

RBM

R.B.M. S.p.A.

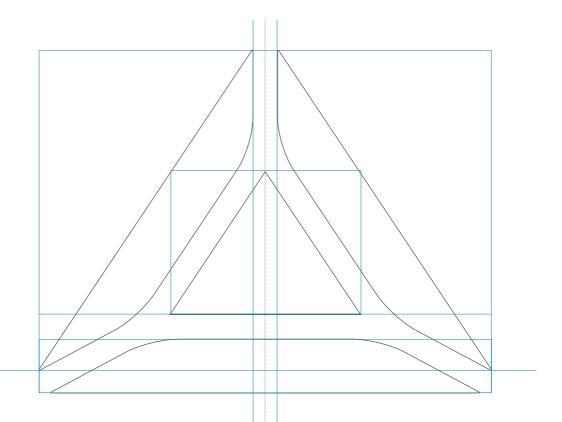
Subject to management and coordination pursuant to Article 2497-bis of the Italian Civil Code by GLBS S.r.l. a socio unico VAT No. 00551250988

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SHARE CAPITAL: 17.000.000€



RBM CAT 2024







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RBM designs and manufactures **highly innovative components**, hydro-thermo-sanitary systems and climate wellness solutions, distinguished by their highly efficient performance and recognised effectiveness. We have always focused on solutions that operate **invisibly and silently**, helping to simplify and improve quality of life, with an emphasis on features guaranteeing maximum ease of installation and use.

Who We Are

Products

Founded in 1953 by the Bossini family in Lumezzane, RBM has become a leading company in the plumbing and heating industry, operating worldwide.

An advanced and continuously evolving company, which today boasts **5 production plants in the Brescia area** (3 dedicated to the production of brass components and 2 for the processing of plastics), **2 branches**, **3 sales offices and over 300 employees**.

The company develops **all of its products at each stage**, with the aim of providing the best quality level on the market. From the mould designed in the internal technical department, the attention to each detail, up to the precise management of customer care processes.

RBM's experience has grown by keeping pace with a world undergoing constant changes, believing in and promoting the design and production of systems and components with the highest technological content, focusing on the development of state-of-the-art plumbing and heating systems, able to satisfy market needs, anticipate competition and be the first to oversee emerging sectors such as **climate comfort**, **plumbing and heating efficiency and the effective management of fluid distribution**.

RBM maintains the maximum quality control of its products via the constant development of internal skills and a **vertical integration of its production activities.**

RBM manufactures all the connection and management components of the modern plumbing and heating system.

The product range has been developed following and anticipating the needs of the sector thanks to the work of the internal team that operate daily in the field.

The commitment of the **RBM Research and Development department** is aimed at the design of technologically advanced components and systems, capable of overcoming the increasingly more challenging tests and the pressing market needs.

The goal is to identify solutions that are better, easier to use, more convenient and reliable to achieve and maintain the trust of each customer over time.

PRODUCT CERTIFICATIONS

RBM components are manufactured and tested in accordance with the main regulations and standards in force. Added to this is the guarantee of product certifications achieved internationally.

Most RBM products suitable for drinking water conveyance have achieved different certifications (e.g. DHW) which certify their suitability for use.

See the catalogue to check the certified products. PRODUCT APPLICATION FIELD: Unless otherwise specified, RBM products are suitable for use with water and water + glycol.

INSURED PRODUCTS

RBM products are insured against product liability.

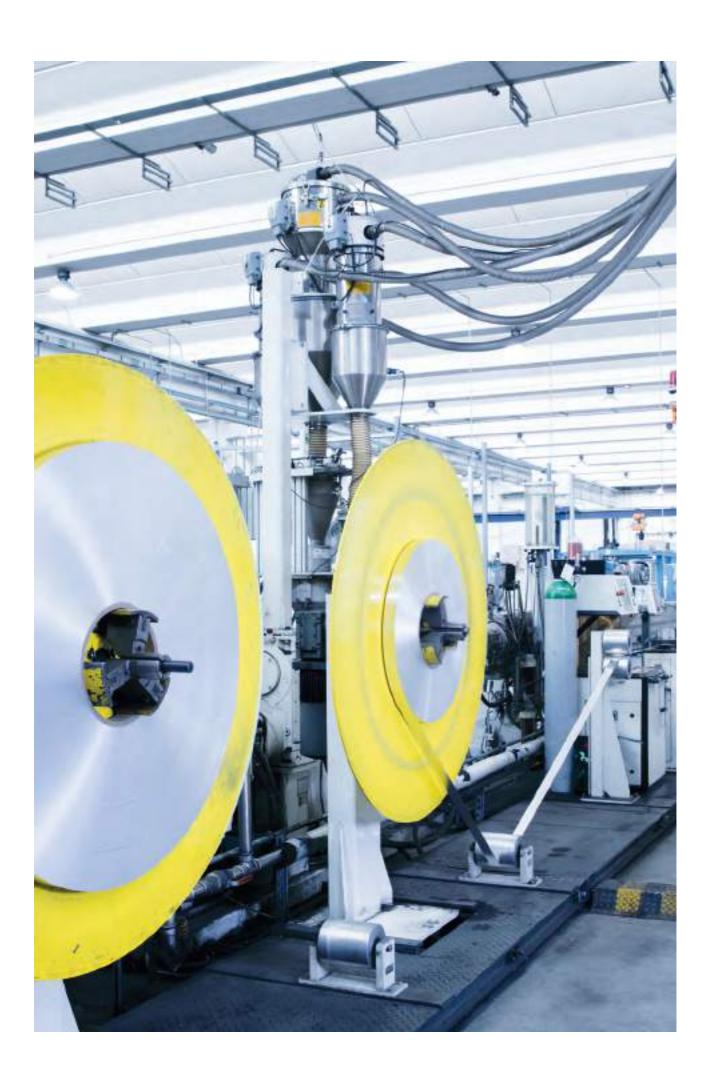
In the event of a claim, it is recommended that it be reported within 72 hours of the event.

Any communication in this regard must necessarily be received within 72 hours of the damage verified.

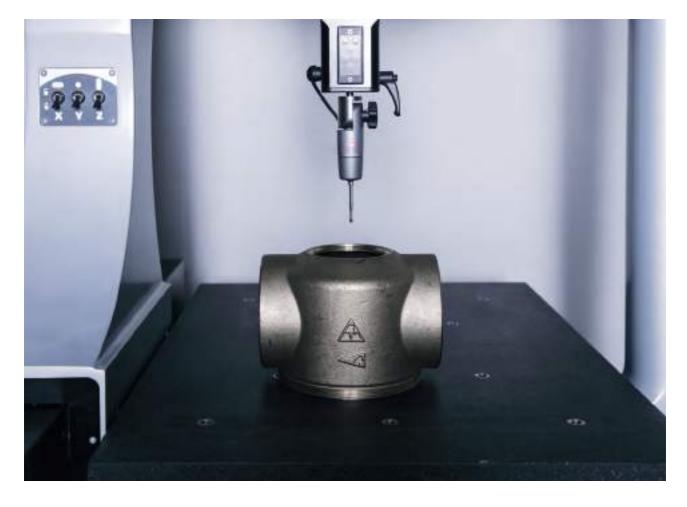
For details regarding the Product Liability Policy, please refer to the section 'Product Liability Policy' on the 'Quality Certificate' page at the end of this catalogue.

COMPANY CERTIFICATION

RBM obtained the **UNI EN ISO 9001** certification in 1992, issued by ICIM and recognised by leading organisations in Italy and worldwide.







R&D

RBM I-BOX® is the place for **hydraulic research** where theoretical results derived from inventive and creative processes are transformed into technological innovation.

Over 1000 m² of continuous interaction between the **R&D**, **Laboratory**, **Training functions**, to develop and improve products for the HVAC sector (heating – ventilation and air conditioning).

RBM I-BOX® addresses each need on an experimental level, observing phenomena, formulating hypotheses and developing prototypes.

The tested hypotheses are the raw material of the virtuous circle that leads to the identification of the best process/product.

RBM I-BOX® is a a team of **trained technicians**, **industry experts and new graduates**, who work in a **State-of-the-art laboratory**, capable of carrying out simulations, functional hydraulic tests, mechanical tests and endurance tests.

RBM I-BOX® is a **Training support area** where ideas are illustrated to technicians, installers, designers, customers, as part of training courses organised in a modern interactive classroom.

Training also includes the use of **EMOTIONAL BOXES** where the operation of various products can be observed in real time.

MAGNETIC FILTRATION AND EFFICIENCY

RBM has invested considerable resources in the study of **mechanical magnetic filtration** thus defining the **concept of magnetic efficiency**. The constant and extensive research has led to the development of a series of magnetic filters among the most efficient on the market, with the aim of preserving boiler heat exchangers, improving their efficiency and useful lifespan.



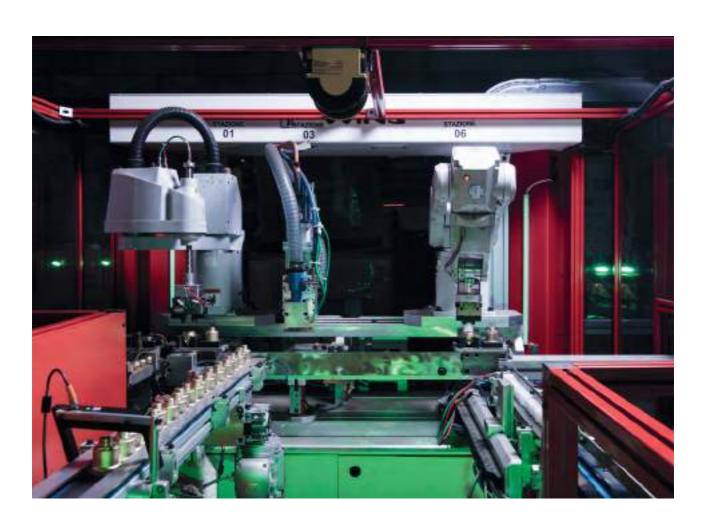


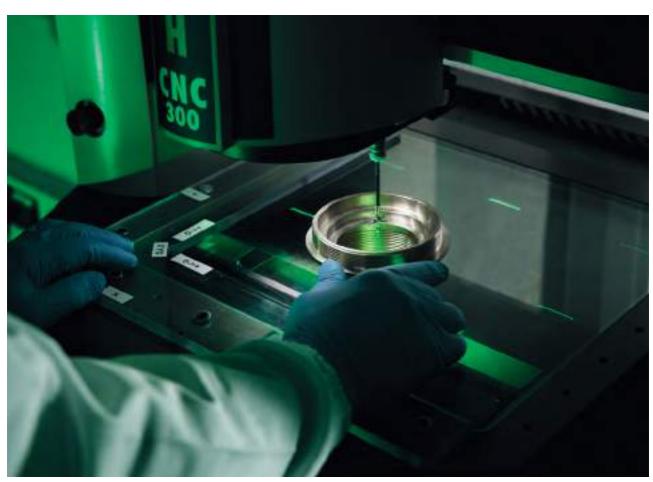
CSR policy

We are convinced that spreading the **culture of climate welfare** and working concretely to make it possible for every individual we will be able to **CREATE A FUTURE** in which cutting-edge technology and sustainability support each other, increasing the mutual value and shared benefits.

We want to guarantee a governance marked by integrity, transparency and respect, in order to disseminate good business practices and inspire new sustainability standards.

That's why we have defined our CSR vision with a **5-pillar** strategy.





RBM Vision

1. GOING INTERNATIONAL

Opening up to international markets, both upstream and downstream, is essential to geographically diversify our business, spreading risks and investments across European and non-European markets.

This international outlook also helps to get to know and compare different cultural contexts in order to develop skills that will be useful in a changing, global environment.

2. INNOVATING

We are paying increasing attention to energy saving and to production strategies and processes that reduce the impact on the environment.

This standing innovation approach is on the increase, and will include partnerships with leading schools or with our customers and suppliers, to extend markets and enable new investments.

The Research and Development programme is also aiming to respond to new market needs in order to improve production processes, products and services. We want to make them more effective, more efficient and more environment-friendly.

3. REDUCING OUR CARBON FOOTPRINT

Reducing our carbon footprint helps to fight climate change, and is a responsible way of increasing sales while improving environmental protection. Calculation of carbon footprint takes into account all sustainability issues, such as reducing energy consumption, transport, waste, circular economy, development of alternative construction systems, etc.

Reducing the carbon footprint is part of the European CO2 emissions reduction target (Fit for 55).

4. PARTNERSHIP - TERRITORY

Partnership and collaboration among industry players are the keys to success in developing RBM in an open, dynamic and adaptive way.

We want to make our partners, customers, suppliers and subcontractors aware of the ecological transition and encourage them to adopt good sustainability practices. In addition, we do not forget the context in which we operate: RBM is close to the territory and its communities through concrete support activities and participation and promotion of social, cultural and sporting initiatives.

5. DEVELOPING QUALITY OF LIFE IN THE WORKPLACE

Quality of Life in the workplace is crucial if we are to keep our teams motivated and healthy over the long term. Our aim is to provide a safe and stimulating working environment where everyone can express their individual potential.



