 0.1°C
- temperature adjustment precision: 0.2°C
- hysteresis range: 0.2°C/0.5°C/1°C/2°C/5°C
- working temperature from 2°C to 45°C
- outlet: transmitter, voltage free, SPDT (relayed)
- max. load: 5A, 230V, 50Hz
- external sensor connection possible



Index

FQ1

Packaging

individual

bulk

1 pcs

-



Weekly electronic controller, wired

- temperature setting range:
- 5 - 35°C in cooperation with central heating furnace
- 5 - 45°C in floor heating mode
- voltage: 3V DC (2 AA batteries)
- large, easy to read, backlit display
- designed for operation in heating and air-conditioning systems
- separate program for each of the 7 days of the week
- two set temperatures: comfort and economy
- temperature measuring range: 0 - 50°C
- temperature setting: every 30 minutes
- frequency of room temperature control: every 1 minute
- temperature step: 0.2°C
- hysteresis (on/off difference): 0.4°C or 1.0°C as selected by user
- accuracy of temperature readings: 0.1°C
- battery discharge LED
- control outlet: 16 (3.5)A/50V AC, potential-free
- dimensions (L/H/W): 132.5 x 85 x 27.6 mm
- external sensor connection possible



Index

F2006

Packaging

individual

bulk

1 pcs

-



Description

Underfloor heating control unit, wired

- module supply voltage: 230V/50Hz
 - heating pump control voltage: 230V/50Hz
 - actuator supply voltage: 230V/50Hz
 - maximum load (sum): 3A
 - dimensions (W/H/D) mm: 270 x 95 x 50
- Functions:
- operates in heating or air-conditioning systems
 - controls up to six heating circuits
 - control of circulation pump operation
 - controls boiler operation (switchable relay, potential-free)
 - possibility of switching outlet in test mode
 - Anti-stop function - activates the pump and actuator outside the heating season to prevent their blocking
 - power-saving function
 - can be mounted on a DIN rail, also in an electrical cabinet
 - possibility to connect modules in series in order to increase the number of circuits



Packaging

Index

individual

bulk

FT6

1 pcs

-



Thermocouple head

- voltage: 230V/50Hz
- normally closed
- connection: M30 x 1.5
- spindle pitch: 3 - 5 mm
- protection class: IP54, II protection class
- actuator inertia: approx. 3 minutes
- maximum power consumption: 2W
- working temperature: from -5°C to 60°C



Packaging

Index

individual

bulk

FTE01

1 pcs

100 pcs



Strap thermostat

- single-pole, switching contacts mounted with screw clamp
- temperature control range: + 10°C to + 90°C
- voltage: 230V/50 Hz
- load on the terminals: 15A (2,5 A)/250V
- degree of electrical protection: IP20
- temperature gradient: 1°C/min.



Packaging

Index

individual

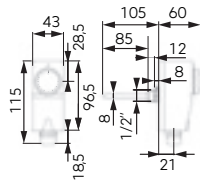
bulk

91934010

1 pcs

60 pcs

Description



Immersion thermostat 30 - 90/16A/250V

- temperature setting range: 30°C ÷ 90°C (± 3°C)
- differential: 4 ± 2°C
- degree of electrical protection: IP40
- protection class: Class II
- thermal gradient: < 1 K/min
- max. head temperature: 80°C
- max. capillary temperature: 110°C
- max. pressure of the shield: 10 bar
- terminals: Ag 1000/1000
- load on the terminals: 16A (5A)/250V AC
- disconnecting or switching contacts: SPDT type
- action type: 1B
- gland: M20x1.5
- connection thread: G1/2
- capillary length: 85 mm
- installation location: in tanks



Packaging

Index	individual	bulk
91934020	1 pcs	25 pcs



Floor temperature sensor

- for controller FQ1, F2006, F2006TXT6, F2026, F2026TXT6
- enables the use of floor temperature limitation function
- cable length: 250 cm



Packaging

Index	individual	bulk
FS250	1 pcs	-

Radiator accessories

RADIATOR ACCESSORIES



PLUGS
142



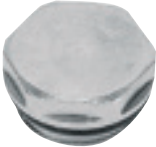



AIR VENTS
144







RADIATOR HOOKS
147



RADIATOR ACCESSORIES

		Description	
	Plug		
			Packaging
	Index	individual	bulk
1" right	GG2L20	-	10 pcs
1" left	GG2P20	-	10 pcs
	Reduction plug		
			Packaging
	Index	individual	bulk
1"x1/2" left	GG3L20	-	10 pcs
1"x1/2" right	GG3P20	-	10 pcs
1"x3/4" right	G93P20	-	10 pcs
1"x3/4" left	G93L20	-	10 pcs
	1/2" blanking plug with an O-ring • nickel plated		
			Packaging
	Index	individual	bulk
	KZ1	1 pcs	230 pcs
	Plug gasket		
			Packaging
	Index	individual	bulk
	GG4	1 pcs	3000 pcs



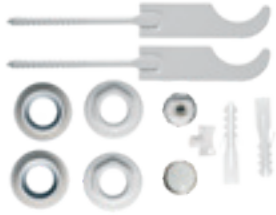




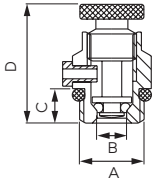

Description					
	<p>Plug gasket set – 4 pcs</p>				
	<p>EAN </p>				
<p>Index</p> <p>GG4W</p>	<p>Packaging</p> <table border="1"> <thead> <tr> <th>individual</th> <th>bulk</th> </tr> </thead> <tbody> <tr> <td>1 set</td> <td>-</td> </tr> </tbody> </table>	individual	bulk	1 set	-
individual	bulk				
1 set	-				

	<p>Plug set</p> <ul style="list-style-type: none"> • 2x 1" x 1/2" reduction plug left-handed with gasket • 2x 1" x 1/2" reduction plug right-handed with gasket • 1/2" automatic venting valve • 1/2" blanking plug 				
	<p>EAN </p>				
<p>Index</p> <p>ZGG1BA</p>	<p>Packaging</p> <table border="1"> <thead> <tr> <th>individual</th> <th>bulk</th> </tr> </thead> <tbody> <tr> <td>1 pcs</td> <td>50 pcs</td> </tr> </tbody> </table>	individual	bulk	1 pcs	50 pcs
individual	bulk				
1 pcs	50 pcs				

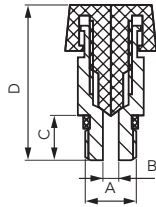
	<p>Plug set</p> <ul style="list-style-type: none"> • 2x 1" x 1/2" reduction plug left-handed with gasket • 2x 1" x 1/2" reduction plug right-handed with gasket • 1/2" automatic venting valve • 1/2" blanking plug • 2x painted radiator hook • 2x rawplugs 				
	<p>EAN </p>				
<p>Index</p> <p>ZGG2BA</p>	<p>Packaging</p> <table border="1"> <thead> <tr> <th>individual</th> <th>bulk</th> </tr> </thead> <tbody> <tr> <td>1 pcs</td> <td>40 pcs</td> </tr> </tbody> </table>	individual	bulk	1 pcs	40 pcs
individual	bulk				
1 pcs	40 pcs				

	<p>Plug set</p> <ul style="list-style-type: none"> • 2x 1" x 1/2" reduction plug left-handed with gasket • 2x 1" x 1/2" reduction plug right-handed with gasket • 1/2" automatic venting valve • 1/2" blanking plug • 3x painted radiator hook • 3x rawplugs 				
	<p>EAN </p>				
<p>Index</p> <p>ZGG3BA</p>	<p>Packaging</p> <table border="1"> <thead> <tr> <th>individual</th> <th>bulk</th> </tr> </thead> <tbody> <tr> <td>1 pcs</td> <td>40 pcs</td> </tr> </tbody> </table>	individual	bulk	1 pcs	40 pcs
individual	bulk				
1 pcs	40 pcs				