01. HYDROTHERMAL DISTRIBUTION

- **01.** Boiler room distribution
- **02.** Zone valves
- **03.** Utility systems
- **04.** Radiator and fan coil distribution
- **05.** Dhw distribution
- **06.** Pressure reduction
- **07.** Control and safety components
- 08. Ball valves, check valves and shut-off devices
- **09.** Fittings
- **10.** Water distribution
- 11. Equipment and tools

02. ENERGY EFFICIENCY

- **20.** Water treatment
- **21.** Valves for radiator and terminal control
- 22. Hydraulic balancing

03. CLIMATE COMFORT

30. Radiant climate control systems

SERVICE

60. Service

CODE	Р	CODE	P	CODE	Р	CODE	Р
30310	10	40620	27	100600	36	340600	3
30320	10	40670	27	100700	36	350500	3'
30370	10	40700	27	180100	36	350540	3
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30410	10	40720	28	180300	36	350600	3
30420	10	40770	28	180400	36	350640	3
30470	10	40800	28	200400	36	350650	3
30500	10	40810	28	200410	36	350700	4
30510	10	40820	30	200500	36	360500	4
30520	10	40870	31	200510	36	360540	4
30570	12	40900	32	220400	36	360550	4
30600	12	40910	32	220420	36	360600	4
30610	14	40920	33	220500	36	360640	4
30620	14	40970	35	220530	36	360650	4
30670	14	50310	35	243210	36	360700	4
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30720	15	50610	35	250550	37	370560	4
80770	18	50710	35	250600	37	370570	4
30800	18	50810	35	250610	37	370660	4
30810	18	50910	35	250650	37	380410	4
30820	18	60310	35	270300	37	380450	4
30870	18	60410	35	270310	37	411020	4
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31310	23	80400	36	300300	39	429013	4
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7070650	123	7820661	127	8123250	129	8371230	134
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7730690	125	8111430	129	8320630	133	8512620	144
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7740690	125	8111530	129	8330610	133	8512650	144
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36734002	280	36911170	289	37410712	306	38412000	311
36735002	280	36911200	289	37410902	306	38412010	311
36741002	280	36911250	289	37411002	307	38412500	312
36742002	280	36911260	289	37411102	307	38412510	312
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36910870	286	37400012	306	38130900	309	39300600	317
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40510000	326	1810020*	341	320400*	344	35000032(d)	348
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41246000	329	22500012*	342	3371 34NI	347	3615R1300	349
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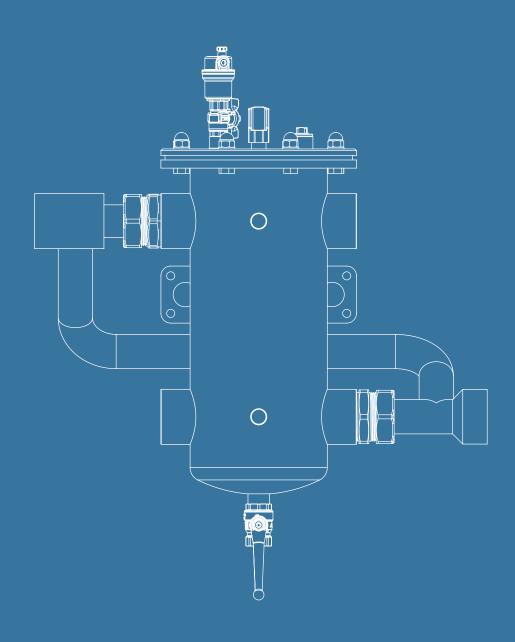
RBM01. HYDROTHERMAL DISTRIBUTION

GROUP		CATEGORY		LINE	
01.		01.01		Hydraulic separators	10
Boiler room		Boiler room distribution		Magnetic hydraulic separators	12
distribution	8		10	Multimix booster units DN25	14
				Multimix booster units DN32	18
				Accessories for multimix booster units	23
02.	24	02.01	26	Compact zone valves	26
Zone valves	24	Zone valves	20	Actuators for compact zone valves	28
03. Utility systems	29	03.02 Utility satellites	30	Utility satellites	30
04.	34	04.01 Radiator and fancoil distribution	on 35	Manifolds for air-conditioning systems	35
Radiator and fancoil				Manifolds for large flow rates	39
distribution	34			Accessories for manifolds	40
				Plastic housing boxes	43
05.		05.01		Manifolds for dhw systems	45
Dhw distribution	44	Dhw distribution	45	Plastic housing boxes	48
				Thermostatic mixers	51
06.		06.01		Diaphragm pressure reducing valves	56
Pressure	52	Pressure reduction	54	Piston-operated pressure reducing valves	62
reduction				Water hammer damper	66

GROUP		CATEGORY		LINE		
07.		07.01 Pressure control and safety		Safety relief valves	70	
Control and safety components				By-pass valve	75	
				Filling units	76	
	69	07.03 Fluids security control	80	Leak detectors	80	
		07.04 Temperature control and safety	83	Anti-freeze valves	83	
08.		08.01		Ball valves	86	
Ball valves, check valves and	85	Ball valves, check valves and shut-off devices	86	Check valves	94	
shut-off devices				Accessories	95	
09.	96		97	Fittings for valves and piping	97	
Fittings				Fittings for manifolds	106	
10.		10.01 Multi-layer pipes		PE-Xc bare multi-layer pipe	110	
Water distribution				PE-Xc multi-layer thermally coated pipe	111	
		1		PE-Xc multi-layer pipe with anti-condensation coating	112	
				PE-RT bare multi-layer pipe	113	
	109			PE-RT multi-layer thermally coated pipe	114	
				PE-RT multi-layer pipe with anti-condensation coating	115	
		10.02		Press fittings for multi-layer pipes	118	
		Fittings for multi-layer pipes	117	Shut-off taps	127	
				Compression fittings for multi-layer pipes	128	
11.		11.01		Equipment for compression valves and fittings	132	
Equipment	131	Equipment and tools	132	Equipment for multi-layer system	133	
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01. HYDROTHERMAL DISTRIBUTION

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01. BOILER ROOM DISTRIBUTION

01.01 BOILER ROOM DISTRIBUTION

Hydraulic separators

Magnetic hydraulic separators

Multimix booster units DN 25

Multimix booster units DN 32

Accessories for multimix booster units

10



Series 617.A

Threaded, pre-dimensioned hydraulic separator.

Painted steel body. Valves and degasser are made of brass. PTFE ball valves seals. Elastomer degasser seals. $Threaded\,union\,connections\,F\,UNI\text{-}EN\text{-}ISO\,228.$ Front connection for 1/2" F UNI-EN-ISO 228 accessories.

 ${\it Max\,operating\,pressure:}$

- Separator body 10 Bar
- Ball valve 25 Bar
- · Degasser 10 Bar

Allowed temperatures:

- Degasser 0 \div +115 $^{\circ}$ C
- Ball valve -15 \div +120 $^{\circ}$ C

Code	Measure	Flow rate (I/h)	Pack	Outer	Cat.
617.06.12	1"	2.500	1	60	01.01
617.07.12	1"1/4	4.000	1	60	01.01
617.08.12	1"1/2	6.000	1	42	01.01
617.09.12	2"	8.500	1	30	01.01



 $Supplied\,complete\,with\,MEGALUFT\,degasser, ball\,valve\,to$ $discharge\ bottom\ and\ mud\ drainage\ and\ thermal\ insulation$ shell.



Series 617.B

Flanged, pre-dimensioned hydraulic separator.

Painted steel body. Valves and degasser are made of brass. PTFE ball valves seals. Elastomer degasser seals. PN16 flanged connections. Connection for 1/2"F UNI-EN-ISO 228 accessories.

 $Max\,operating\,pressure:$

- Separator body 10 BarBall valve 25 Bar
- · Degasser 10 Bar

- Allowed temperatures: • Degasser $0 \div +115$ °C

•	Ball valve -15 \div +120 $^{\circ}$ C	
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Code	Measure	Flow rate (I/h)	Pack	Outer	Cat.
617.09.72	DN 50	9.000	1	1	01.01
617.10.72	DN 65	18.000	1	1	01.01
617.11.72	DN 80	28.000	1	1	01.01
617.13.72	DN 100	56.000	1	1	01.01
617.14.72	DN 125	75.000	1	1	01.01
617.15.72	DN 150	110.000	1	1	01.01



 $Supplied\,complete\,with\,MEGALUFT\,degasser, ball\,valve\,to$ discharge bottom and mud drainage and thermal insulation

Flange suitable for coupling with counter-flange UNIEN 1092-1.



HYDRAULIC SEPARATOR

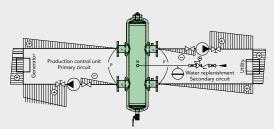
The **Hydraulic separator** is a pre-dimensioned manifold with the task of making the primary and secondary circuits independent if, hydraulically connected, they are equipped with their own circulation pumps.

THE PURPOSE

Insertion of the Separator, as a component of hydraulic separation between the two circuits, mainly provides the following functions:

- cancels the mutual infl uence between the pumping stations of the different circuits;
- promote the sedimentation, the collection and discharging of micro-impurities suspended in the fluid;
- promotes the deaeration of the circuits by means of the automatic removal of the dissolved gases.

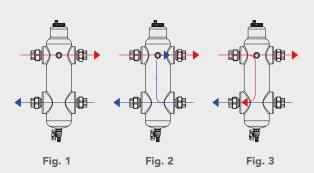
To facilitate the assembly of auxiliary components, such as temperature and pressure control components, system filling circuit, safety pipe for connection to expansion tank, etc... all RBM Hydraulic separators are supplied with threaded sleeves.

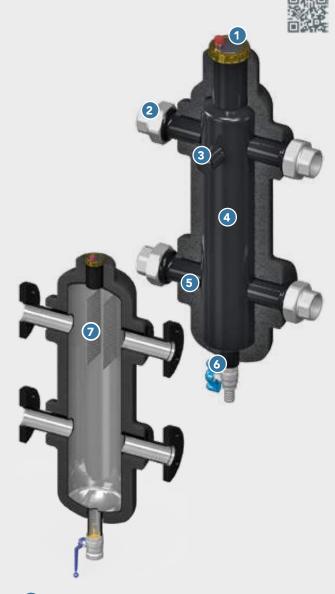


Typical diagram of insertion of the hydraulic separator which separates the primaryand secondary circuit

THE CHOICE

The Hydraulic separator is chosen based on the maximum flow rate recommended for the connection nozzles. During the designing phase, pay special attention to possible temperature variations which the circuits can undergo due to induced mixing inside the Hydraulic separator. A secondary circuit with flow rate higher than that circulating in the primary circuit (fig. 2), generates, in fact, through the Hydraulic separator, a flow temperature below that of the primary circuit.





- 1 Air venting valve
- 2 Threaded / flanged connections to connect primary and secondary circuits
- 3 Threaded sleeve to install accessories
- 4 Burnished steel body
- 5 Thermal insulation shell
- 6 Ball valve to discharge sludge
- 7 Double internal sludge/flow septum

Installation and maintenance facilitated by Funion connections with flat seat;

0

Self-cleaning: equipped with discharge cock;

Supplied in a kit complete with insulation shell and gas exhaust device.



Series 3813

Sep MG Compact Inspectable hydraulic separator with compact magnetic sludge remover filter for thermo-cooling control units.

Main body in painted steel on the outside. Steel cover painted on the outside. Ball valve body and air vent valve in brass. Elastomer seals.

AISI stainless steel filter basket. Threaded process connections UNI EN ISO 228.

- Pressure class PN10
- Max operating temperature 95 $^{\circ}$ C
- Neodymium magnet
- Degree of filtration 100 µm

Features:



Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
3813.09.00	G 2"	87,00	1	1	01.01

Patented.

Hydraulic separation. Direct magnetic filtration. Inspectionability.

Degassing.
Sludge removal.

Pressure gauges not supplied, must be ordered separately, code 2549.005 for scale 0-4 bar - code 2579.005 for scale 0-10 bar



Series 3974

Thermal shell Insulation casing consisting of semicasings and expanded polyethylene cover with external antiscratch coating.

Half-bearings fixed with double-sided adhesive tape already applied.

- Fire behaviour class I
- Density 33 kg/m³
- Max operating temperature -40 ÷ +90 °C





The rmal insulation suitable for insulating the Sep MG Compact magnetic hydraulic separator



SEP MG COMPACT

Hydraulic separator, degasser and magnetic sludge remover filter

SEP MG Compact concentrates in a single compact component the functions of a hydraulic separator, magnetic sludge remover filter and degasser, suitable for protecting and separating the primary and secondary circuits of central heating and cooling unit plants.

SEP MG Compact allows you to solve:

- hydraulic separation system problems where, among other things, a constant power supply temperature to the utilities is required for the absence of uncontrollable mixing phenomena;
- the elimination of pollution by sand and rust particles formed as a result of corrosion and scaling, reducing the danger of wear and consequent damage to all components making up the system.

Ensures hydraulic separation between the primary and secondary circuits

Removes any impurity

It ensures the energy and functional efficiency of the system

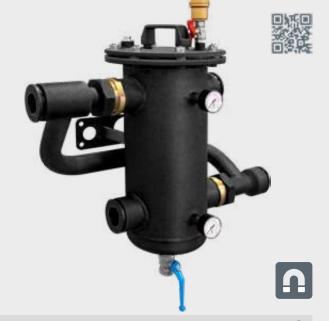
Typical application in industrial, com-mercial and medium and large-scale civil systems

Reinforced stainless steel filtering mesh with 100 micron filtering degree

Equipped with an easily accessible dosing point for adding treatment chemicals

Limited overall dimensions (in relation to the product category)

Reversible connections



Optional in-line installation on boiler rooms

Reduced maintenance costs:

- > magnet protected from contact with water, easy to clean
- > the large removable basket with bottom check valve prevents impurities from falling into the cylindrical body
- > the large filtering surface reduces the frequency of filter maintenance
- > the possibility of cleaning the filter without emptying completely reduces the amount of chemical additives to be replenished after each maintenance operation.
- > filter clogging control gauges on request.



to eliminate air at the filling stage, complete with the ball shut-off valve

2 Inspection cover

3 Magnetic filtering unit

powerful neodymium magnet to capture ferrous particles such as rust that form due to corrosion during normal operation of a system, metal debris, processing residues, etc... The magnet is protected from direct contact with water by a removable conduit that facilitates cleaning the filter

4 Sudden section increase

it causes the fluid to slow down. The settling of particles due to the effect of gravity is favoured $\,$

5 Injection and separation kit

Anchorage of the KIT with unused sleeve shut- off fitting can.

Wall fixing bracket

Filtering wire mesh

stainless steel stretched mesh (100 micron filtration degree) contained in a basket that can be easily pulled out from above. This is equipped with an automatic closing shutter, located at the bottom, to prevent impurities from leaking during maintenance

8 Revolving fitting

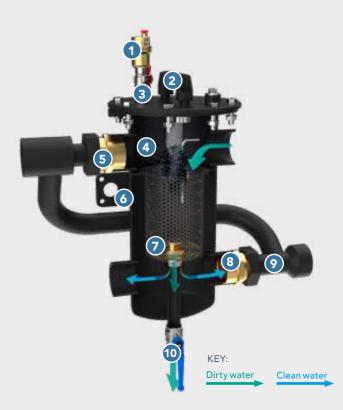
for the reversibility of the injection and separation kit

Injection and separation kit:

- It prevents parasitic mixing with the return fluid from the air conditioning system, typical of traditional 4-pipe hydraulic separators, with the consequent inability of the system to guarantee a constant temperature on the secondary circuit;
- Eliminates thermal stratification phenomena and eliminates the need to reverse the connections for hot and cold distribution;
- Absence of any reciprocal influence between the primary and secondary circuit pumping system;
- Absence of a return circulation even if one of the two circuits stops pumping completely.

10 Bottom valve

for draining the separated, decanted and accumulated material inside the basket.







Multimix Multimix booster unit.

for heating/cooling systems.
Black water-painted steel body.
Module supplied complete with EPP insulation casing (density 60 g/l) serving as casing and wall support of the whole mixing and booster unit.
Manifold can be transformed, as needed, into manifold/hydraulic separator by the manual opening of a shutter on the manifold (supplied in manifold/separator configuration).

Wall-mounted hydraulic manifold for 2 or 3 zones

1" M threaded connections from the heat generator. Connections on the user side with 1"1/2 F threaded unions.

Connection set-up for 3/4" F safety unit (delivery) and connection for 3/4" F expansion tank (return). Manifold can be coupled to RD25 - RF MIX25 - RM MIX25 modules.

- Maximum operating pressure 6 bar
- Maximum operating temperature 110 °C
- Minimum cooling temperature 7 °C
- Size lxhxp: 402x525x250 mm (2 branches) -555x525x250 mm (3 branches)

Code	Measure	Ways	Pack	Outer	Cat.
3195.06.02	DN 25	2	1	1	01.01
3196.06.02	DN 25	3	1	1	01.01



Series 3197

RD Direct booster unit.

High temperature unit for heating/cooling systems complete with:

- High efficiency circulator model model Wilo Yonos Para 25/6;
- 2 shut-off ball valves on system delivery and return with built-in thermometer - 1" F connection;
- Check valve built into system return ball valve, can be excluded for counter washing.
- Maximum operating pressure 6 bar
- Maximum operating temperature 110 °C
- Minimum cooling temperature 7 °C

Code	Measure	Pack	Outer	Cat.
3197.06.02	DN 25	1	1	01.01



Series 3198

RF MIX mixing unit.

Fixed point mixed unit for heating only systems, complete with:

- 3-way mixer valve and thermostatic actuator;
- Safety contact thermostat on supply pipe (only model RF MIX B.T.);
- High efficiency circulator model model Wilo Yonos Para 25/6;
- 2 shut-off ball valves on system delivery and return with built-in thermometer - 1" F connection;
- Check valve built into system return ball valve, can be excluded for counter washing.
- Maximum operating pressure 6 bar
- Maximum operating temperature 110 °C

RF MIX B.T. - Low Temperature Fixed Point Booster

Code	Measure	Pack	Outer	Cat.
3198.06.00	DN 25	1	1	01.01

Supply inclusive of thermostatic head model TL50. Temperature adjustment range $25 \div 52 \, ^{\circ} \text{C}$

RF MIX A.T. - High Temperature Fixed Point Booster

Code	Measure	Pack	Outer	Cat.
3198.06.10	DN 25	1	1	01.01

Supply inclusive of thermostatic head model TL70S. Temperature range $40 \div 70 \,^{\circ}\text{C}$



Kit components (booster module and thermostatic head) supplied in 2 separate packages.





RM MIX RM MIX mixing unit.

 $Mixed\,unit\,designed\,for\,shifting\,temperature\,for$ $heating/cooling\ systems, complete\ with:$

- 3-way mixer valve (Actuator to couple separately $depending\,on\,electronic\,temperature\,control$ $chosen-see\,range\,of\,actuators);$
- High efficiency circulator model model Wilo Yonos Para 25/6;
- $\bullet \ 2\,shut\text{-}off\,ball\,valves\,on\,system\,delivery\,and\\$ return with built-in thermometer - 1" F connection;
- · Check valve built into system return ball valve, can be excluded for counter washing.
- Maximum operating pressure 6 bar
- Maximum operating temperature 110 °C
- Minimum cooling temperature 7 °C

Code	Measure	Pack	Outer	Cat.
3199.06.02	DN 25	1	1	01.01

Optional actuator series 3232 and 3233 to be ordered separately depending on the electronic temperature control chosen.



MULTIMIX DN25



RBM MULTIMIX is a hydronic distribution unit for thermal systems capable of managing 2 or 3 zones. It is characterised by compact size allowing it to be installed right below the boiler.

The different thermal zones can be supplied by 3 different types of booster unit.

The types of booster units are as follows:

- RD: direct booster unit (without mixing, for zones supplied with water at the same temperature(*) as the one produced by the heat generator).
- **RF MIX:** booster unit mixed at fixed point (constant temperature). RF MIX is supplied with two different thermostatic control models for heating only systems in high or low temperature.
- RM MIX: modulating mixed booster unit (shifting temperature). Can be coupled to different electric rotary actuators, chosen depending on the type of temperature control selected.
- (*) minus the natural "thermal drop" on the hydraulic separator.



Combined and modular distribution system

Modular insulation shell (in EPP 40 g/l) with self-bearing function for wall mounting

Hydraulic distribution manifold/separator. RBM MULTIMIX DN25 is equipped with an innovative system which, through the manual intervention of a threaded shutter, can separate or joint the supply chamber with the return chamber, thus transforming the manifold/separator into a simple manifold and vice versa

Possibility of installing module even underneath boiler thanks to its compact size

Simplified hydraulic connections and seals ensured by flat stops

Possibility of simultaneous installation of different types of booster units according to different requirements (e.g. 3 direct / 3 mixed / 2 direct + 1 mixed / 1 direct + 2 mixed)

Set up for installation of a automatic temperature control unit with external probe for shifting temperature mixing unit.



CONFIGURATION WITH SHUTTER OPEN: "COMMUNICATING CHAMBERS"

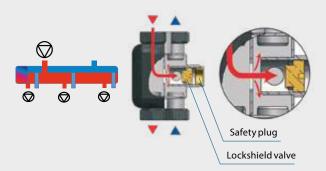
(standard configuration in which the module is supplied).

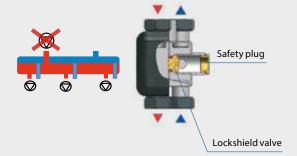
The communication between the supply and return chambers makes it possible to manage a system with one or more circulators which interact upstream and downstream of the manifold/separator.

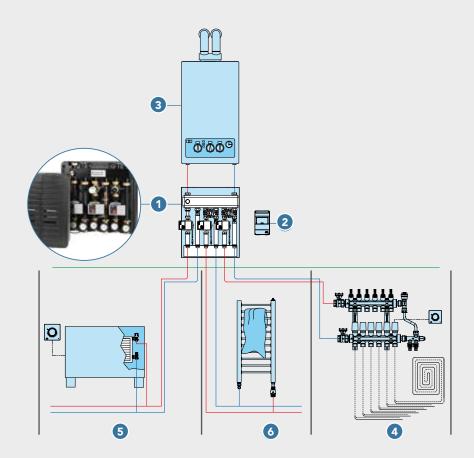
CONFIGURATION WITH SHUTTER CLOSED: "SEPARATE CHAMBERS".

(configurazione standard in cui viene fornito il modulo).

Configuration necessary when there is no circulator upstream of the manifold which supplies it directly.







- 1 RBM MULTIMIX distribution unit
- 2 Temperature control
- 3 Boiler

- 4 Underfloor circuit (RM MIX low temperature)
- 5 Fan-coil circuit (RD high temperature)
- 6 Radiator circuit (RF MIX high temperature)



Multimix S32 Hydraulic separator MULTIMIX S32.

Hydraulic separator with 1"1/2 M threaded connections, body made of galvanised steel (Fe 37.1) colour RAL 9004, complete with polyurethane foam insulation covered with aluminium sheet. Complete with set-up for:

- Air vent 1/2" F connection (unplugged when supplied - any plug to be provided by the installer):
- 1/2" F safety unit connection (unplugged when supplied - any plug to be provided by the installer);
- System sludge drain (2" F hole complete with plug when supplied and positioned on the opposite side of the separator with respect to the manifold);
- 1"1/4 F threaded blind hole on the bottom for fastening the support foot (foot not included).
- Qn max 6.5 m³/h
- · Maximum operating pressure 6 bar
- Maximum operating temperature 120 °C

Code	Measure	Pack	Outer	Cat.
3219.07.02	DN 40	1	1	01.01



Series 3222

Insulated pipe kit to connect Multimix S32 vertical separator and Multimix C32 zone manifold.

Pipes supplied complete with 2 1"1/2 x 2" reducing couplings for connection on Multimix S32 hydraulic separator side.

- Qn max 6.5 m³/h
- $\bullet \ \ Maximum \ operating \ pressure \ 6 \ bar$
- Maximum operating temperature 100 $^{\circ}\text{C}$
- Capacity 4.81

Code	Measure	Ways	Pack	Outer	Cat.
3222.07.02	DN 32	2-3	1	1	01.01
3222.07.12	DN 32	4-5	1	1	01.01



Series 3223

Multimix C32 Multimix C32 zone manifold.

Wall-mounted zone manifolds with double chamber for 2, 3, 4 and 5 zones for heating/cooling systems

2" M threaded connections from the heat generator - centre distance 125 mm, connections to the areas with 2" F threaded fittings - centre distance 125 mm

Steel body in black water paint (ST37.1 - RAL 9004), complete with black EPP insulation (density 40 g/l). Square profile manifold.

Supply chamber equal to Ø52 mm (for DN50). Return chamber equal to Ø41 mm (for DN40). 1" F connection for safety unit (delivery). 3/4" F connection for expansion tank (return). Possibility of screwing mixing units set up for metering RD25 CONT, RF25 CONT and RM25 CONT by means of specific reductions code 3237.06.02

- Maximum power 120 kW (Δt 20 °C)
- Maximum operating pressure 6 bar
- Maximum operating temperature 120 °C
- Minimum operating temperature 7 °C

Code	Measure	Ways	Pack	Outer	Cat.
3223.07.02	DN 32	2	1	1	01.01
3224.07.02	DN 32	3	1	1	01.01
3225.07.02	DN 32	4	1	1	01.01
3226.07.02	DN 32	5	1	1	01.01





Wall support kit for Multimix C32 zone manifold.

Code	Pack	Outer	Cat.
3227.00.02	1	1	01.01



Series 3228

RD32 RD32 Direct booster unit.

High temperature unit for heating/cooling systems complete with:

- High efficiency circulator, model Wilo Yonos Para 30/1-6;
- Ball valve with thermometer on system supply and return line;
- Spacer fitting with check valve;
- Black EPP insulation (density 40 g/l).

Maximum flow rate 3000 l/h Maximum power ($\Delta t = 20^{\circ}C$) 69,7 kW DN32 - 1"1/4 nominal diameter Brass ball valves Check valve in acetalic resin (POM) Elastomer gaskets 1"1/4 F x 2" M connections

- Maximum operating pressure 6 bar
- Maximum operating temperature 120 °C
- Minimum cooling temperature 11 °C

Code	Measure	Pack	Outer	Cat.
3228.07.02	DN 32	1	1	01.01





Series 3229

RM MIX32 RM MIX32 mixing unit.

Mixing unit for heating/cooling system complete with:

- 3-way mixer valve (Actuator to couple separately according to temperature control chosen - see range of actuators);
- High efficiency circulator, model Wilo Yonos Para 30/1-6;
- Ball valve with thermometer on system supply and return line;
- Spacer fitting with check valve;
- Black EPP insulation (density 40 g/l).