RADIATOR ACCESSORIES

				Description										
				<p>Set of plugs</p> <ul style="list-style-type: none"> • 2x 1"x1/2" reduction plugs left-handed with gasket • 2x 1"x1/2" reduction plugs right-handed with gasket • 1/2" manual venting valve • 1/2" blanking plug • vent valve key 										
				<p></p> <table border="1"> <thead> <tr> <th colspan="2">Index</th> <th>Packaging</th> </tr> <tr> <th>individual</th> <th>bulk</th> <th></th> </tr> </thead> <tbody> <tr> <td>ZGG1B</td> <td>1 pcs</td> <td>50 pcs</td> </tr> </tbody> </table>			Index		Packaging	individual	bulk		ZGG1B	1 pcs
Index		Packaging												
individual	bulk													
ZGG1B	1 pcs	50 pcs												
				<p>Plug set</p> <ul style="list-style-type: none"> • 2x 1"x 1/2" reduction plugs left-handed with gasket • 2x 1"x 1/2" reduction plugs right-handed with gasket • 1/2" manual venting valve • 1/2" blanking plug • vent valve key • 2x painted radiator hook • 2x rawlplugs 										
				<p></p> <table border="1"> <thead> <tr> <th colspan="2">Index</th> <th>Packaging</th> </tr> <tr> <th>individual</th> <th>bulk</th> <th></th> </tr> </thead> <tbody> <tr> <td>ZGG2B</td> <td>1 pcs</td> <td>40 pcs</td> </tr> </tbody> </table>			Index		Packaging	individual	bulk		ZGG2B	1 pcs
Index		Packaging												
individual	bulk													
ZGG2B	1 pcs	40 pcs												
				<p>Plug set</p> <ul style="list-style-type: none"> • 2x reduction plugs 1"x1/2" left with seal • 2x reduction plugs 1"x1/2" right with seal • 1/2" manual venting valve • 1/2" blanking plug • key to vent valve • 3x painted radiator hanger • 3x rawlplugs 										
				<p></p> <table border="1"> <thead> <tr> <th colspan="2">Index</th> <th>Packaging</th> </tr> <tr> <th>individual</th> <th>bulk</th> <th></th> </tr> </thead> <tbody> <tr> <td>ZGG3B</td> <td>1 pcs</td> <td>40 pcs</td> </tr> </tbody> </table>			Index		Packaging	individual	bulk		ZGG3B	1 pcs
Index		Packaging												
individual	bulk													
ZGG3B	1 pcs	40 pcs												
 				<p>Mechanical air vent with metal knob</p> <ul style="list-style-type: none"> • max. working temperature: 120°C • max. working pressure: 1.0 MPa (10 bar) • O-ring seal 										
				<p></p> <table border="1"> <thead> <tr> <th colspan="2">Packaging</th> <th>Retail</th> </tr> <tr> <th>individual</th> <th>bulk</th> <th>Index</th> </tr> </thead> <tbody> <tr> <td>-</td> <td>100 pcs</td> <td>RA501/8-W</td> </tr> <tr> <td>-</td> <td>100 pcs</td> <td>RA501/10-W</td> </tr> </tbody> </table>			Packaging		Retail	individual	bulk	Index	-	100 pcs
Packaging		Retail												
individual	bulk	Index												
-	100 pcs	RA501/8-W												
-	100 pcs	RA501/10-W												
A	B [mm]	C [mm]	D [mm]	Index	individual	bulk	Index							
1/4"	5,8	7	24,5	RA501/8	-	100 pcs	RA501/8-W							
3/8"	5,8	8	25,5	RA501/10	-	100 pcs	RA501/10-W							

Description



Mechanical air vent with knob
 • max. working temperature: 120°C
 • max. working pressure: 1.0 MPa (10 bar)



				Packaging		Retail
A	B [mm]	C [mm]	D [mm]	Index	individual	bulk
1/8"	3	8,5	28	RA502/5	-	100 pcs RA502/5-W
1/4"	3	8,5	25	RA502/8	-	100 pcs RA502/8-W
3/8"	3	9,5	26	RA502/10	-	100 pcs RA502/10-W
1/2"	3	9	24,5	RA502/15	-	50 pcs RA502/15-W

1/2" mechanical air vent with knob



		Packaging		Retail
Index	individual	bulk	Index	
O15M	1 pcs	-	O15MW	

1/2" mechanical air vent with key



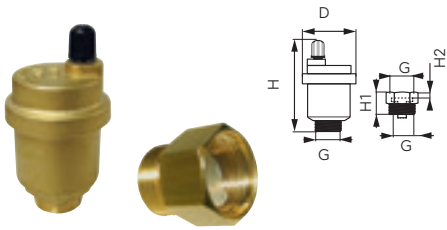
		Packaging		
Index	individual	bulk	Index	
O18Y	1 pcs	500szt.		

1" automatic air vent for aluminium radiators



		Packaging		Retail (Eurohanger)
Index	individual	bulk	Index	
left	OG25AL	1 pcs	50 pcs	OG25ALE
right	OG25AP	1 pcs	50 pcs	OG25APE

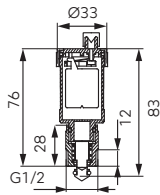
Description



Automatic air vent with stop valve



D [mm]	H [mm]	H1 [mm]	H2 [mm]	G	Index	Packaging		Retail
						individual	bulk	Index
42	58,5	24	5	3/8"	O10AS	1 pcs	50 pcs	
42	58,5	25	6	1/2"	O15AS	1 pcs	50 pcs	O15ASE

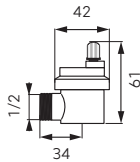


1/2" automatic air vent with stop valve

- max. working temperature: 110°C
- max. working pressure: 1.0 MPa (10 bar)
- brass closing element of the foot valve



Index	Packaging	
	individual	bulk
O15AS2	1 pcs	100 pcs

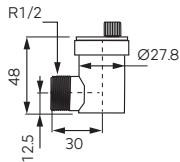


1/2" automatic side air vent

- max. working temperature: 95°C
- max. working pressure: 1.0 MPa (10 bar)



Index	Packaging	
	individual	bulk
O15ASB	1 pcs	50 pcs






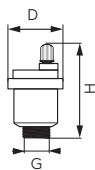

1/2" automatic side air vent



- max. working temperature: 110°C
- max. working pressure: 1.0 MPa (10 bar)





Index	Packaging	
	individual	bulk
O15ASB2	1 pcs	120 pcs









		Description	
		1/2" hygroscopic automatic air vent	
			
		Packaging	
Retail			Retail
Index	individual	bulk	Index
O15AH	12 pcs	360 pcs	O15AHW



 		Description	
		Automatic air vent • without stop valve	
			
		Packaging	
individual			bulk
Index	individual	bulk	Index
O10A	1 pcs	50 pcs	O15A
O15A	1 pcs	50 pcs	



		Description	
		Bent radiator hook • zinc-plated with two rawlplugs	
			
		Packaging	
Retail			Retail
Index	individual	bulk	Index
GG7K	2 pcs	200 pcs	GG7KW


		Description	
		Painted radiator hook • with a rawlplug	
			
		Packaging	
individual			bulk
Index	individual	bulk	Index
GG77M	2 pcs	100 pcs	


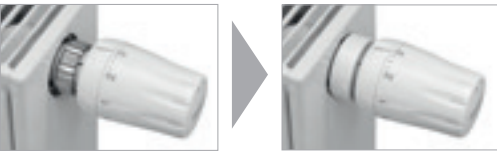

RADIATOR ACCESSORIES

		Description	
	<p>Zinc plated radiator hook • with rawplug- length 24 cm</p>		
			
		Packaging	
Index	individual	bulk	Index
GG77D	2 pcs	50 pcs	GG77DW
	<p>Radiator hook • with rawplug</p>		
			
		Packaging	
Index	individual	bulk	Index
GG77	2 pcs	100 pcs	GG77W
	<p>Painted bent radiator hook</p>		
			
		Packaging	
Index	individual	bulk	
GG7M		1 pcs	100 pcs
	<p>Zinc-plated bent radiator hook</p>		
			
		Packaging	
Index	individual	bulk	Index
GG7	50 pcs	-	GG7W

Description	
 <p>nipple for aluminium radiators</p>	
	
Packaging	
Index	individual bulk Index
GG8	- 500 pcs GG8W

Description	
 <p>Key for 1" nipples for aluminium radiators</p>	
	
Packaging	
Index	individual bulk
GG9P	1 pcs -

Description	
 <p>1" radiator nipple gasket</p>	
	
Packaging	
Index	individual bulk
GG5	100 pcs 2500 pcs

Description	
 <p>Thermostatic head disassembly blocking device</p> <ul style="list-style-type: none"> • ABS ring to be locked on the nut of the thermostatic head • Fits: GT10, GT11, GT12, GT20 • Prevents removal of the head without tools • One-off use lock, can only be removed by destroying it • Used with GT12 head, it additionally prevents change of setting limit • The set includes an additional element for blocking GT12 head settings 	
	
	
Packaging	
Index	individual bulk
GT-LOCK1	1 pcs 500 pcs

Radiator fittings

RADIATOR FITTINGS



THERMOSTATIC VALVES
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THERMOSTATIC HEADS
153