Maximum flow rate 2400 l/h Maximum power ($\Delta t = 20^{\circ}C$) 41.3 kW DN32 - 1"1/4 nominal diameter Brass ball valves Check valve in acetalic resin (POM) Elastomer gaskets 1"1/4 F x 2" M connections

- Maximum operating pressure 6 bar
- Maximum operating temperature 120 °C
- Minimum cooling temperature 11 °C

Code	Measure	Pack	Outer	Cat.
3229.07.02	DN 32	1	1	01.01



 $Optional\ actuator\ series\ 3232\ and\ 3233\ to\ be\ ordered\ separately\ depending\ on\ the\ electronic\ temperature\ control\ chosen.$







RD25 CONT Direct booster unit, set up for heat metering, RD25 CONT.

High temperature unit for heating/cooling systems complete with:

- High efficiency circulator, model Wilo Yonos Para 25/1-6;
- 21" F ball valves on system delivery and return, each complete with thermometer;
- Check valve built into the system return ball valve (can be excluded for counter washing);
- 1" L 130 mm polymer template on system return line for future calorimeter installation with nQ 2.5 m³/h/Microclima HC25 model (various models available);
- $\bullet \ \ Delivery \ probe \ holder \ well \ for \ calorimeter;$
- Insulation in black EPP (density 40 g/l).

Nominal diameter: DN25 - 1" Brass ball valves Check valve in acetalic resin (POM) Elastomer gaskets 1" Fx 1"1/2 M connections

- Maximum operating pressure 6 bar
- Maximum operating temperature 120 °C

Code	Measure	Pack	Outer	Cat.
3234.06.02	DN 25	1	1	01.01



Unit set up for installation on Multimix C32 series 3223 central manifold



For installation on DN32 manifold, provide specific reduction code 3237.06.02

For the meter range, see Group 3 - Utility systems.



Series 3235

Fixed point booster unit, set up for heat metering RF25 CONT.

Fixed point mixed unit for heating only systems, complete with:

- High efficiency circulator, model Wilo Yonos Para
 15/1 6:
- 25/1-6;3-way mixer valve equipped with upper bypass (mixed system side) and thermostatic actuator;
- Safety contact thermostat on supply pipe (only model RF MIX B.T)
- Polymer template on system 1" L 130 mm return line for future calorimeter installation with nQ 2.5 m³/h/Microclima HC25 model (various models available);
- Delivery probe holder well for calorimeter;
- Insulation in black EPP (density 40 g/l).

Nominal diameter: DN25 - 1" Brass ball valves Acetal resin (POM) check valve Elastomer gaskets 1" Fx 1"1/2 M connections

- Maximum operating pressure 6 bar
- Maximum operating temperature 120 °C

RF25 CONT B.T. - Low Temperature Fixed Point Booster designed for metering purposes

Code	Measure	Pack	Outer	Cat.
3235.06.00	DN 25	1	1	01.01

Supply inclusive of thermostatic head model TL50. Temperature adjustment range $25 \div 52 \, ^{\circ}\text{C}$

 $RF25\,CONT\,A.T.\,High\,Temperature\,Fixed\,Point\,Booster\,designed\,for\,metering\,purposes$

Code	Measure	Pack	Outer	Cat.
3235.06.10	DN 25	1	1	01.01

Supply inclusive of thermostatic head model TL70S. Temperature range 40÷70°C



Unit set up for installation on Multimix C32 series 3223 central manifold

For installation on DN32 manifold, provide specific reduction code 3237.06.02



For the meter range, see Group 3 - Utility systems.

Kit components (booster module and thermostatic head) supplied in 2 separate packages.







RM25 CONT Climatic booster unit, set up for heat metering.

Mixing unit with shifting temperature or heating/cooling systems, complete with:

- High efficiency circulator, model Wilo Yonos Para 25/1-6;
- 3-way mixer valve (Actuator to couple separately according to temperature control chosen - see range of actuators);
- 1" polymer template on system L 130 mm return line for future calorimeter installation with nQ 2.5 m³/h / Microclima HC25 model (various models available);
- Delivery probe holder well for calorimeter;
- Insulation in black EPP (density 40 g/l).

Nominal diameter: DN25 - 1" Brass ball valves Acetal resin (POM) check valve Elastomer gaskets 1" Fx 1"1/2 M connections

- Maximum operating pressure 6 bar
- Maximum operating temperature 120 °C

Code	Pack	Outer	Cat.
3236.06.02	1	1	01.01



Unit set up for installation on Multimix C32 series 3223 central manifold



For installation on DN32 manifold, provide specific reduction code 3237.06.02

For the meter range, see Group 3 - Utility systems.
Optional actuator series 3232 and 3233 to be ordered separately depending on the electronic temperature control chosen.



MULTIMIX DN32

RBM MULTIMIX DN32 is a hydronic system used in the distribution and management of zone system utilities both for winter heating and summer cooling.

It consists of a hydraulic separator and a distribution manifold (from 2 to 5 zones) connected one to another by pre-insulated pipes and relative booster units, available in two versions:

- RD: Direct booster unit (without mixing, for zones supplied with water at the same temperature(*) as the one produced by the heat generator).
- RF MIX: Modulating mixed booster unit (shifting temperature).
 Can be coupled to different electric rotary actuators, chosen depending on the type of temperature control selected.

In addition, DN25 booster units designed for metering are available, requiring a specific reducer for connection to the MULTI-MIX C32 manifold.

(*) minus the natural "thermal drop" on the hydraulic separator.



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Combined and modular distribution system

Manifold, separator, connection pipes and booster units thermally insulated with EPP 40 g/l shells

Simplified hydraulic connections and seals ensured by flat stops

Rationalisation of space in boiler room

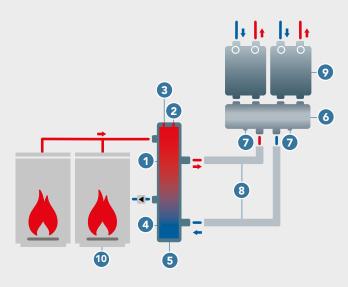
Set up for installation of one or more temperature control units for shifting temperature mixing unit

Up to 5 thermal zones

High flow rates

Possibility of direct metering to divide consumptions (only with DN25 booster unit)

FUNCTIONAL HYDRAULIC DIAGRAM MULTIMIX DN32 UNIT



- 1 Hydraulic separator MULTIMIX S32 code 3219.07.02
- Connection for air vent
- 3 Connection for temperature probe holder
- 4 System load-drain / sludge discharge
- 5 Connection for support foot (foot not supplied)
- 6 MULTIMIX C32 zone manifold (2-3-4-5 utilities)
- 7 Wall manifold support connection
- 8 Connection piping kit code 3222.07.X2
- 9 Direct booster unit RD32 code 3228.07.02 / mixed RM MIX32 code 3229.07.02
- 10 Heat generator

23



Series 3237 $Pair of \, reduction \, fittings \, for \, connection \,$ of DN25 units on DN32 manifold.

Code	Size A	Size B	Pack	Outer	Cat.
3237.06.02	2" M	1"1/2 F	1	1	01.01



Series 3232

${\bf Electric\, rotary\, actuator\, for\, mixer\, valves.}$

- Power supply: AC 24V
- Motor starting time: 120s
- Protection class: IP54
- Operating torque: 5Nm
- Operating torque: 5Nm
 Operation: manual with push button, fixed or temporary.
 NR 230V 3 Points 120s 5Nm
 NR 2V 3 Points 120s 5Nm
 NR 24V 0÷10V 120s 5Nm

Code	Power supply	Pack	Outer	Cat.
3232.00.02	230V 3 POINTS	1	1	01.01
3232.00.12	24V 3 POINTS	1	1	01.01
3232.00.22	24V 0÷10V	1	1	01.01



Series 3233

Electric rotary actuator for mixer valves equipped with built-in fixed pointadjustment.

Fixed point adjustment in heating/cooling.Including delivery probe

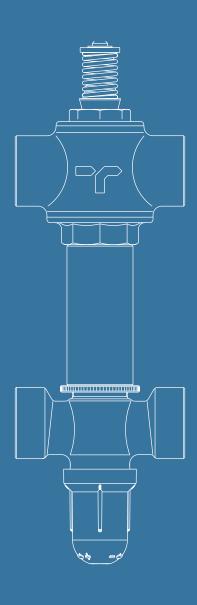
• NR 230V - 120s - 6Nm

Code	Power supply	Pack	Outer	Cat.
3233.00.02	230V	1	1	01.01



01.
HYDROTHERMAL
DISTRIBUTION

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02. ZONE VALVES

02.01 ZONE VALVES

26

Compact zone valves

Actuators for compact zone valves

2-way motorised compact zone valve. Normally closed with actuator not powered.

Nickel brass body.
Obturator and seal in elastomer.
Elastomer rod seals.
Stainless steel springs.
Handwheel for manual opening in ABS.
Threaded connections MM UNI-EN-ISO 228.

- Max operating temperature 95 $^{\circ}$ C
- Max operating pressure 10 Bar
- Max differential pressure 1 Bar

Code	Measure	Pack	Outer	Cat.
814.04.20	G 1/2"	1	10	02.01
814.05.20	G 3/4"	1	10	02.01
814.06.20	G 1"	1	10	02.01

(i)

 $Prearranged for thermo-electric actuators code 2944.00.\,X2$



Series 813

3-way motorised compact zone valve. Normally closed on straight way with actuator not powered.

Nickel brass body.
Obturator and seal in elastomer.
Elastomer rod seals.
Stainless steel springs.
Handwheel for manual opening in ABS.
Threaded connections MM UNI-EN-ISO 228.

- Max operating temperature 95 °C
- Max operating pressure 10 Bar
- Max differential pressure 1 Bar

Code	Measure	Pack	Outer	Cat.
813.04.20	G 1/2"	1	10	02.01
813.05.20	G 3/4"	1	10	02.01
813.06.20	G 1"	1	10	02.01



Prearranged for thermo-electric actuators code 2944.00. X2



Series 736

4-way motorised compact zone valve. Normally closed on straight way with actuator mounted, not powered. Can be coupled to Monoblock coplanar manifolds.

Nickel brass body.
Obturator and seal in elastomer.
Elastomer rod seals.
Stainless steel springs.
Handwheel for manual opening in ABS.
In-line threaded union couplings FF UNI-EN-ISO 228.
Centre distance 50 ÷ 55mm.

- Max operating temperature 95 °C
- Max operating pressure 10 Bar
- Max differential pressure 1 Bar

Code	Measure	Ways	Pack	Outer	Cat.
736.04.20	G 1/2"	4	1	10	02.01
736.05.20	G 3/4"	4	1	10	02.01
736.06.20	G 1"	4	1	10	02.01



Prearranged for thermo-electric actuators code 2944.00. X2



02.01 ZONE VALVES COMPACT ZONE VALVES



Series 3758.A

Fancoil 2-way motorised zone valve. Normally closed with actuator not powered.

Nickel brass body.
EPDM+PEROX shutter and seal.
EPDM+PEROX rod seals.
AISI302 stainless steel springs.
Cap for manual opening in ABS.
Threaded in-line connections FF UNI-EN-ISO 228.

- Max operating temperature +95 $^{\circ}$ C
- Max operating pressure 10 Bar
- Max differential pressure 1 Bar

Code	Measure	Kv (m³/h)	Pack	Cat.
3758.04.20	G 1/2"	1.64	1	02.01
3758.05.20	G 3/4"	2.87	1	02.01



Series 3758.B

Fancoil 4-way motorised zone valve. Normally closed with actuator not powered.

Nickel brass body.

EPDM+PEROX shutter and seal.

EPDM+PEROX rod seals.

AISI302 stainless steel springs.

Cap for manual opening in ABS.

Threaded in-line connections FF UNI-EN-ISO 228.

- Max operating temperature +95 $^{\circ}\text{C}$
- Max operating pressure 10 Bar
- Max differential pressure 1 Bar

Code	Measure	Kv (m³/h)	Pack	Cat.
3758.04.40	G 1/2"	1.31	1	02.01
3758.05.40	G 3/4"	2.98	1	02.01





Series 2944.A

Thermo-electrically controlled actuator $for compact zone \, valves, complete \, with \,$ valve body clamping ring nut and electric power cable.

Normally closed valve position when power missing.

- Power supply 24/230 VConsumption 2,5 W
- Frequency 50/60 Hz
- Electric protection IP54
- Operating temperature +5 ÷ +50 °C
 Switch contact rating (0.5A) 1 A (if any)
 5 mm stroke
- Size (lxhxp): 44x52x60 mm

Certifications:



$Thermo-electrically \,controlled\, actuator$

Code	Power supply	Pack	Outer	Cat.
2944.00.02	230V AC	1	50	02.01
2944.00.12	24V AC	1	50	02.01

Version without auxiliary microswitch (2 wires)

$Thermo-electrically \,controlled\,actuator\,with\,auxiliary$ microswitch

Code	Power supply	Pack	Outer	Cat.
2944.00.42 230V AC		1	50	02.01
2944.00.52 24V AC		1	50	02.01

Version supplied with auxiliary microswitch (4 wires)



01. HYDROTHERMAL IDROTERMICA

03. UTILITY SYSTEMS

03.02 UTILITY SATELLITES

30

Utility satellites

30



Code	Measure	DHW (kW)	Pack	Outer	Cat.
3239.05.02	3/4"	40	1	1	03.02

Micromega NEW zone module. For heating and Domestic Hot Water instant production.

Recessed substation for heating and instantly producing domestic hot water, suitable for installation in flats and detached houses with centralised systems.

Consisting of:

Brazed stainless steel heat exchanger, 20 plates;
DHW outlet thermostatic valve probe holder well;

 $Variable\hbox{-}calibration differential valve 5-30\,kPa;$

 $3-way\ valve\ with\ proportional\ thermostatic\ regulation;$

 $Manual\,air\,vent\,valve;$

Template for meter AFS L 80 mm, 3/4" M connections;

 $Template for thermal \, energy \, meter \, L \, 110 \, mm, connections \, 3/4 " \, M;$

Meter delivery probe well;

Primary delivery Y filter;

Heating circuit ON-OFF 2-way valve;

 $230\,V\,or\,24\,V\,electric\,actuator\,(actuator\,supplied\,separately, see$ accessories section);

Balancing lockshield valve.

- Primary fluid maximum operating temperature 85 $^{\circ}\text{C}$
- Maximum operating pressure 10 Bar
- Power supply 230 V
- Minimum domestic cold water temperature 10 °C
- Domestic hot water maximum temperature 50 °C
- Exchanger nominal power 40 kW
- Dimensions 570x800x160 mm





03.02 UTILITY SATELLITES UTILITY SATELLITES

Series 3240



Code	Measure	DHW (kW)	Pack	Outer	Cat.
3240.05.02	3/4"	40	1	1	03.02

31

$\label{lem:micromega} \ \mbox{MIX zone module.} \ \mbox{For heating and Domestic Hot Water instant production.}$

Recessed substation for heating and instantly producing domestic hot water, suitable for installation in flats and detached houses with centralised systems.

Consisting of:

Brazed stainless steel heat exchanger, 20 plates;

DHW outlet thermostatic valve probe holder well;

Variable-calibration differential valve 5-30 kPa;

 $3-way\ valve\ with\ proportional\ thermostatic\ regulation;$

 $Manual\,air\,vent\,valve;$

Template for meter AFS L 80 mm, 3/4" M connections;

 $Template for thermal \, energy \, meter \, L \, 110 \, mm, connections \, 3/4 " \, M;$

Meter delivery probe well;

Primary delivery Y filter;

3-way mixing valve on heating side. Fixed point management

 $(Thermostatic \, control \, supplied \, separately, see \, accessories \, section);\\$

High-efficiency electronic circulator Wilo Para SC 15/6; Check valve.

- Primary fluid maximum operating temperature 85 $^{\circ}\text{C}$
- Maximum operating pressure 10 Bar
- Power supply 230 V
- Minimum domestic cold water temperature 10 °C
- Domestic hot water maximum temperature 50 °C
- Exchanger nominal power 40 kW
- Dimensions 570x800x160 mm

Domestic Hot Water instant production
Thermostatic control model TL50 or TL70 M to be ordered separately (see page 345).





Code	Pack	Outer	Cat.
3241.05.02	1	1	03.02

Installation and shut-off template for Micromega 3239 and 3240 Series modules.

Shut-off kit consisting of a galvanised steel template, ball valves and check valves downstream of the module.

 $\bullet \ \ Ball \, valves, 3/4"\, F\, connection$

Series 3242



Code	Pack	Outer	Cat.
3242.00.02	1	1	03.02

$Series\,3239\,and\,3240\,Micromega\,module\,recessed\,box.$

 $\label{lem:Galvanised} \textbf{Galvanised steel recessed containment box complete with frame and door.}$

- · Colour:white
- Dimensions (lxhxd): 570x800x160 mm



03.02 UTILITY SATELLITES UTILITY SATELLITES

Series 3891



Code	Measure	DHW (kW)	Pack	Outer	Cat.
3891.00.00	3/4"	80	1	1	03.02

33

HIUltra

Utility satellite for instantaneous production of domestic hot water and winter climate control.

It is the ideal solution for distributing, regulating and metering the thermal energy produced in centralised system contexts. The satellite is designed to meet the heating and domestic hot water needs which, like for a wall-mounted boiler, is produced instantaneously on demand by the utility.

RBM's HIUltra is equipped with an electronic regulator which, through the return temperature control of the system, performs single control functions to optimise performance and operation.

 $Hy draulic units featuring an advanced technology structure that is widely established in the world of wall boilers \\ Full adjustment of the heating and DHW functions$

Optimisation of the heating control also with climate compensation and on the system return line

 $DHW\, production\, function\, quick\, response$

Set up to manage system functions with prepaid mode Complete with fully insulated box

Equipped with dynamic balancing function and regulation with pressure independent valve (PICV)

- Maximum primary circuit pressure (DH) 16 bar
- Maximum primary circuit temperature (DH) 90° C
- Maximum primary circuit differential pressure (DH) 4 bar
- Max heating (RISC) circ. pressure/relief valve setting 3 bar
- Max DHW output at 1300 l/h with 80° C primary circuit (DH) and ΔT 40°
 C:80 kW
- Max HEAT output at 1300 l/h with 80° C primary circuit (DH): 30 kW
- Dimensions 585x465x265 mm



For further technical information, see the use and installation manual MI3891.0_00 HIUltra utility satellite.

Certifications:





01. HYDROTHERMAL DISTRIBUTION

04. RADIATOR AND FAN COIL DISTRIBUTION

04.01 RADIATOR AND FAN COIL DISTRIBUTION

35

Manifolds for air-conditioning systems
Manifolds for large flow rates
Accessories for manifolds
Plastic housing boxes

35



Series 34

Monoblock® Single modular manifold, with in-line connections and unilateral junctions.

Nickel brass body.

Junction connections, centre distance 37 mm threaded M standard RBM, for copper, polyethylene and multilayer pipe fittings. Threaded in-line connections MF UNI-EN-ISO 228.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar



	Code	Measure	Ways	Pack	Outer	Cat.
	34.05.00	G 3/4"	1	10	40	04.01
	35.05.00	G 3/4"	2	10	40	04.01
	36.05.00	G 3/4"	3	10	40	04.01
	34.06.00	G 1"	1	10	40	04.01
	35.06.00	G 1"	2	10	40	04.01
	36.06.00	G 1"	3	10	40	04.01
	35.07.00	G 1"1/4	2	10	40	04.01
	36.07.00	G 1"1/4	3	10	40	04.01

Standard RBM thread W24.5x19F junction side



 $Use fittings\,with\,RBM\,Standard\,thread\,for\,pipe\,connection.$ $Please \, use \, brackets \, cod. \, 129.0 X.00 \, for \, fixing \, in \, plastic \, boxes \, or \,$ $brackets\,cod.\,899.00.00\,for\,fixing\,in\,metal\,boxes.$



Series 35.A

Monoblock® Module for G1/2" modular simple manifold, female junctions

Nickel brass body. $FG1/2"\,threaded\,junction\,connections, centre$ distance 37 mm, UNI-EN-ISO 228. Threaded in-line connections MF UNI-EN-ISO 228.

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Ways	Pack	Outer	Cat.
35.05.40	G 3/4" MF	2x1/2"F	10	40	04.01
36.05.40	G 3/4" MF	3x1/2"F	10	40	04.01
35.06.40	G 1" MF	2x1/2"F	10	40	04.01
36.06.40	G 1" MF	3x1/2"F	10	40	04.01

Junctions side thread FG1/2"



Please use brackets cod. 129.0X.00 for fixing in plastic boxes or brackets cod. 899.00.00 for fixing in metal boxes.



Series 35.B

Monoblock® Module for modular simple manifold, G1/2" male junctions

Nickel brass body. MG1/2" threaded junction connections, centre distance 37 mm, for multilayer pipe fittings.
Threaded in-line connections MF UNI-EN-ISO 228.

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Ways	Pack	Outer	Cat.
35.05.50	G 3/4" M	2x1/2"M	10	40	04.01
36.05.50	G 3/4" M	3x1/2"M	10	40	04.01
35.06.50	G 1" M	2x1/2"M	10	40	04.01
36.06.50	G 1" M	3x1/2"M	10	40	04.01

Junctions side thread MG1/2"



Use series 2796 fittings with G1/2" thread (see page 105) for pipe connection.



Please use brackets cod. 129.0X.00 for fixing in plastic boxes or brackets cod. 899.00.00 for fixing in metal boxes.





Monoblock®Manifold, single, with in-line connections and unilateral junctions.

Nickel brass body. Junction connections, centre distance 37 mm threaded M standard RBM for copper, polyethylene and multilayer pipe fittings. Threaded in-line connections FF UNI-EN-ISO 228.

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Ways	Pack	Outer	Cat.
63.05.00	G 3/4"	4	3	12	04.01
63.05.20	G 3/4"	5	3	12	04.01
64.05.00	G 3/4"	6	3	12	04.01
64.05.20	G 3/4"	7	3	12	04.01
65.05.00	G 3/4"	8	3	12	04.01
63.06.00	G 1"	4	3	12	04.01
63.06.20	G 1"	5	3	12	04.01
64.06.00	G 1"	6	3	12	04.01
64.06.20	G 1"	7	3	12	04.01
65.06.00	G 1"	8	3	12	04.01
66.06.00	G 1"	10	3	12	04.01

Use fittings with RBM Standard thread for pipe connection.
Please use brackets cod. 129.0X.00 for fixing in plastic boxes or brackets cod. 899.00.00 for fixing in metal boxes.



Series 1150

Insulation shell for RBM Single Monoblock manifold made up from expanded polyethylene half-bearings with external antiscratch coating.

Complete with clips to fix half-bearings.

- Fire behaviour class I
- Density 33 kg/m³
- Max operating temperature -40 ÷ +90 °C

Code	Measure	Ways	Pack	Outer	Cat.
1150.05.00	3/4"	2	5	5	04.01
1150.05.10	3/4"	3	5	5	04.01
1150.05.20	3/4"	4	5	5	04.01
1150.05.30	3/4"	5	1	5	04.01
1150.05.40	3/4"	6	5	5	04.01
1150.05.50	3/4"	7	1	20	04.01
1150.05.60	3/4"	8	1	1	04.01
1150.06.00	1"	2	1	5	04.01
1150.06.10	1"	3	1	5	04.01
1150.06.20	1"	4	1	5	04.01
1150.06.30	1"	5	1	5	04.01
1150.06.40	1"	6	1	5	04.01
1150.06.50	1"	7	1	1	04.01
1150.06.60	1"	8	1	1	04.01
1150.06.80	1"	10	1	30	04.01
3102.07.20	1"1/4	2	1	15	04.01
3102.07.30	1"1/4	3	1	10	04.01

Thermal insulation suitable for manifolds with junction connections 37 mm centre distance.



Series 293

Module for modular simple manifold, centre distance 50mm, flat seat, G 1/2"

Nickel brass body. Junction connections, MG 1/2", flat seat for copper, polyethylene and multilayer pipe fittings. Centre distance 50 mm.

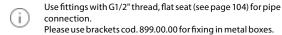
- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Certifications:



ı	Code	Size A	Size B	Ways	Pack	Outer	Cat.
	293.05.00	G 3/4"	G 1/2"	3	10	40	04.01
	294.05.00	G 3/4"	G 1/2"	4	10	40	04.01
	295.05.00	G 3/4"	G 1/2"	5	8	32	04.01
	296.05.00	G 3/4"	G 1/2"	6	5	20	04.01
	297.05.00	G 3/4"	G 1/2"	7	5	20	04.01
	298.05.00	G 3/4"	G 1/2"	8	5	20	04.01

Junctions side thread MG 1/2" (flat seat)







Single modular manifold, with in-line connections and one-way lateral junctions.

Nickel brass body. Euroconus M3/4" threaded junction connections, centre distance 50 mm, for copper, polyethylene and multilayer pipe fittings. Threaded in-line connections MF UNI-EN-ISO 228.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Certifications:

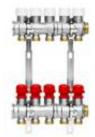


Code	Measure	Ways	Pack	Outer	Cat.
100.06.50	G 1"	2x3/4"	10	10	04.01
101.06.50	G 1"	3x3/4"	8	8	04.01
102.06.50	G 1"	4x3/4"	3	3	04.01

EUROCONUS thread G3/4" UNI-EN-ISO 228

(i)

Use fittings with Euroconus G3/4" thread for pipe connection. Use brackets cod. 219.0X.00 for metal case fastening.



Series 3202.A

Modular brass manifold kit.

Each kit contains:

n° 1 multi-way manifold unit complete with micrometric lockshield valves with graduated handwheel:

n° 1 multi-way manifold unit complete with valves with thermostatic option with hand wheel; 1 pair of steel brackets for fixing manifolds.

- Temperature range $0 \div 100\,^{\circ}\text{C}$
- Max operating pressure 10 Bar

Code	Measure	Ways	Pack	Outer	Cat.
3202.06.90	1"	2+2	1	1	04.01
3203.06.90	1"	3+3	1	1	04.01
3204.06.90	1"	4+4	1	1	04.01
3205.06.90	1"	5+5	1	1	04.01
3206.06.90	1"	6+6	1	1	04.01
3207.06.90	1"	7+7	1	1	04.01
3208.06.90	1"	8+8	1	1	04.01
3209.06.90	1"	9+9	1	1	04.01
3210.06.90	1"	10+10	1	1	04.01
3211.06.90	1"	11+11	1	1	04.01
3212.06.90	1"	12+12	1	1	04.01
3213.06.90	1"	13+13	1	1	04.01
3214.06.90	1"	14+14	1	1	04.01

Centre distance between connections via distribution manifolds 37 mm-threading Standard RBM W24,5x19F

 $\label{lem:main_section} Manifold\,kit\,can\,be\,inserted\,in\,walls\,constructed\,in\,8\,cm\,box,\\ plastered.$

Composition with adjustable lockshield valves with graduated handwheel.

Use fittings for multilayer pipe with Standard RBM thread for pipe connection.

Use fittings for polyethylene pipe with Standard RBM thread for pipe connection.