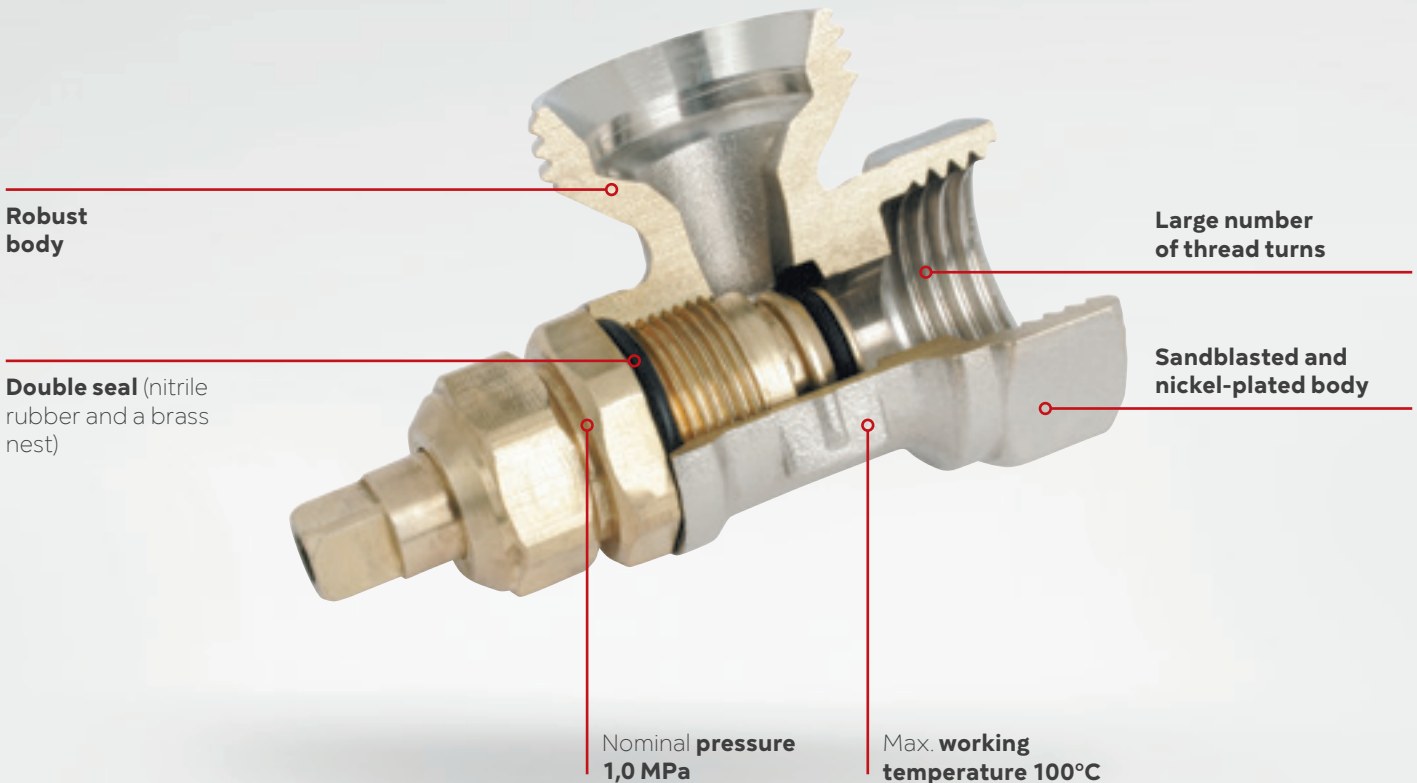


RADIATOR VALVES
158



RADIATOR SETS
159

Radiator valves



Advantages:

- all radiator valves are subjected to 100% tightness test
- simple design, high reliability
- double seal in control valves: rubber gasket and special brass seat
- the valve body is embossed with permanent markings, including the manufacturer's label

Operating parameters

- nominal pressure 1.0 MPa (10 bar)
- working temperature up to 100°C
- working media: hot, cold, central water heating
- radiator valves are attested by the Institute of Energy in Radom

Workmanship and materials:

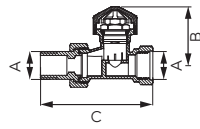
- bodies and nuts are made of moulded parts and processed by machine tools
- body material: brass
- seals: nitrile rubber NBR, brass socket
- lever/knob: ABS

Finishing:

- radiator valves are sandblasted and then nickel-plated
- following special orders - valves can be only chromed or just sandblasted

THERMOSTATIC VALVES

Description

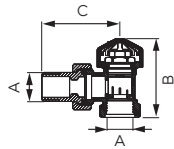


Straight thermostatic valve

- max. permissible static pressure: 1 MPa
- max. permissible pressure difference: 0.06 MPa
- max. working temperature: 100°C
- connection thread for head: M30 x 1.5



DN	A	B [mm]	C [mm]	Nominal flow qmN	Pressure difference impact	Pre-setting regulation	Index	Packaging		Retail (bags)		Retail (Eurohanger)	
								individual	bulk	Index	Index	Index	Index
15	Rp 1/2	44	85	0,130 m³/h	0,8 K	yes	ZT2Y	9 pcs	108 pcs			ZT2YE	
15	Rp 1/2	44	85	0,137 m³/h	0,3 K	no	ZT2YS	9 pcs	108 pcs	ZT2YSW			
20	Rp 3/4	45,5	100	0,162 m³/h	0,6 K	yes	ZT3Y	8 pcs	72 pcs			ZT3YE	

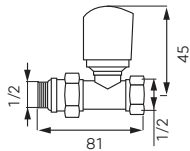


Thermostatic angle valve

- max. permissible pressure difference: 1 MPa
- max. permissible pressure difference: 0.06 MPa
- max. working temperature: 100°C
- connection thread for head: M30 x 1.5



DN	A	B [mm]	C [mm]	Nominal flow qmN	Pressure difference impact	Pre-setting regulation	Index	Packaging		Retail (bags)		Retail (Eurohanger)	
								individual	bulk	Index	Index	Index	Index
15	Rp 1/2	44	85	0,140 m³/h	0,6 K	yes	ZT5Y	10 pcs	120 pcs			ZT5YE	
15	Rp 1/2	44	85	0,153 m³/h	0,3 K	no	ZT5YS	10 pcs	120 pcs	ZT5YSW			
20	Rp 3/4	45,5	100	0,181 m³/h	0,6 K	yes	ZT6Y	89szt.	81 pcs			ZT6YE	

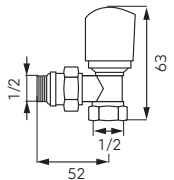


Straight thermostatic valve 1/2" x 1/2"

- connection thread for head: M30 x 1.5
- max. permissible static pressure: 1 MPa
- max. permissible pressure difference: 0.1 MPa
- max. working temperature: 100°C
- connection with additional O-ring sealing
- the valve with 2-in-1 function: valve equipped with ergonomic knob for manual adjustment. After removing the knob, the thermostatic head can be mounted with a typical M30 x 1.5 thread
- water, 50% glycol concentration



Index	Packaging		Retail (bags)	
	individual	bulk	Index	Index
ZT12Y	10 pcs	60 pcs	ZT12YW	



Thermostatic angle valve 1/2" x 1/2"

- connection thread for head: M30 x 1.5
- max. permissible static pressure: 1 MPa
- max. permissible pressure difference: 0.1 MPa
- max. working temperature: 100°C
- connection with additional O-ring sealing
- the valve with 2-in-1 function: valve equipped with ergonomic knob for manual adjustment. After removing the knob, the thermostatic head can be mounted with a typical M30 x 1.5 thread
- water, 50% glycol concentration







Index	Packaging		Retail (bags)	
	individual	bulk	Index	Index
ZT15Y	10 pcs	60 pcs	ZT15YW	

		Description	
	Thermostatic head <ul style="list-style-type: none"> • connection M30 x 1.5 • max. ambient temperature: 50°C • adjustment scale: 0 - 5 • temperature adjustment range: up to 28°C • anti-freeze protection: ~ 7°C • closing function (0) • white 		
			
	Packaging Retail (Eurohanger)		Index
Index	individual	bulk	Index
GT10	1 pcs	100 pcs	GT10E
	Thermostatic head <ul style="list-style-type: none"> • connection M30 x 1.5 • max. ambient temperature: 50°C • adjustment scale: 0 - 5 • temperature adjustment range: up to 28°C • anti-freeze protection: ~ 7°C • closing function (0) • white 		
			
	Packaging Retail (Eurohanger)		Index
Index	individual	bulk	Index
GT11	1 pcs	100 pcs	GT11E
	Thermostatic head <ul style="list-style-type: none"> • connection M30 x 1.5 • possibility to limit minimum or maximum setting • maximum ambient temperature: 50°C • adjustment scale: 0 - 5 • temperature adjustment range: up to 28°C • anti-freeze protection: ~ 7°C • closing function (0) • white 		
			Packaging
	Index	individual	bulk
GT12	1 pcs	100 pcs	
	Thermostatic head with limitation from 16°C <ul style="list-style-type: none"> • connection M30 x 1.5 • maximum ambient temperature: 50°C • adjustment scale: 2 - 5 • temperature adjustment range: 16°C - 30°C • white 		
			Packaging
	Index	individual	bulk
GT12-16	1 pcs	100 pcs	