Set up Seriess 3189 thermo-electric actuators to automatically shut off the single circuits.



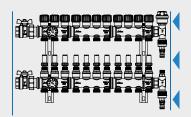
MODULAR COMPACT BRASS MANIFOLD KIT

(37mm C.T.C.)

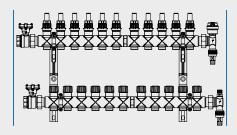


SUPER COMPACT

37 mm c.t.c. manifold



50 mm c.t.c. manifold





0

Compact: manifold kit can be inserted in 80 mm housing boxes (Box1 series 2606)

Manual/Automaticon-offinterception of the circuits

Nickel plated brass manifolds: high quality material for best reliability through time; not affected by corrosion that could weaken system efficiency

- 1 Dedicated actuators Series 3189
- 2 Manifold 1"
- 3 Suitable for ball valves with M inlet coupling (without OR seals)
- 4 Standard RBM threaded connections W24.5x19F
- 5 Compact: 37 mm c.t.c.

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Series 227

Basic 1"1/4 manifold kit

 $Nickel-plated\ brass\ manifolds.$ Steel brackets. ${\tt EUROCONUS\,M\,3/4"}\ threaded\ junction$ $connections, centre\,distance\,50\,mm\,for\,copper,$ $polyethylene \, and \, multilayer \, pipe \, fittings.$ Threaded in-line FF connections (UNI-EN-ISO 228).

- Max. temperature: 110° C
- Maximum operating pressure: 1000 kPa

Code	Measure	Ways	Pack	Outer	Cat.
227.07.80	G 1"1/4	3	1	1	04.01
228.07.80	G 1"1/4	4	1	1	04.01
229.07.80	G 1"1/4	5	1	1	04.01
230.07.80	G 1"1/4	6	1	1	04.01
231.07.80	G 1"1/4	7	1	1	04.01
232.07.80	G 1"1/4	8	1	1	04.01
233.07.80	G 1"1/4	9	1	1	04.01
234.07.80	G 1"1/4	10	1	1	04.01
235.07.80	G 1"1/4	11	1	1	04.01
236.07.80	G 1"1/4	12	1	1	04.01

Euroconus G3/4" thread - UNI-EN-ISO 228



Series 196

FF 1"1/4 Simple MONOBLOCK manifold produced from casting, with in-line connections and one-way lateral junctions.

Nickel brass body. EUROCONUS M 3/4" threaded junction $connections, centre \, distance \, 50 \, mm \, for \, copper,$ $polyethylene \, and \, multilayer \, pipe \, fittings.$ Threaded in-line connections FF UNI-EN-ISO 228.

- Max. temperature: 110° C
- Maximum operating pressure: 1000 kPa

Code	Measure	Ways	Pack	Outer	Cat.
196.07.30	G 1"1/4	3	3	3	04.01
197.07.30	G 1"1/4	4	2	2	04.01
198.07.30	G 1"1/4	5	3	3	04.01
199.07.30	G 1"1/4	6	2	2	04.01
200.07.30	G 1"1/4	7	3	3	04.01
201.07.30	G 1"1/4	8	2	2	04.01
202.07.30	G 1"1/4	9	2	2	04.01
203.07.30	G 1"1/4	10	2	2	04.01
204.07.30	G 1"1/4	11	2	2	04.01
205.07.30	G 1"1/4	12	2	2	04.01

Euroconus G3/4" thread - UNI-EN-ISO 228





Single insulation shell for 1"1/4 manifold, made of expanded polyethylene half-bearings with external antiscratch coating.

Fire behaviour class I Density 33 kg/m³ Max operating temperature -40 ÷ +90 °C

Code	Ways	Pack	Outer	Cat.
3769.12.00	12	1	1	04.01

(i)

To insulate a complete manifold kit, order 2 pieces.



Series 3781

Insulation shell for thermometer holder well consisting of expanded polyethylene half-casings with external antiscratch coating.

Fire behaviour class I Density 33 kg/m³ Max operating temperature -40 \div +90 $^{\circ}\text{C}$

Code	Measure	Pack	Outer	Cat.
3781.00.00	G 1"1/4	1	1	04.01



Series 3780

Insulation shell for automatic air vent valve/degasser consisting of expanded polyethylene half-casings with external antiscratch coating.

Fire behaviour class I Density 33 kg/m³ Max operating temperature -40 ÷ +90 °C

Code	Measure	Pack	Outer	Cat.
3780.00.00	1"1/4	1	1	04.01



Series 3782

Insulation shell for discharge terminal unit consisting of expanded polyethylene half-casings with external antiscratch coating.

Fire behaviour class I Density 33 kg/m³ Max operating temperature -40 ÷ +90 °C

Code	Measure	Pack	Outer	Cat.	
3782.00.00	1"1/4	1	1	04.01	



Series 070

T-terminal fitting with plugged junctions, suitable for the possible connection of air vent valve and cock



Nickel brass body. Junction connections, F 3/8" and F 1/2". Threaded connections M UNI-EN-ISO 228.

- Max. temperature: 110° C
- Max pressure: 1000 kPa

T-shaped terminal fitting

Code	Measure	Pack	Outer	Cat.
70.07.10	1"1/4	10	10	04.01

T-shaped terminal fitting

Code	Measure	Раск	Outer	Cat.
70.07.00	1"1/4	10	10	04.01





Multifunction line fitting with plugged junction. Suitable for the possible connection of air vent valve, thermometer or discharge cock

Nickel brass body. F 1/2" junction connections. Threaded connections MF UNI-EN-ISO 228.

• Max.temperature: 110°C

Max pressure: 1000 kPa

Code	Measure	Pack	Outer	Cat.
96.07.00	1"1/4	10	10	04.01



Series 219

Pair of steel brackets to fixing single manifolds in metal boxes (for boxes code 2606.XX.02).

• Centre distance 220 mm

Code	Measure	Pack	Outer	Cat.
219.06.00	1"	1	50	04.01
219.07.00	1"1/4	1	50	04.01



Series 105

 $Simple\,adjust ment\,straight\,shut-off$ valve for branch circuits from modular manifolds with standard RBM connections.

Nickel brass body. Elastomer seals. Shockproof ABS handwheel. $Rotary\,connection\,to\,manifold, threaded\,F$ standard RBM with seal. $Threaded\,M\,standard\,RBM\,connection\,for\,copper,$ $polyethylene \, and \, multilayer \, pipe \, fittings.$

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Pack	Outer	Cat.
105.00.00	RBM	10	10	04.01

RBM Standard Thread (W24,5x19F)



Series 106

Simple adjustment straight shut-off lockshield valve for branch circuits from modular manifolds with standard RBM connections.

Nickel brass body. Elastomer seals. Shockproof ABS handwheel. Rotary connection to manifold, threaded F standard RBM with seal. Threaded M standard RBM connection for copper, polyethylene and multilayer pipe fittings.

- Max operating temperature 110 $^{\circ}$ C
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Pack	Outer	Cat.
106.00.00	RBM	10	10	04.01

RBM Standard Thread (W24,5x19F)





Thermostatically controlled straight valve for branch circuits from modular manifolds with standard RBM connections

Nickel brass body. Elastomer seals. Shockproof ABS handwheel. . Rotary connection to manifold, threaded F standard RBM with seal. Threaded M standard RBM connection for copper, $polyethylene \, and \, multilayer \, pipe \, fittings.$

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Code	Measure	Pack	Outer	Cat.
556.00.00	RBM	10	10	04.01

RBM Standard Thread (W24,5x19F)



Can be coupled to thermoelectric actuatorss RBM code 306.00.



Series 899

Pair of plastic brackets to fix Single $manifolds \, in \, metal \, boxes \, (for \, boxes \, code \,$ 2606.XX.02).

Bracket centre distance 220 mm.

Code	Measure	Pack	Outer	Cat.
899.00.00	3/4" ÷ 1"	1	1	04.01



43



Series 85

Manifold plastic containment and inspection box without bottom, complete with removable cover with ventilation slots, counter frame, fixing $screws\, and\, removable\, protection\, for$ plastering.

Flush mount installation, paintable cover

Code	LxH (mm)	Model	Pack	Outer	Cat.
85.35.00	250x350	SF	24	24	04.01
85.50.00	250x500	SF	18	18	04.01
85.58.00	310x580	SF	13	13	04.01
85.40.00	400x500	SF	13	13	04.01
85.75.00	360x750	SF	14	14	04.01



Series 86

 $Manifold\, plastic\, containment\, and\,$ inspection box with bottom, complete $with \, removable \, cover \, with \, ventilation \,$ slots, counter frame, fixing screws and $removable\, protection\, for\, plastering$

Flush mount installation, paintable cover

Code	LxH (mm)	Model	Pack	Outer	Cat.
86.35.00*	250x350	CF	18	18	04.01
86.50.00*	250x500	CF	11	-	04.01
86.58.00*	310x580	CF	10	10	04.01
86.40.00*	400x500	CF	9	9	04.01
86.75.00*	360x750	CF	10	10	04.01

^{*}Adjustable depth 85-100 mm



Series 362

Manifold plastic containment and $in spection\,box\,with\,bottom\,and\,side$ closures, complete with removable cover *Fixed depth 100 mm with ventilation slots, brackets and fixing screws for simple manifolds ø3/4" centre distance 37 mm.

Flush mount installation, paintable cover

Code	LxH (mm)	Model	Pack	Outer	Cat.
362.35.00*	250x350	CFC	10	10	04.01
362.50.00*	250x500	CFC	4	4	04.01



Series 128

Pair of plastic brackets to fix one-sided and two-sided manifolds in plastic boxes (for boxes code 86.XX.00).

Bracket centre distance 50 mm (3/4") 55 mm (1").

Code	Measure	Pack	Outer	Cat.
128.05.00	3/4"	1	10	04.01
128.06.00	1"	1	10	04.01



Series 129

Pair of plastic brackets to fix Single manifolds in plastic boxes (for boxes code 86.XX.00).



Bracket centre distance 114,5 mm.

Code	Measure	Pack	Outer	Cat.
129.05.00	3/4"	1	10	04.01
129.06.00	1"	1	10	04.01



^{**}Adjustable depth 95-120 mm

01. HYDROTHERMAL DISTRIBUTION

05. DHW DISTRIBUTION

05.01 DHW DISTRIBUTION

45

Manifolds for dhw systems Plastic housing boxes Thermostatic mixers



Simple modular manifold with in-line connections, used for domestic water circuit distribution. Unilateral junctions complete with built-in micrometric shut-off valves.

Nickel brass body. Elastomer seals.

Shockproof ABS handwheel.

RBM standard threaded M junction connections, centre distance 37 mm, for copper, polyethylene and multilayer pipe fittings, or M G1/2" (according to version).

In-line threaded connections MF UNI-EN-ISO 228.

- Max operating temperature 95 °C
- Max operating pressure 10 Bar

Certifications:



Modular manifold, Standard RBM connections

Code	Measure	Ways	Pack	Outer	Cat.
171.05.00	G 3/4"	2	5	5	05.01
172.05.00	G 3/4"	3	5	5	05.01
1330.05.00	G 3/4"	4	5	5	05.01
171.06.00	G 1"	2	5	5	05.01
172.06.00	G 1"	3	5	5	05.01
1330.06.00	G 1"	4	5	5	05.01

Standard RBM thread W24.5x19F junction side

Modular domestic water manifold, G 1/2" connections

Code	Measure	Ways	Pack	Outer	Cat.
2793.05.50	G 3/4"	2	5	5	05.01
2794.05.50	G 3/4"	3	5	5	05.01
2795.05.50	G 3/4"	4	5	5	05.01
2793.06.50	G 1"	2	5	5	05.01
2794.06.50	G 1"	3	5	5	05.01
2795.06.50	G 1"	4	5	5	05.01

Thread MG 1/2" junctions side



Use fittings with RBM standard thread or G 1/2" thread series 2796 (see page 105) for pipe connection, according to versions. O.R. seal manifold.



Series 181

Buried connection elbow for DHW and heating systems.

Internal elbow in OT58, threaded M standard RBM (pipe side) and F 1/2" UNI-EN-ISO 228 (cock side). Shockproof PP container.

- Max temperature 90 °C
- Maximum operating pressure 1000 kPa

Certifications:



Code	Figure	Measure	Pack	Outer	Cat.
181.00.20*	1	RBM 1/2" F	1	20	05.01
181.00.30**	2	RBM 1/2" F	1	20	05.01

*For flush wall mounting

**For flush tile mounting

Standard RBM thread (W24.5x19F) pipe side



Series 186

Connection elbow for double outlet DHW systems

Internal elbow in OT58 threaded F 1/2" UNI-EN-ISO 228 (cock side) and double connection threaded M standard RBM (pipe side). Shockproof PP container

- Max temperature 90 °C
- Maximum operating pressure 1000 kPa

Certifications:



Code	Measure	Pack	Outer	Cat.
186.00.00	RBM 1/2" F	1	20	05.01

Standard RBM thread (W24.5x19F) pipe side





Buried connection elbow for DHW and heating systems.

Internal elbow in OT58, threaded M standard RBM (pipe side) and F 1/2" UNI-EN-ISO 228 (cock side). Shockproof PP container.

- Max temperature 90 °C
- Maximum operating pressure 1000 kPa

Certifications:



Code	Figure	Measure	Model	Pack	Outer	Cat.
182.00.00	1	-	Fig. 1	10	-	05.01
183.00.00	2	1/2"	Fig. 2	20	600	05.01

*For flush wall mounting **For flush tile mounting Standard RBM thread (W24.5x19F) pipe side



Series 185

Buried connection elbow for DHW and heating systems.

Internal elbow in OT58, threaded M standard RBM (pipe side) and F 1/2" UNI-EN-ISO 228 (cock side). Shockproof PP container.

- Max temperature 90 °C
- Maximum operating pressure 1000 kPa

Certifications:



Code	Measure	Model	Pack	Outer	Cat.
185.00.20	RBM 1/2" F	Plastic wall plate	4	16	05.01

*For flush wall mounting **For flush tile mounting Standard RBM thread (W24.5x19F) pipe side



MODULAR MANIFOLD FOR SANITARY SYSTEMS



RBM modular manifolds make it possible to implement compositions suitable for the control and distribution of sanitary water.

They are equipped with shut-off valves and indica- tion of the utility supplied on each junction way.



PRACTICAL INSTALLATION:

When assembling several elements one to another, the connections of the junctions are always per- fectly aligned.





PRODUCTION RANGE:

RBM modular manifolds are made in sizes 3/4" and 1" with male and female connections at the ends. They are available in versions with 2, 3 and 4 distribution ways.

The junction connections are available with two different threads: standard RBM W24.5x19F or gas M G1/2".

To complete the range, plastic housing boxes and relative fixing brackets are available to make instal- lation of the manifolds easy and quick.

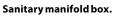
Manifold with o-ring seat;

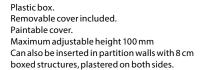
Micrometric shut-off valves on each junction;

Indication of utility supplied on each junction.

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Code	LxH (mm)	Pack	Outer	Cat.
3828.29.00	290x270	1	1	05.01
3828.39.00	390x270	1	1	05.01
3828.49.00	490x270	1	1	05.01

Bottom depth 80 - 92 mm

(i)

Brackets for fixing manifolds supplied separately. Removable frame 12 mm.



Series 1942

Pair of plastic brackets to fix simple modular manifolds in plastic boxes (for 3828 series boxes).

Code	Measure	Pack	Outer	Cat.
1942.05.00	3/4"	1	20	05.01
1942.06.00	1"	1	20	05.01



Series 3827

BiBox

Box for sanitary manifold, classic installation and flush with the wall.

Reversible and telescopic frame. Suitable for classic installations with external cover plate or flush with the wall.

Can also be inserted in partition walls with 8 cm boxed structures, plastered on both sides. Can be inserted in plasterboard with 75 mm or longer uprights.

Code	LxH (mm)	Pack	Outer	Cat.
3827.29.00	290x270	1	1	05.01
3827.39.00	390x270	1	1	05.01
3827.49.00	490x270	1	1	05.01

Bottom depth 80 - 92 mm Frame adjustment stroke 35 mm

Presence of 3 guides for the manifold support to be secured. On all sides there are removable inserts for the pipes to be passed.

Threads M6 pitch 1 to adjust the telescopic frame.

On the external part of the bottom there is a grid to facilitate adhesion of the mortar in masonry works.

Pre-holes for suitable dowels or screws to be used to be secured in the plasterboard or accessory use.

Removable frame (12 mm).

Use Series 1942 brackets for fixing manifolds supplied separately.



BiBox

Reversible housing box for manifolds for sanitary systems.

 $\label{lem:reconstruction} \textbf{Reversible housing box} \ \text{for sanitary system manifolds}.$

Suitable for **flush wall installations** or with **external door**. Can be inserted in partition walls with 80 mm boxed structures or in plasterboard with 75 mm uprights.

Suitable for plaster board and masonry walls

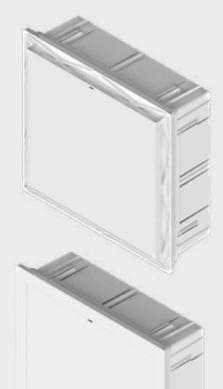
Reversible cover: flush wall installation or with external door

Universal: for all types of manifolds

Adjustable depth

Lightweight structure that can be installed using dowels and self-tapping screws

Paintable cover



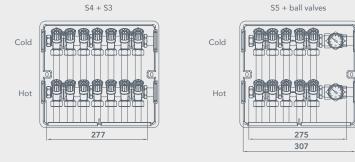


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MODULAR SANITARY MANIFOLD COUPLING / HOUSING-BOXES







T-shaped adjustable thermostatic mixer for sanitary systems.

 $Chrome-plated\ body\ in\ anti-dezinci fication\ alloy$ (size 1/2" and 3/4").

Chrome-plated brass body (size 1" - 1"1/4 - 1"1/2 -2").

Stainless steel springs. Elastomer seals. Threaded connections UNI-EN-ISO 228.

- Max dynamic pressure 5 Bar
- Max static pressure 10 BarMax inlet temperature 85 °C
- Setting range +30 +65 °CPrecision ± 2 °C

Certifications:



Code	Size A	Pack	Outer	Cat.
2133.04.00	1/2"	1	10	05.01
2133.05.00	3/4"	1	10	05.01
2133.06.00	1"	1	10	05.01
2133.07.00	1"1/4	1	8	05.01
2133.08.00	1"1/2	1	-	05.01
2133.09.00	2"	1	-	05.01

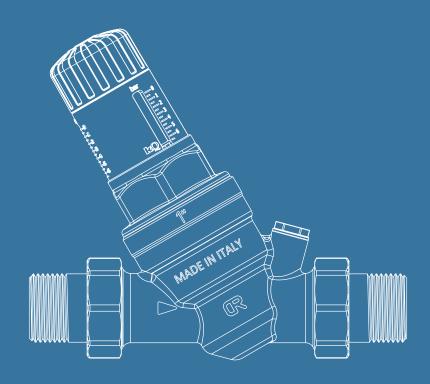
51

Non-removable cartridge.



01.
HYDROTHERMAL
DISTRIBUTION

.....



06. PRESSURE REDUCTION

06.01 PRESSURE REDUCTION

54

Diaphragm pressure reducing valves
Piston-operated pressure reducing valves

Water hammer damper

PRESSURE REDUCING VALVES

RBM pressure reducing valves are used in plumbing, heating and sanitary systems, mainly **to reduce pressure between the distribution network and the utility junctions**. The RBM range includes diaphragm and piston pressure reducing valves.

DIAPHRAGM PRESSURE REDUCING VALVES



Rinox Series 51.A PN 40 Sizes: 1/2" - 3/4" - 1" 1"1/4 - 1"1/2 - 2"





Rinox Series 51.B PN 40 Sizes: 1/2" - 3/4" - 1" 1"1/4 - 1"1/2 - 2" 2"1/2 - 3" - 4"





Rinox Series 51.C PN 40 Sizes: 65 - 80 - 100





Rinox Series 51.D PN 40 Sizes: 1/2" - 3/4" - 1" 1"1/4 - 1"1/2 - 2"





Rinox Plus Smart M Series 2909 PN 25 Sizes: 1/2" - 3/4" - 1" - 1"1/4 1"1/2 - 2"





Rinox Plus M Series 2848 PN 25 Sizes: 1/2" - 3/4" - 1" 1"1/4 - 1"1/2 - 2"



PISTON-OPERATED PRESSURE REDUCING VALVES



Rinox Due Series 87.A PN 25 Sizes: 3/8" - 1/2" - 3/4"





Rinox Due Series 87.B PN 25 Sizes: 3/8" - 1/2" - 3/4" - 1" 1"1/4 1"1/2 - 2"





Rinox Due Series 288 PN 25 Sizes: 1/2" - 3/4"



Ris Series 1139.A PN 16 Sizes: G 3/8" - G 1/2" - G 3/4"





Ris Series 1139.BPN 16
Sizes:
3/8" - 1/2" - 3/4"





Ris Series 1139.CPN 16
Sizes:
G 3/8" - G 1/2" - G 3/4"





Series 51.A

Rinox

Adjustable compensated pressure reducing valve, diaphragm operated, double seat, made of stainless steel, with anti-water hammer function. Suitable for water conveyance.

Nickel brass body. Stainless steel AISI 303. Elastomer seals. Threaded connections FF UNI-EN-ISO 228. Pressure gauge holder connection F 1/4".

- · Nominal pressure 40 Bar
- Max upstream pressure 25 Bar
- Max operating temperature 80 $^{\circ}$ C

Certifications:



Code	Measure	Model	Pack	Outer	Cat.
51.04.95	G 1/2"	Rinox	1	6	06.01
51.05.95	G 3/4"	Rinox	1	6	06.01
51.06.95	G 1"	Rinox	1	6	06.01
51.07.95	G 1"1/4	Rinox	1	4	06.01
51.08.95	G 1"1/2	Rinox	1	1	06.01
51.09.95	G2"	Rinox	1	1	06.01

outlet adjustment 6 ÷ 10 Bar



First reduction pressure reducing valve: this reduces upstream pressures near a value of 25 bar in compliance with the reduction ratio recommended by RBM.



In order to avoid cavitation phenomena, and therefore excessive noise of the component, it is best to avoid having the ratio between the upstream maximum pressure and the downstream adjustment pressure of the regulator exceed a value of 2.5.



Series 51.B

Nickel brass body.

Rinox

Adjustable compensated pressure reducing valve with FF - PN40 connections, diaphragm operated, double seat, made of stainless steel, with anti-water hammer function. Suitable for water conveyance.

Stainless steel AISI 303. Elastomer seals. Threaded connections FF UNI-EN-ISO 228. Pressure gauge holder connection F 1/4".

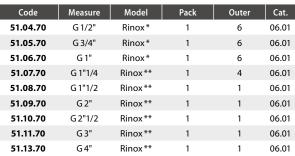
- Nominal pressure 40 Bar
- Max upstream pressure 25 Bar
- Max upstream pressure in compliance with standard NF 16 Bar
- Max operating temperature 80 $^{\circ}\text{C}$
- $\bullet \ \ Default\, presetting\, 3\, Bar\, (only\, models\, with^*)$

Certifications:









^{*}outlet adjustment 0.8 - 5.5 Bar - available outlet adjustment 0.8 - 7 Bar (ordering code 51.0X.80).

^{**} outlet adjustment 0.8-7 k Bar. NF certified for ½" and ¾" sizes only



Pre-calibrated(*) with anti-water hammer function.



Series 51.C

Rinox

Adjustable compensated pressure reducing valve, diaphragm operated, double seat, made of stainless steel, with anti-water hammer function. Suitable for water conveyance.

Nickel brass body. Stainless steel AISI 303. Elastomer seals. $PN\,16\,flanged\,connections.$ $Pressure\,gauge\,holder\,connection\,F\,\,1/4".$

- Reducing valve nominal pressure 40 Bar
- Nominal flange pressure 16 Bar
- Max upstream pressure 25 Bar
- Max operating temperature 80 $^{\circ}$ C

Certifications:





Code	Measure	Model	Pack	Outer	Cat.
51.10.10	DN 65	Rinox**	1	1	06.01
51.11.10	DN 80	Rinox**	1	1	06.01
51.13.10	DN 100	Rinox**	1	1	06.01

^{**} outlet adjustment 0.8-7 Bar



Flange suitable for coupling with counter-flange UNIEN 1092-1. Equipped with floating flanges that simplify installation



Series 51.D

Rinox

Adjustable compensated pressure reducing valve, diaphragm operated, double seat, made of stainless steel, with anti-water hammer function. Suitable for water conveyance.

Nickel brass body. Stainless steel AISI 303. Elastomer seals. Threaded connections MM UNI-EN-ISO 228. Pressure gauge holder connection F 1/4".

- Nominal pressure 40 Bar
- Max upstream pressure 25 Bar
- Max upstream pressure in compliance with standard NF 16 Bar
- Max operating temperature 80 $^{\circ}\text{C}$
- Default presetting 3 Bar (only models with*)

Certifications:







Code	Measure	Model	Pack	Outer	Cat.
51.04.10	G 1/2"	Rinox*	1	6	06.01
51.05.10	G 3/4"	Rinox*	1	6	06.01
51.06.10	G 1"	Rinox*	1	6	06.01
51.07.10	G 1"1/4	Rinox**	1	4	06.01
51.08.10	G 1"1/2	Rinox**	1	1	06.01
51.09.10	G 2"	Rinox**	1	1	06.01

^{*} outlet adjustment 0.8-5.5 Bar.

^{**} outlet adjustment 0.8-7 k Bar. NF certified for 1/2" and 3/4" sizes only



 $Pre-calibrated (*)\ with\ anti-water\ hammer\ function.$



RINOX

Compensated pressure reducing valves with double stainless steel seat. Diaphragm operated.

RBM Rinox pressure reducing valves are used in plumbing, heating and sanitary systems, es- pecially to reduce pressure between the distri- bution network and the junctions of the main utility.

The structural features and diaphragm operation make **RBM Rinox** the ideal product to use in circuits in which upstream pressure can be subject to strong oscillations (water hammers).

The compensation chamber in the pressure re- ducing valve also prevents these fluctuations from affecting the calibration pressure, keeping it stable.