THERMOSTATIC HEADS

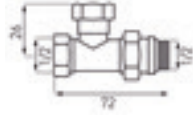
Description											
	<p>Thermostatic head</p> <ul style="list-style-type: none"> • connection M30 x 1.5 • max. ambient temperature: 50°C • adjustment scale: 0 - 5 • temperature control range: up to 28°C • anti-freeze protection: ~ 6°C • closing function (0) • white 	<table border="1"> <thead> <tr> <th colspan="3">Packaging</th> </tr> <tr> <th>Index</th> <th>individual</th> <th>bulk</th> </tr> </thead> <tbody> <tr> <td>GT20B</td> <td>1 pcs</td> <td>75 pcs</td> </tr> </tbody> </table>	Packaging			Index	individual	bulk	GT20B	1 pcs	75 pcs
Packaging											
Index	individual	bulk									
GT20B	1 pcs	75 pcs									
	<p>Thermostatic head</p> <ul style="list-style-type: none"> • connection: M30 x 1.5 • maximum ambient temperature: 50°C • adjustment scale: * - 5 • temperature control range: up to 30°C • anti-freeze protection: ~ 9°C • white 	<table border="1"> <thead> <tr> <th colspan="3">Packaging</th> </tr> <tr> <th>Index</th> <th>individual</th> <th>bulk</th> </tr> </thead> <tbody> <tr> <td>GT30B</td> <td>1 pcs</td> <td>75 pcs</td> </tr> </tbody> </table>	Packaging			Index	individual	bulk	GT30B	1 pcs	75 pcs
Packaging											
Index	individual	bulk									
GT30B	1 pcs	75 pcs									
	<p>Thermostatic head</p> <ul style="list-style-type: none"> • connection: M30x1.5 • maximum ambient temperature: 50°C • adjustment scale: * - 5 • temperature adjustment range: up to 30°C • anti-freeze protection: ~ 9°C • chrome 	<table border="1"> <thead> <tr> <th colspan="3">Packaging</th> </tr> <tr> <th>Index</th> <th>individual</th> <th>bulk</th> </tr> </thead> <tbody> <tr> <td>GT31B</td> <td>1 pcs</td> <td>75 pcs</td> </tr> </tbody> </table>	Packaging			Index	individual	bulk	GT31B	1 pcs	75 pcs
Packaging											
Index	individual	bulk									
GT31B	1 pcs	75 pcs									
	<p>Thermostatic head</p> <ul style="list-style-type: none"> • connection: M30 x 1.5 • max. ambient temperature: 50°C • adjustment scale: * - 5 • temperature adjustment range: up to 30°C • anti-freeze protection: ~ 9°C • white/chrome 	<table border="1"> <thead> <tr> <th colspan="3">Packaging</th> </tr> <tr> <th>Index</th> <th>individual</th> <th>bulk</th> </tr> </thead> <tbody> <tr> <td>GT32B</td> <td>1 pcs</td> <td>75 pcs</td> </tr> </tbody> </table>	Packaging			Index	individual	bulk	GT32B	1 pcs	75 pcs
Packaging											
Index	individual	bulk									
GT32B	1 pcs	75 pcs									

Description		
	<p>Thermostatic head</p> <ul style="list-style-type: none"> • connection: M30x1.5 • maximum ambient temperature: 50°C • adjustment scale: * - 5 • temperature adjustment range: up to 30°C • anti-freeze protection: ~ 9°C • anthracite 	
		
Packaging		
Index	individual	bulk
GT33B	1 pcs	75 pcs

	<p>Thermostatic head</p> <ul style="list-style-type: none"> • connection: M30x1.5 • maximum ambient temperature: 50°C • adjustment scale: * - 5 • temperature adjustment range: up to 30°C • anti-freeze protection: ~ 9°C • black 	
		
Packaging		
Index	individual	bulk
GT34B	1 pcs	75 pcs

RADIATOR VALVES

Description

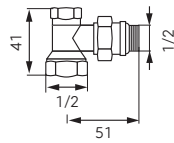


Radiator cut-off straight valve 1/2" x 1/2"

- connection with additional O-ring
- water, 50% glycol concentration
- nominal pressure: 1.0 MPa (10 bar)
- max. working temperature: 100°C

Packaging

Index	Packaging	
	individual	bulk
ZPI2Y	10 pcs	120 pcs

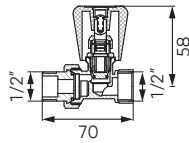


Radiator cut-off angle valve 1/2" x 1/2"

- connection with additional O-ring
- water, 50% glycol concentration
- nominal pressure: 1.0 MPa (10 bar)
- max. working temperature: 100°C

Packaging

Index	Packaging	
	individual	bulk
ZPI5Y	10 pcs	120 pcs



Straight radiator valve 1/2" with gland

- nominal pressure: 1.0 MPa (10 bar)
- max. working temperature: 100°C

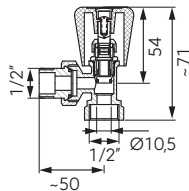


Packaging

Retail (bags)

Retail (Eurohanger)

Index	Packaging		Index	Index
	individual	bulk		
ZG2Y	12 pcs	144 pcs	ZG2YW	ZG2YE



1/2" angle radiator valve with gland

- nominal pressure: 1.0 MPa (10 bar)
- max. working temperature: 100°C




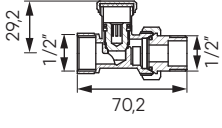
Packaging

Retail (bags)

Retail (Eurohanger)



Index	Packaging		Index	Index
	individual	bulk		
ZG5Y	12 pcs	144 pcs	ZG5YW	ZG5YE

Description


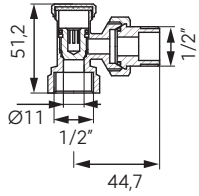



1/2" straight cut-off radiator valve

- nominal pressure: 1.0 MPa (10 bar)
- max. working temperature: 100°C






Packaging		Retail (bags)	Retail (Eurohanger)
Index	individual	bulk	Index
ZP2Y	16 pcs	192 pcs	ZP2YW
			ZP2YE


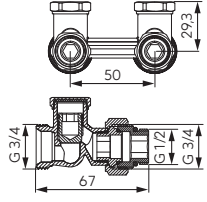



1/2" angle cut-off radiator valve

- nominal pressure: 1.0 MPa (10 bar)
- max. working temperature: 100°C






Packaging		Retail (bags)	Retail (Eurohanger)
Index	individual	bulk	Index
ZK2Y	16 pcs	192 pcs	ZK2YW
			ZK2YE


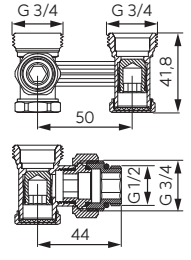



Double valve for bottom connected radiators, straight

- connections 3/4" M x F3/4" F or 3/4" M x 1/2" M
- reduction nipples included
- conical sealing
- poppet type shut-off valves
- nominal pressure: 1,0 MPa (10 bar)
- maximum working temperature: 100°C






Packaging		Retail (bags)	Retail (Eurohanger)
Index	individual	bulk	Index
LZ06YK	8 pcs	72 pcs	LZ06YKW
			LZ06YKE

Double valve for bottom connected radiators, angle

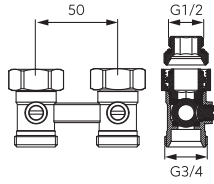
- connections 3/4" M x F3/4" F or 3/4" M x 1/2" M
- reduction nipples included
- conical sealing
- poppet type shut-off valves
- nominal pressure: 1,0 MPa (10 bar)
- maximum working temperature: 100°C

Packaging		Retail (bags)	Retail (Eurohanger)
Index	individual	bulk	Index
LZ07YK	8 pcs	72 pcs	LZ07YKW
			LZ07YKE

RADIATOR VALVES

Description

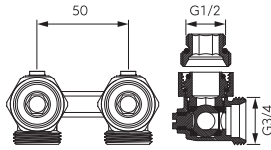


Double valve for bottom connected radiators, straight

- connections 3/4" M x F3/4" F or 3/4" M x 1/2" M
- reduction nipples included
- conical sealing
- ball shut-off valves
- nominal pressure: 1,0 MPa (10 bar)
- maximum working temperature: 100°C

Packaging

Index	individual	bulk
LZ06YKN	8 pcs	72 pcs



Double valve for bottom connected radiators, angle

- connections 3/4" M x F3/4" F or 3/4" M x 1/2" M
- reduction nipples included
- conical sealing
- ball shut-off valves
- nominal pressure: 1,0 MPa (10 bar)
- maximum working temperature: 100°C

Packaging

Index	individual	bulk
LZ07YKN	10 pcs	90 pcs

Description								
	<p>Straight thermostatic set with presetting valve</p> <p>Elements of the set:</p> <ul style="list-style-type: none"> • GT12 thermostatic head with M30 x 1.5 connection • ZT2Y thermostatic straight valve with presetting • ZP2Y straight cut-off valve <p>Technical parameters:</p> <ul style="list-style-type: none"> • max. working temperature: 100°C • max. working pressure: 1 MPa (10 bar) • max. ambient temperature: 50°C • scale of adjustment: 0 - 5 • adjustment range: up to 29°C • valve connection diameter: 1/2" 	<table border="1"> <thead> <tr> <th colspan="2">Packaging</th> </tr> <tr> <th>individual</th> <th>bulk</th> </tr> </thead> <tbody> <tr> <td>1 pcs</td> <td>16 pcs</td> </tr> </tbody> </table>	Packaging		individual	bulk	1 pcs	16 pcs
Packaging								
individual	bulk							
1 pcs	16 pcs							
	<p>Straight 1/2" thermostatic set with presetting valve and thermostatic head with 16°C limit</p> <p>Elements of the set:</p> <ul style="list-style-type: none"> • GT12-16 thermostatic head with M30 x 1.5 connection • ZT2Y thermostatic straight valve with presetting • ZP2Y straight cut-off valve <p>Technical parameters:</p> <ul style="list-style-type: none"> • max. working temperature: 100°C • max. working pressure: 1 MPa (10 bar) • max. ambient temperature: 50°C • scale of adjustment: 2 - 5 • adjustment range: up to 30°C • valve connection diameter: 1/2" 	<table border="1"> <thead> <tr> <th colspan="2">Packaging</th> </tr> <tr> <th>individual</th> <th>bulk</th> </tr> </thead> <tbody> <tr> <td>1 pcs</td> <td>16 pcs</td> </tr> </tbody> </table>	Packaging		individual	bulk	1 pcs	16 pcs
Packaging								
individual	bulk							
1 pcs	16 pcs							
	<p>Angle thermostatic set with presetting valve</p> <p>Elements of the set:</p> <ul style="list-style-type: none"> • GT12 thermostatic head with M30 x 1.5 connection • ZT5Y angle thermostatic valve, with presetting • ZK2Y angle cut-off valve <p>Technical parameters:</p> <ul style="list-style-type: none"> • max. working temperature: 100°C • max. working pressure: 1 MPa (10 bar) • max. ambient temperature: 50°C • scale of adjustment: 0 - 5 • adjustment range: up to 33°C • valve connection diameter: 1/2" 	<table border="1"> <thead> <tr> <th colspan="2">Packaging</th> </tr> <tr> <th>individual</th> <th>bulk</th> </tr> </thead> <tbody> <tr> <td>1 pcs</td> <td>16 pcs</td> </tr> </tbody> </table>	Packaging		individual	bulk	1 pcs	16 pcs
Packaging								
individual	bulk							
1 pcs	16 pcs							
	<p>Angle 1/2" thermostatic set with presetting valve and thermostatic head with 16°C limit</p> <p>Elements of the set:</p> <ul style="list-style-type: none"> • GT12-16 thermostatic head with M30 x 1.5 connection • ZT5Y angle thermostatic valve, with presetting • ZK2Y angle cut-off valve <p>Technical parameters:</p> <ul style="list-style-type: none"> • max. working temperature: 100°C • max. working pressure: 1 MPa (10 bar) • max. ambient temperature: 50°C • scale of adjustment: 2 - 5 • adjustment range: 16°C - 29°C • valve connection diameter: 1/2" 	<table border="1"> <thead> <tr> <th colspan="2">Packaging</th> </tr> <tr> <th>individual</th> <th>bulk</th> </tr> </thead> <tbody> <tr> <td>1 pcs</td> <td>16 pcs</td> </tr> </tbody> </table>	Packaging		individual	bulk	1 pcs	16 pcs
Packaging								
individual	bulk							
1 pcs	16 pcs							

Description



1/2" straight thermostatic set

Elements of the set:

- thermostatic head
- thermostatic valve without presetting
- cut-off valve

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1.0 MPa (10 bar)
- max. ambient temperature: 50°C
- scale of adjustment: 0 - 5
- temperature control range: up to 28°C
- valve connection diameter: 1/2"



Packaging

Index

ZTM07

individual
1 pcs

bulk
16 pcs



1/2" angle thermostatic set

Elements of the set:

- thermostatic head
- thermostatic valve without presetting
- cut-off valve

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1.0 MPa (10 bar)
- max. ambient temperature: 50°C
- scale of adjustment: 0 - 5
- temperature control range: up to 28°C
- valve connection diameter: 1/2"



Packaging

Index

ZTM08

individual
1 pcs

bulk
16 pcs



1/2" straight thermostatic set

Elements of the set:

- thermostatic head
- 1/2" straight thermostatic valve without presetting
- 1/2" straight radiator cut-off valve

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1.0 MPa (10 bar)
- valve connection diameter: 1/2"
- head connection: M30 x 1.5
- max. ambient temperature: 50°C
- scale of adjustment: 0 - 5
- adjustment range: up to 28°C



Packaging

Index

ZTM20

individual
1 pcs

bulk
40 pcs



1/2" angle thermostatic set

Elements of the set:

- thermostatic head
- 1/2" thermostatic angle valve without presetting
- 1/2" angle radiator cut-off valve

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1.0 MPa (10 bar)
- valve connection diameter: 1/2"
- head connection: M30 x 1.5
- max. ambient temperature: 50°C
- scale of adjustment: 0-5
- temperature control range: up to 28°C




Packaging

Index

ZTM21

individual
1 pcs

bulk
40 pcs




1/2" straight radiator set

Elements of the set:


- ZG2Y - 1/2" straight radiator valve with gland
- ZP2Y - 1/2" straight radiator cut-off valve

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1.0 MPa (10 bar)



Packaging		
Index	individual	bulk
ZGB01	1 pcs	30 pcs




1/2" angular radiator set

Elements of the set:


- ZG5Y - 1/2" angle radiator valve with gland
- ZK2Y - 1/2" angle radiator cut-off valve


Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1.0 MPa (10 bar)



Packaging		
Index	individual	bulk
ZGB02	1 pcs	30 pcs



 **1/2" straight thermostatic valve set**

Elements of the set:


- 2-in-1 thermostatic valve
- cut-off valve

Technical parameters:


- max. working temperature: 100°C
- max. working pressure: 1.0 MPa (10 bar)
- max. ambient temperature: 50°C
- valve connection diameter: 1/2"


Characteristics:

- valve with 2-in-1 function:
- valve equipped with ergonomic knob for manual adjustment after removing the knob, the thermostatic head can be mounted with a typical M30 x 1.5 thread
- easy to install; additional gasket on the thermostatic and shut-off valve half union



Packaging		
Index	individual	bulk
ZTB01	1 pcs	30 pcs



 **1/2" angle thermostatic valve set**

Elements of the set:


- 2-in-1 thermostatic valve
- cut-off valve

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1.0 MPa (10 bar)
- max. ambient temperature: 50°C
- valve connection diameter: 1/2"

Characteristics:

- valve with 2-in-1 function:
- valve equipped with ergonomic knob for manual adjustment after removing the knob, the thermostatic head can be mounted with a typical M30x1.5 thread
- easy to install; additional gasket on the thermostatic and shut-off valve half union



Packaging		
Index	individual	bulk
ZTB02	1 pcs	30 pcs

Description



Thermostatic set for bottom connected radiators, straight

Elements of the set:

- Thermostatic head with M30 x 1.5 connection (fits Heimeier thermostatic inserts)
- universal connection valve straight for V-type radiators
- connections 3/4" M x F3/4" F or 3/4" M x 1/2" M
- reduction nipples included

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1.0 MPa (10 bar)
- max. ambient temperature: 50°C
- scale of adjustment: 0 - 5
- temperature control range: up to 28°C
- valve connection diameter: MT3/4" x MT3/4" or MT3/4" x MT1/2"



Packaging

Index	individual	bulk
ZTV01	1 pcs	25 pcs



Thermostatic set for bottom connected radiators, angle

Elements of the set:

- Thermostatic head with M30 x 1.5 connection (fits Heimeier thermostatic inserts)
- universal angle connection valve for V-type radiators
- connections 3/4" M x F3/4" F or 3/4" M x 1/2" M
- reduction nipples included

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1.0 MPa (10 bar)
- max. ambient temperature: 50°C
- scale of adjustment: 0 - 5
- temperature control range: up to 28°C



Packaging

Index	individual	bulk
ZTV02	1 pcs	25 pcs



Thermostatic set for bottom connected radiators, straight

Elements of the set:

- thermostatic head with M30 x 1.5 connection (fits Heimeier thermostatic inserts)
- universal straight connection valve for V-type radiators
- connections 3/4" M x F3/4" F or 3/4" M x 1/2" M

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1.0 MPa (10 bar)
- max. ambient temperature: 50°C
- scale of adjustment: 0 - 5
- temperature control range: up to 28°C



Packaging

Index	individual	bulk
ZTV07	1 pcs	16 pcs



Thermostatic set for bottom connected radiators, angle

Elements of the set:

- thermostatic head with M30 x 1.5 connection (fits Heimeier thermostatic inserts)
- universal angle connection valve for V-type radiators
- connections 3/4" M x F3/4" F or 3/4" M x 1/2" M

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1.0 MPa (10 bar)
- max. ambient temperature: 50°C
- scale of adjustment: 0 - 5
- temperature control range: up to 28°C



Packaging

Index	individual	bulk
ZTV08	1 pcs	25 pcs

Description



Thermostatic set for bottom connected radiators, straight

Elements of the set:

- thermostatic head with M30x1,5 connection (suitable for Heimeier type thermostatic inserts)
- universal straight connection valve

Technical specifications:

- connections 3/4" M x F3/4" F or 3/4" M x 1/2" M
- reduction nipples included
- conical sealing
- ball shut-off valves
- nominal pressure: 1,0 MPa (10 bar)
- maximum working temperature: 100°C
- maximum ambient temperature: 50°C
- adjustment scale: 0-5
- temperature adjustment range: 0-28°C
- antifreeze protection: - 6°C



Packaging

Index	individual	bulk
ZTV20	1 pcs	40 pcs



Thermostatic set for bottom connected radiators, angle

Elements of the set:

- thermostatic head with M30x1,5 connection (suitable for Heimeier type thermostatic inserts)
- universal angle connection valve

Technical specifications:

- connections 3/4" M x F3/4" F or 3/4" M x 1/2" M
- reduction nipples included
- conical sealing
- ball shut-off valves
- nominal pressure: 1,0 MPa (10 bar)
- maximum working temperature: 100°C
- maximum ambient temperature: 50°C
- adjustment scale: 0-5
- temperature adjustment range: 0-28°C
- antifreeze protection: - 6°C



Packaging

Index	individual	bulk
ZTV21	1 pcs	40 pcs

Description



pipe connector set:



multilayer

copper

Decorative integrated angle thermostatic set, chrome

Elements of the set:

- GT31 thermostatic head
- integrated angle valve
- 15 mm copper pipe connectors
- 16x2 mm multilayer pipe connectors
- 3/4' x 1/2' radiator nipples

Thermostatic head:

- connection: M30 x 1.5
- max. ambient temperature: 50°C
- adjustment scale: * - 5
- adjustment range: up to 30°C
- anti-freeze protection: - 9°C

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1 MPa (10 bar)



Packaging

Index	individual	bulk
ZTD30CR	1 pcs	20 pcs



pipe connector set:



multilayer

copper

Decorative integrated angle thermostatic set, white

Elements of the set:

- GT30 thermostatic head
- integrated angle valve
- 15 mm copper pipe connectors
- 16x2 mm multilayer pipe connectors
- 3/4' x 1/2' radiator nipples

Thermostatic head:

- connection: M30 x 1.5
- max. ambient temperature: 50°C
- adjustment scale: * - 5
- adjustment range: up to 30°C
- anti-freeze protection: - 9°C

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1 MPa (10 bar)



Packaging

Index	individual	bulk
ZTD30WH	1 pcs	20 pcs



pipe connector set:



multilayer

copper

Decorative integrated angle thermostatic set, anthracite

Elements of the set:

- GT33 thermostatic head
- integrated angle valve
- 15 mm copper pipe connectors
- 16 x 2 mm multilayer pipe connectors
- 3/4' x 1/2' radiator nipples

Thermostatic head:

- connection: M30 x 1.5
- max. ambient temperature: 50°C
- adjustment scale: * - 5
- adjustment range: up to 30°C
- anti-freeze protection: - 9°C

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1 MPa (10 bar)



Packaging

Index	individual	bulk
ZTD30AT	1 pcs	20 pcs

Description



pipe connector set:



multilayer

copper



Decorative integrated angle thermostatic set, black

Elements of the set:

- GT34 thermostatic head
- integrated angle valve
- 15 mm copper pipe connectors
- 16 x 2 mm multilayer pipe connectors
- 3/4' x 1/2' radiator nipples

Thermostatic head:

- connection: M30 x 1.5
- max. ambient temperature: 50°C
- adjustment scale: * - 5
- adjustment range: up to 30°C
- anti-freeze protection: - 9°C

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1 MPa (10 bar)

Index

ZTD30BL

Packaging

individual	bulk
1 pcs	20 pcs



pipe connector set:



multilayer

copper



Decorative axial thermostatic set, chrome

Elements of the set:

- GT31 thermostatic head
- 1/2' axial thermostatic valve
- 1/2' axial cut-off valve
- 15 mm copper pipe connectors
- 16x2 mm multilayer pipe connectors

Thermostatic head:

- connection: M30 x 1.5
- max. ambient temperature: 50°C
- adjustment scale: * - 5
- adjustment range: up to 30°C
- anti-freeze protection: - 9°C

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1 MPa (10 bar)

Index

ZTO30CR

Packaging

individual	bulk
1 pcs	20 pcs



pipe connector set:



multilayer

copper



Decorative axial thermostatic set, white

Elements of the set:

- GT30 thermostatic head
- 1/2' axial thermostatic valve
- 1/2' axial cut-off valve
- 15 mm copper pipe connectors
- 16x2 mm multilayer pipe connectors

Thermostatic head:

- connection: M30 x 1.5
- max. ambient temperature: 50°C
- adjustment scale: * - 5
- adjustment range: up to 30°C
- anti-freeze protection: - 9°C

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1 MPa (10 bar)

Index

ZTO30WH

Packaging

individual	bulk
1 pcs	20 pcs

RADIATOR SETS

Description



pipe connector set:



multilayer

copper

Decorative axial thermostatic set, anthracite

Elements of the set:

- GT33 thermostatic head
- 1/2" axial thermostatic valve
- 1/2" axial cut-off valve
- 15 mm copper pipe connectors
- 16 x 2 mm multilayer pipe connectors

Thermostatic head:

- connection: M30 x 1.5
- max. ambient temperature: 50°C
- adjustment scale: * - 5
- adjustment range: up to 30°C
- anti-freeze protection: - 9°C

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1 MPa (10 bar)



Packaging

Index

ZTO30AT

individual

1 pcs

bulk

20 pcs



pipe connector set:



multilayer

copper

Decorative axial thermostatic set, black

Elements of the set:

- GT34 thermostatic head
- 1/2" axial thermostatic valve
- 1/2" axial cut-off valve
- 15 mm copper pipe connectors
- 16 x 2 mm multilayer pipe connectors

Thermostatic head:

- connection: M30 x 1.5
- max. ambient temperature: 50°C
- adjustment scale: * - 5
- adjustment range: up to 30°C
- anti-freeze protection: - 9°C

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1 MPa (10 bar)



Packaging

Index

ZTO30BL

individual

1 pcs

bulk

20 pcs

Description



Decorative straight thermostatic set, chrome

- Elements of the set:
- GT31 thermostatic head
 - 1/2' straight thermostatic valve
 - 1/2' straight cut-off valve
- Thermostatic head:
- connection: M30 x 1.5
 - max. ambient temperature: 50°C
 - adjustment scale: * - 5
 - adjustment range: up to 30°C
 - anti-freeze protection: - 9°C
- Technical parameters:
- max. working temperature: 100°C
 - max. working pressure: 1 MPa (10 bar)



Packaging

Index	individual	bulk
ZTM30CR	1 pcs	20 pcs



Decorative straight thermostatic set, white

- Elements of the set:
- GT30 thermostatic head
 - 1/2' straight thermostatic valve
 - 1/2' straight cut-off valve
- Thermostatic head:
- connection: M30 x 1.5
 - max. ambient temperature: 50°C
 - adjustment scale: * - 5
 - adjustment range: up to 30°C
 - anti-freeze protection: - 9°C
- Technical parameters:
- max. working temperature: 100°C
 - max. working pressure: 1 MPa (10 bar)



Packaging

Index	individual	bulk
ZTM30WH	1 pcs	20 pcs



Decorative straight thermostatic set, anthracite

- Elements of the set:
- GT33 thermostatic head
 - 1/2' straight thermostatic valve
 - 1/2' straight cut-off valve
- Thermostatic head:
- connection: M30 x 1.5
 - max. ambient temperature: 50°C
 - adjustment scale: * - 5
 - adjustment range: up to 30°C
 - anti-freeze protection: - 9°C
- Technical parameters:
- max. working temperature: 100°C
 - max. working pressure: 1 MPa (10 bar)



Packaging

Index	individual	bulk
ZTM30AT	1 pcs	20 pcs



Decorative straight thermostatic set, black

- Elements of the set:
- GT34 thermostatic head
 - 1/2' straight thermostatic valve
 - 1/2' straight cut-off valve
- Thermostatic head:
- connection: M30 x 1.5
 - max. ambient temperature: 50°C
 - adjustment scale: * - 5
 - adjustment range: up to 30°C
 - anti-freeze protection: - 9°C
- Technical parameters:
- max. working temperature: 100°C
 - max. working pressure: 1 MPa (10 bar)



Packaging

Index	individual	bulk
ZTM30BL	1 pcs	20 pcs

Description



Decorative angle thermostatic set, chrome

Elements of the set:

- GT31 thermostatic head
- 1/2" angle thermostatic valve
- 1/2" angle cut-off valve

Thermostatic head:

- connection: M30 x 1.5
- max. ambient temperature: 50°C
- adjustment scale: * - 5
- adjustment range: up to 30°C
- anti-freeze protection: - 9°C

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1 MPa (10 bar)



Packaging

Index	individual	bulk
ZTM31CR	1 pcs	20 pcs



Decorative angle thermostatic set, white

Elements of the set:

- GT30 thermostatic head
- 1/2" angle thermostatic valve
- 1/2" angle cut-off valve

Thermostatic head:

- connection: M30 x 1.5v
- max. ambient temperature: 50°C
- adjustment scale: * - 5
- adjustment range: up to 30°C
- anti-freeze protection: - 9°C

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1 MPa (10 bar)



Packaging

Index	individual	bulk
ZTM31WH	1 pcs	20 pcs



Decorative angle thermostatic set, anthracite

Elements of the set:

- GT33 thermostatic head
- 1/2" angle thermostatic valve
- 1/2" angle cut-off valve

Thermostatic head:

- connection: M30 x 1.5
- max. ambient temperature: 50°C
- adjustment scale: * - 5
- adjustment range: do 30°C
- anti-freeze protection: - 9°C

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1 MPa (10 bar)



Packaging

Index	individual	bulk
ZTM31AT	1 pcs	20 pcs



Decorative angle thermostatic set, black

Elements of the set:

- GT34 thermostatic head
- 1/2" angle thermostatic valve
- 1/2" angle cut-off valve

Thermostatic head:

- connection: M30 x 1.5
- max. ambient temperature: 50°C
- adjustment scale: * - 5
- adjustment range: do 30°C
- anti-freeze protection: - 9°C


Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1 MPa (10 bar)



Packaging

Index	individual	bulk
ZTM31BL	1 pcs	20 pcs



Description


Decorative straight radiator set, chrome

Elements of the set:


- 1/2" straight control valve
- 1/2" straight shut-off valve

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1 MPa (10 bar)



Index	Packaging	
	individual	bulk
ZGB30CR	1 pcs	30 pcs



Description


Decorative straight radiator set, white

Elements of the set:


- 1/2" straight control valve
- 1/2" straight shut-off valve

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1 MPa (10 bar)



Index	Packaging	
	individual	bulk
ZGB30WH	1 pcs	30 pcs



Description


Decorative straight radiator set, anthracite

Elements of the set:


- 1/2" straight control valve
- 1/2" straight shut-off valve

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1 MPa (10 bar)



Index	Packaging	
	individual	bulk
ZGB30AT	1 pcs	30 pcs



Description


Decorative straight radiator set, black

Elements of the set:

- 1/2" straight control valve
- 1/2" straight shut-off valve


Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1 MPa (10 bar)



Index	Packaging	
	individual	bulk
ZGB30BL	1 pcs	30 pcs

RADIATOR SETS



Description


Decorative angle radiator set, chrome

Elements of the set:


- 1/2" angle control valve
- 1/2" angle cut-off valve

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1 MPa (10 bar)



Packaging		
Index	individual	bulk
ZGB31CR	1 pcs	30 pcs



Description


Decorative angle radiator set, white

Elements of the set:


- 1/2" angle control valve
- 1/2" angle cut-off valve

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1 MPa (10 bar)



Packaging		
Index	individual	bulk
ZGB31WH	1 pcs	30 pcs



Description


Decorative angle radiator set, anthracite

Elements of the set:


- 1/2" angle control valve
- 1/2" angle cut-off valve

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1 MPa (10 bar)



Packaging		
Index	individual	bulk
ZGB31AT	1 pcs	30 pcs



Description


Decorative angle radiator set, black

Elements of the set:

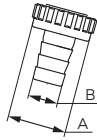
- 1/2" angle control valve
- 1/2" angle cut-off valve

Technical parameters:

- max. working temperature: 100°C
- max. working pressure: 1 MPa (10 bar)



Packaging		
Index	individual	bulk
ZGB31BL	1 pcs	30 pcs



Description

Hose connection tip for bibcocks



A	B [mm]	for valve	Index	Packaging		Retail (bags)
				individual	bulk	Index
G3/4	15	1/2"	K44	50 pcs	450 pcs	K44W
G1	20	3/4"	K45	50 pcs	450 pcs	K45W
G1 1/4	28	1"	K46	25 pcs	-	K46W



Ball valve handle




for valve	Index	individual	bulk
3/8"	RKP10	1 pcs	-
1/2"	RKP1	1 pcs	-
3/4"	RKP2	1 pcs	-
1"	RKP3	1 pcs	-
1 1/4"	RKP4	1 pcs	-
1 1/2"	RKP5	1 pcs	-
2"	RKP6	1 pcs	-
2 1/2"	RKP7	1 pcs	-
3"	RKP8	1 pcs	-
4"	RKP9	1 pcs	-



Flange – finish
• galvanized steel

model	Ø [mm]	Size	Index	individual	bulk
SV35	95	3/4"	CFF095TRF008Z	1 pcs	-
SV50	95	1"	CFF095TRF007Z	1 pcs	-
SV80	145	3/4"	CFF145TRF008Z	1 pcs	-
SV100	145	1"	CFF145TRF007Z	1 pcs	-
SV150	260	1 1/4"	CFF260TRF001V	1 pcs	-

SPARE PARTS

Description		
	Membrane fixing flange • model: 100 ÷ 500	
		Packaging
	Index TIR001Z	individual 1 pcs
	Membrane fixing flange • model: 750 ÷ 5000	
		Packaging
	Index TIR003Z	individual 1 pcs
	Air precharge valve por pressure tanks	
		Packaging
	Index VAL003	individual 1 pcs



Description

Expansion vessel membranes




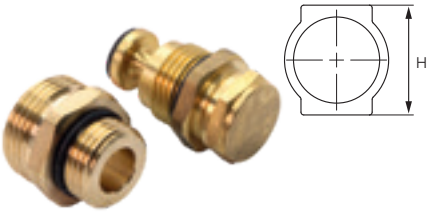
for model	Ø [mm]	Index	Packaging	
			individual	bulk
R5, R8	45	ME008R	1 pcs	-
R12	45	ME012R	1 pcs	-
R18	45	ME018R	1 pcs	-
R24	45	ME024R	1 pcs	-
R35	80	ME035R	1 pcs	-
R50, RV50	80	ME050R	1 pcs	-
RV60, RV80	80	ME080R	1 pcs	-
RV100	80	ME100R	1 pcs	-
RV150	80	ME150R	1 pcs	-
RV200, RV250, RV300	80	ME300R	1 pcs	-
RV400, RV500	150	ME500R	1 pcs	-
RV600	150	ME600R	1 pcs	-
S8	45	ME008S	1 pcs	-
S12	45	ME012S	1 pcs	-
S18	45	ME018S	1 pcs	-
S24	80	ME024S	1 pcs	-
SV35	80	ME035S	1 pcs	-
SV50	80	ME050S	1 pcs	-
SV80	80	ME080S	1 pcs	-
SV100	80	ME100S	1 pcs	-
SV150	80	ME150S	1 pcs	-
SV200	80	ME200S	1 pcs	-
SV300	80	ME300S	1 pcs	-
M2	45	ME002A	1 pcs	-
A5, A8	45	ME008A	1 pcs	-
A12	45	ME012A	1 pcs	-
A18	45	ME018A	1 pcs	-
A24	80	ME024A	1 pcs	-
A35	80	ME035A	1 pcs	-
AV50	80	ME050A	1 pcs	-
AV80	80	ME080A	1 pcs	-
AV100	80	ME100A	1 pcs	-
AV150	80	ME150A	1 pcs	-
AV200	150	ME200A	1 pcs	-
AV300	150	ME300A	1 pcs	-







Ball valve butterfly


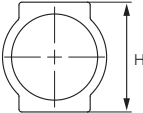
Index	Packaging		
	individual	bulk	
KMS1, KSS1, KMS11, KMS2, KSS2, KMS21, KM1, KM2, KM21	MKM2	1 pcs	-
KMS3, KSS3, MKS31, KM3, KM31	MKM3	1 pcs	-
KS1, KM11	MKMKS1	1 pcs	-
KS2	MKMKS2	1 pcs	-
KS3	MKMKS3	1 pcs	-


SPARE PARTS

		Description		
		<p>1/2" balancing and measuring valve (flowmeter) + 1/2"x3/4" nipple</p>		
		Packaging		
H [mm]	Index	individual	bulk	
39	RKPP-SET39	1 pcs	-	
42	RKPP-SET42	1 pcs	-	
		<p>1/2" balancing and measuring valve (flowmeter) + 1/2"x1/2" nipple + compression fitting for 16x2 mm multilayer pipes</p> <ul style="list-style-type: none"> • profile: 39 mm 		
		Packaging		
		Index	individual	bulk
		RKPP-SET39P12	1 pcs	-
		<p>Thermostatic insert M30x1.5 + 1/2" x 3/4" nipple</p>		
		Packaging		
H [mm]	Index	individual	bulk	
39	RKPT-SET39	1 pcs	-	
42	RKPT-SET42	1 pcs	-	
		<p>Cut-off valve + 1/2" x 3/4" nipple</p>		
		Packaging		
H [mm]	Index	individual	bulk	
39	RKPO-SET39	1 pcs	-	
42	RKPO-SET42	1 pcs	-	





	 <p>1/2" balancing and measuring valve (flowmeter)</p> <ul style="list-style-type: none"> • max. working pressure: 0.6 MPa (6 bar) • max. working temperature: 70°C • Kvs = 1,1 m³/h • regulation range: 0 - 5 l/min • measurement accuracy: ± 10% final value 	Packaging	
		Index	individual
	RKPP_T	1 pcs	100 pcs






	 <p>1/2" balancing and measuring valve (flowmeter)</p> <ul style="list-style-type: none"> • maximum working pressure: 0.6 MPa (6 bar) • maximum working temperature: 60°C • Kvs = 1,1 m³/h • regulation range: 0 - 5 l/min • measurement accuracy: ± 10% final value 	Packaging	
		Index	individual
	RKPP_TP	1 pcs	-

 	<p>1/2" x 3/4" nipple for RKPP_T flow meters</p>	Packaging	
		Index	individual
H [mm]	N10POR-C7	1 pcs	-
39	N10POR	1 pcs	-
42			





	<p>1/2" x 1/2" nipple for RKPP_TP flowmeters</p> <ul style="list-style-type: none"> • profile: 39 mm • compression fitting for 16x2 mm multilayer fittings included 	Packaging	
		Index	individual
	N10PORT-C7NEW	1 pcs	-

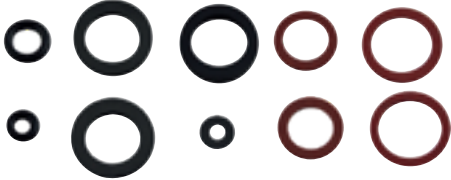




SPARE PARTS

		Description		
		1/2" cut-off valve for the manifold		
		Packaging		
H [mm]	Index	individual	bulk	
39	RKPO1-C7	1 pcs	-	
42	RKPO1	1 pcs	-	
		Thermostatic insert knob M30 x 1.5		
		Packaging		
		Index	individual	bulk
		RKPT2	1 pcs	-
		Thermostatic insert M30 x 1.5		
		Packaging		
H [mm]	Index	individual	bulk	
39	RKPT1-C7	1 pcs	-	
42	RKPT1	1 pcs	-	
		Nipple for thermostatic insert or cut-off valve • compression fitting for 16x2 mm multilayer fittings included		<div style="background-color: red; color: white; padding: 2px; display: inline-block;">NEW</div> Availability Q1 2023
		Packaging		
1/2" x 1/2"		Index	individual	bulk
		N10ZORZL-C7NEW	1 pcs	-

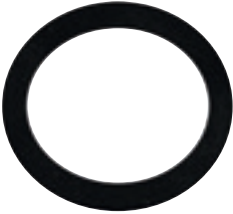



		Description	
		<p>Nipple for thermostatic insert or cut-off valve</p>	
		<p style="text-align: right;">Packaging</p>	
1/2" x 3/4"	<p>Index</p> <p>N10ZOR</p>	individual	bulk
		1 pcs	-
		<p>1/2" swivel drain valve with O-ring</p> <ul style="list-style-type: none"> • max. working pressure: 10 bar • max. working temperature: 100°C 	
		<p style="text-align: right;">Packaging</p>	
	<p>Index</p> <p>ZSR1</p>	individual	bulk
		1 pcs	50 pcs
		<p>1" air vent and drain unit for manifold</p> <ul style="list-style-type: none"> • manifold connection with seal • automatic air vent • drain valve with brass hose tip 	
		<p style="text-align: right;">Packaging</p>	
	<p>Index</p> <p>O25ZSR-C7NEW</p>	individual	bulk
		1 pcs	-
		<p>1" manifold plug with O-ring</p>	
		<p style="text-align: right;">Packaging</p>	
	<p>Index</p> <p>KOR5ZOR</p>	individual	bulk
		1 pcs	-
		<p>1" manifold bracket set</p>	
		<p style="text-align: right;">Packaging</p>	
	<p>Index</p> <p>LC10Y</p>	individual	bulk
		1 pcs	40 pcs

SPARE PARTS

		Description	
		Pipe rosette • white	
		Packaging	
Dimensions	Index	individual	bulk
15 mm	RGB15	5 pcs	100 pcs
16 mm	RGB16	5 pcs	100 pcs
18 mm	RGB18	5 pcs	100 pcs
20 mm	RGB20	5 pcs	100 pcs
22 mm	RGB22	5 pcs	100 pcs
25 mm	RGB25	5 pcs	100 pcs
28 mm	RGB28	5 pcs	100 pcs
		Double pipe rosette • white	
		Packaging	
Dimensions	Index	individual	bulk
15 mm	RRPB15	1 pcs	20 pcs
16 mm	RRPB16	1 pcs	20 pcs
18 mm	RRPB18	1 pcs	20 pcs
20 mm	RRPB20	1 pcs	20 pcs
22 mm	RRPB22	1 pcs	20 pcs
28 mm	RRPB28	1 pcs	20 pcs
		Double pipe rosette • chrome	
		Packaging	
Dimensions	Index	individual	bulk
18 mm	RGPC18	1 pcs	20 pcs
22 mm	RGPC22	1 pcs	20 pcs
		Pipe rosette • chrome	
		Packaging	
Dimensions	Index	individual	bulk
15 mm	RRPC15	2 pcs	40 pcs
16 mm	RRPC16	2 pcs	40 pcs
18 mm	RRPC18	2 pcs	40 pcs
20 mm	RRPC20	2 pcs	40 pcs
22 mm	RRPC22	2 pcs	40 pcs
25 mm	RRPC25	2 pcs	40 pcs
28 mm	RRPC28	2 pcs	40 pcs

		Description		
		Set of gaskets for gas heaters		
		Packaging		
		Index	individual	bulk
		UWOG	1 set	20 set
		Aluminium radiator gasket		
		Packaging		
Dimensions	Index	individual	bulk	
3/4"	GG34EKO	4 pcs	80 pcs	
		Aluminium radiators 1" plug gasket		
		GG4W		
		Packaging		
Dimensions	Index	individual	bulk	
1"	GG4W	4 pcs	-	
		Cast iron radiator gasket		
		Packaging		
Dimensions	Index	individual	bulk	
5/4"	GG54EKO	4 pcs	80 pcs	
		EKO gasket for cast iron unions		
		Packaging		
Dimensions	Index	individual	bulk	
1/2"	USDZ12	2 pcs	800 pcs	
3/4"	USDZ34	2 pcs	800 pcs	
1"	USDZ1	2 pcs	800 pcs	

SPARE PARTS

		Description																	
		Rubber gasket for 1" cast iron unions																	
<table border="1"> <thead> <tr> <th>Dimensions</th> <th>Index</th> <th>individual</th> <th>bulk</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>USDZ1G</td> <td>2 pcs</td> <td>800 pcs</td> </tr> </tbody> </table>		Dimensions	Index	individual	bulk	1"	USDZ1G	2 pcs	800 pcs										
Dimensions	Index	individual	bulk																
1"	USDZ1G	2 pcs	800 pcs																
		Watermeter fiber gasket																	
<table border="1"> <thead> <tr> <th>Dimensions</th> <th>Index</th> <th>individual</th> <th>bulk</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>USW1</td> <td>4 pcs</td> <td>800 pcs</td> </tr> <tr> <td>3/4"</td> <td>USW34</td> <td>4 pcs</td> <td>800 pcs</td> </tr> </tbody> </table>		Dimensions	Index	individual	bulk	1"	USW1	4 pcs	800 pcs	3/4"	USW34	4 pcs	800 pcs						
Dimensions	Index	individual	bulk																
1"	USW1	4 pcs	800 pcs																
3/4"	USW34	4 pcs	800 pcs																
		EPDM rubber washer for 6/4" circulation pump																	
<table border="1"> <thead> <tr> <th>Dimensions</th> <th>Index</th> <th>individual</th> <th>bulk</th> </tr> </thead> <tbody> <tr> <td>44x32x3 mm</td> <td>GG10</td> <td>1 pcs</td> <td>-</td> </tr> </tbody> </table>		Dimensions	Index	individual	bulk	44x32x3 mm	GG10	1 pcs	-										
Dimensions	Index	individual	bulk																
44x32x3 mm	GG10	1 pcs	-																
		Teflon tape																	
<table border="1"> <thead> <tr> <th>Dimensions</th> <th>Index</th> <th>individual</th> <th>bulk</th> </tr> </thead> <tbody> <tr> <td>12 x 10 x 1,205 mm</td> <td>T01</td> <td>1 pcs</td> <td>1000 pcs</td> </tr> <tr> <td>12 x 10 x 0,1 mm</td> <td>T04</td> <td>1 pcs</td> <td>1000 pcs</td> </tr> <tr> <td>19 x 15 x 0,2 mm</td> <td>T05</td> <td></td> <td></td> </tr> </tbody> </table>		Dimensions	Index	individual	bulk	12 x 10 x 1,205 mm	T01	1 pcs	1000 pcs	12 x 10 x 0,1 mm	T04	1 pcs	1000 pcs	19 x 15 x 0,2 mm	T05				
Dimensions	Index	individual	bulk																
12 x 10 x 1,205 mm	T01	1 pcs	1000 pcs																
12 x 10 x 0,1 mm	T04	1 pcs	1000 pcs																
19 x 15 x 0,2 mm	T05																		

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Do you have any questions?

Do you need technical support, product information before buying or are you looking for a spare part? Please contact us! Our advisors will provide comprehensive answers to your questions.



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