Compliant with EN 1567 and Approved ${\bf NF}$ (size 1/2" and 3/4"). Conformity ${\bf ACS.}$

Moulded diaphragm (enhanced sensitivity - longer duration - greatly reduced friction)

Stainless steel double seal seat (protects moving parts - guides movement - enhanced adjustment sensitivity - not touched by scales)

PN 40 bar: ideal for installations in high rising buildings

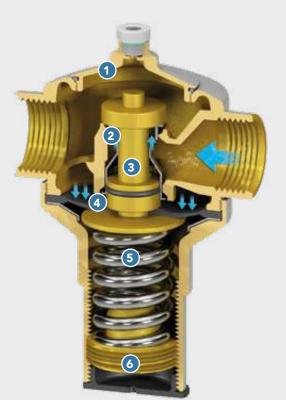
Resistant to high temperatures: max operating temperature 80°C

Compensated: pressure variations upstream are compensated, leaving the outlet calibration constant

Wide application range

Can be installed in any position: vertical, horizontal, diagonal or facing downwards





- 1 Pressure gauge holder connection
- 2 Stainless steel double seal seat
- 3 Compensation chamber
- 4 Diaphragm in moulded rubber
- 5 Adjustment spring
- 6 Calibration ring nut/screw







DIAPHRAGM PRESSURE REDUCING VALVES

Manufactured from top-quality materials, the **RBM Rinox** double-seated pressure reducing valve with diaphragm actuation is particularly suitable for reducing pressure between the distribution network and the main utility branch (from the urban network, power station supply, etc.).

RBM Rinox allows the transit of high flow rates with low pressure drops, absorbing water hammers from the external network thanks to the dampening action of the internal diaphragm. The reducing valve supports a nominal pressure of 40 bar*, allowing downstream pressure regulation between 0.8 and 10 bar (depending on the models). To achieve quiet operation and avoid premature wear of internal components, it is advisable to choose the reducing valve diameter so that the fluid velocity is within the following values:

- for water V= 0.7-1.5 m/s (residential use) V = 1-3.5 m/s (industrial use)

To avoid cavitation phenomena, and thus excessive component noise, the ratio between the maximum upstream pressure and the regulating pressure downstream of the regulator must not exceed 2.5.

For example, for an end-user supply setting of no more than 3 bar, the pressure upstream of the reducing valve must remain within 7.5 bar.

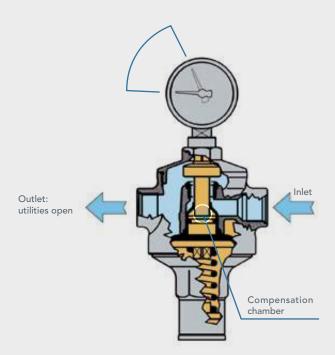
For higher values, it is advisable to insert a second reducing valve in series with the first, in order to spread the total pressure difference over two reduction jumps.

* 25 bar for the RBM RinoxPlus M model

Pressure stopped at the adjustment value of 3 bar

Outlet: utilities closed Compensation chamber

Pressure: P<3 bar



When the utilities to be served are closed, the downstream pressure increases by pushing the piston of the reducer to the bottom. In this way, the shutter closes the passage section of the pressure reducing valve, keeping the pressure constant at the set value set on the spring. The minimal pressure difference straddling the shutter allows it to close perfectly.

With the opening of the downstream utilities, the pressure exerted on the piston is less in favour of the force exerted by the spring on the shutter allowing its opening with the consequent fluid passage. The higher the demand for water from the utility network, the lower the pressure on the piston and the greater the water flow.



Rinox Plus Smart M Adjustable pressure reducing valve, diaphragm operated, with measuring knob.

The internal cartridge can be easily inspected and extracted; provided with extractable filter.

Suitable for water channeling.

Anti-dezincification brass body (CR). Elastomer seals.

 $Threaded\,connections\,MM\,UNI\text{-EN-ISO}\,228.\\ Pressure\,gauge\,holder\,connection\,F\,1/4".$

- Nominal pressure 25 bar (cold water 40 °C) / 16 bar (hot water 80 °C) *
- Upstream pressure 25 bar (cold water 40 °C) / 16 bar (hot water 80 °C)
- Adjustable downstream pressure 0.8 \div 7 Bar
- Max operating temperature 80 $^{\circ}\text{C}$
- Filtering grade 800 μm
- · Default presetting 3 Bar

Certifications:







Code	Measure	Model	Pack	Outer	Cat.
2909.04.00	G 1/2"	Rinox Plus SmartM	1	6	06.01
2909.05.00	G 3/4"	Rinox Plus SmartM	1	6	06.01
2909.06.00	G 1"	Rinox Plus SmartM	1	6	06.01
2909.07.00	G 1"1/4	Rinox Plus SmartM	1	4	06.01
2909.08.00 G 1"1/2 RinoxPlusSmart M		1	4	06.01	
2909.09.00	G 2"	RinoxPlusSmart M	1	4	06.01

Pre-calibrated.

Replaceable cartridge. See spare parts pricelist.
Compact.

 $Complete with \, calibration \, knob.$



Series 2848

Rinox Plus M

Adjustable pressure reducing valve, diaphragm operated. The internal cartridge can be easily inspected and extracted; provided with extractable filter. Suitable for water channeling.

Anti-dezincification brass body (CR). Elastomer seals.

Threaded connections FF UNI-EN-ISO 228. Pressure gauge holder connection F 1/4".

- Nominal pressure 25 bar (cold water 40 °C) / 16 bar (hot water 80 °C) *
- Upstream pressure 25 bar (cold water 40 °C) / 16 bar (hot water 80 °C)
- Adjustable downstream pressure 0.8 \div 7 Bar
- Max operating temperature 80 $^{\circ}\text{C}$
- Filtering grade 800 µm
- Default presetting 3 Bar

Certifications:







WRAS certification only for codes 2848.04.00 and 2848.05.00

Code	Measure	Model	Pack	Outer	Cat.
2848.04.00	G 1/2"	RinoxPlus M	1	10	06.01
2848.05.00	G 3/4"	RinoxPlus M	1	10	06.01
2848.06.00	G 1"	RinoxPlus M	1	4	06.01
2848.07.00	G 1"1/4	RinoxPlus M	1	4	06.01
2848.08.00	G 1"1/2	RinoxPlus M	1	4	06.01
2848.09.00	G 2"	RinoxPlus M	1	4	06.01



Pre-calibrated.

Replaceable cartridge. See spare parts pricelist. Compact.



RINOXPLUS M & RINOXPLUS SMART M

Diaphragm pressure reducing valves with inspectionable internal cartridge and removable filter.

The **RBM RinoxPlus M** are diaphragm operat- ed pressure reducing valves with inspectionable and easily interchangeable internal cartridge, complete with removable filter.

The cartridge is a compensated seat: upstream pressure variations do not affect the adjustment of the downstream pressure.

In addition, the **RinoxPlusSmart M** pressure reducing valve is equipped with a graduated knob to carry out the calibration, without the use of a pressure gauge and tools.



Before carrying out any maintenance oper- ation, shut off the pressure reducing valve.

For the replacement, control and cleaning of the reducer, simply unscrew the cap and remove the internal cartridge, which contains all the mobile parts and consumables.

When replacing the cartridge the reducer goes back to being like new.

It is possible to remove the filter from the cartridge to carry out cleaning or replacement.

During these operations, the body remains installed on the system.









RINOXPLUS SMART M



RINOXPLUS M

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Diaphragm pressure reducing valve

Inspectionable internal cartridge and filter

Body made of brass anti- dezincification (CR)

Out pressure calibration knob

Cartridge compensated

- Polymer cap
- 2 Diaphragm made of elastomer
- 3 Additional sealing o-ring made of elastomer
- 4 Cartridge
- 5 Filter (800 micron)
- 6 Body made brass anti-dezincification (CR)



Series 87.A

Rinox Due - Rinox Due Silver Adjustable pressure reducing valve, with single stainless steel seat and compensated piston operation. Suitable for water conveyance.

Nickel brass body. Stainless steel AISI 303 seat seals. Elastomer seals. Threaded connections FF UNI-EN-ISO 228. F1/4" pressure gauge holder connection.

- Nominal pressure 25 Bar
- Max upstream pressure 25 Bar
- Adjustable downstream pressure 0.5 ÷ 4 Bar (with inlet pressure of 8 Bar)
- Max operating temperature 80 °C
- Default presetting 3 Bar

Certifications:





Rinox Due. Pressure reducing valve with FF connections - pn 25

Code	Measure	Model	Pack	Outer	Cat.
87.03.80	G 3/8"	RinoxDue	1	20	06.01
87.04.80	G 1/2"	RinoxDue	1	20	06.01
87.05.80	G 3/4"	RinoxDue	1	20	06.01

Rinox Due Silver. Pressure reducing valve with FF - pn 25 with **RBM ACT treatment**

Code	Measure	Model	Pack	Outer	Cat.
4054.03.10	G 3/8"	RinoxDue Silver	1	20	06.01
4054.04.10	G 1/2"	RinoxDue Silver	1	20	06.01
4054.05.10	G 3/4"	RinoxDue Silver	1	20	06.01

Pre-calibrated.

 $RBM\ ACT\ treatment.\ Definition: electro-deposited\ ternary\ alloy,$ very stable; it replaces the classical electrolytic nickelchromium. It complies with the limitations imposed by the international regulations in terms of water intended for human consumption.

Features: Great corrosion resistance, both in acidic and alkaline environments and anti-magnetic properties that ensure great dezincification resistance.

It slows down the production of Limestone.

It complies with potability prerequisites.



Series 87.B

Rinox Due - Rinox Due Silver Adjustable pressure reducing valve, with single stainless steel seat and compensated piston operation. Suitable for water conveyance.

Nickel brass body. Stainless steel AISI 303 seat seals. Elastomer seals.

Threaded connections FF UNI-EN-ISO 228. F1/4" pressure gauge holder connection.

- Nominal pressure 25 Bar
- Max upstream pressure 25 Bar
- Adjustable downstream pressure 0.5 ÷ 7 Bar (with inlet pressure of 8 Bar)
- Max operating temperature 80 $^{\circ}$ C

Certifications:





Rinox Due. Pressure reducing valve with FF connections - pn 25

Code	Measure	Model	Pack	Outer	Cat.
87.03.70	G 3/8"	RinoxDue	1	20	06.01
87.04.70	G 1/2"	RinoxDue	1	20	06.01
87.05.70	G 3/4"	RinoxDue	1	20	06.01
87.06.70	G 1"	RinoxDue	1	6	06.01
87.07.70	G 1"1/4	RinoxDue	1	6	06.01
87.08.70	G 1"1/2	RinoxDue	1	1	06.01
87.09.70	G 2"	RinoxDue	1	1	06.01

Rinox Due Silver. Pressure reducing valve with FF - pn 25 with **RBM ACT treatment**

Code	Measure	Model	Pack	Outer	Cat.
4054.04.60	G 1/2"	Rinox Due Silver	1	20	06.01
4054.05.60	G 3/4"	RinoxDue Silver	1	20	06.01
4054.06.60	G 1"	Rinox Due Silver	1	6	06.01
4054.07.60	G 1"1/4	RinoxDue Silver	1	6	06.01
4054.08.60	G 1"1/2	RinoxDue Silver	1	1	06.01
4054.09.60	G 2"	RinoxDue Silver	1	1	06.01

RBM ACT treatment. Definition: electro-deposited ternary alloy, very stable; it replaces the classical electrolytic nickelchromium. It complies with the limitations imposed by the international regulations in terms of water intended for human consumption.



Features: Great corrosion resistance, both in acidic and alkaline $environments\, and\, anti-magnetic\, properties\, that\, ensure\, great$ dezincification resistance.

It slows down the production of Limestone.

It complies with potability prerequisites.





RinoxDue

Adjustable pressure reducing valve with MM - PN25 connections, with single stainless steel seat and compensated piston operation. Suitable for water conveyance.

Nickel brass body. Stainless steel AISI 303 seat seals. Elastomer seals. Threaded connections MF UNI-EN-ISO 228. $F1/4"\,pressure\,gauge\,holder\,connection.$

- Nominal pressure 25 Bar
- Max upstream pressure 25 Bar
- Adjustable downstream pressure 0.5 \div 4 Bar (with inlet pressure of 8 Bar)
- Max operating temperature 80 $^{\circ}$ C
- Default presetting 3 Bar

Certifications:



Code	Measure	Model	Pack	Outer	Cat.
288.04.80	G 1/2"	RinoxDue	1	10	06.01
288.05.80	G 3/4"	RinoxDue	1	10	06.01



Pre-calibrated.



Series 1139.A

Adjustable pressure reducing valve, single seat, compensated piston operation. Suitable for water conveyance.

Nickel brass body. Elastomer seals. Threaded connections FF UNI-EN-ISO 228. $F1/4"\,pressure\,gauge\,holder\,connection.$

- Nominal pressure 16 Bar
- Max upstream pressure 16 Bar
- Adjustable downstream pressure 0.5 \div 4 Bar (with inlet pressure of 8 Bar)
- Max operating temperature 80 °C
 Default presetting 3 Bar

Certifications:





Code	Measure	Model	Pack	Outer	Cat.
1139.03.00	G 3/8"	Ris	1	30	06.01
1139.04.00	G 1/2"	Ris	1	30	06.01
1139.05.00	G 3/4"	Ris	1	20	06.01



Pre-calibrated. Compact.



RINOXDUE

Adjustable piston-operated pressure reducing valve

Single-seated compensated pressure reducing valve with piston actuation. Its small dimensions make it particularly suitable for the final reduction of pressure at the user (condominium distribution to floors, balancing fire-fighting hoses in multi-storey buildings fed by overpressure units, etc.).

Supports a nominal pressure of 25 bar* allowing downstream pressure regulation between 0.5 and 7.0 bar (depending on model).

To achieve quiet operation and avoid premature wear of internal components, it is advisable to choose the reducing valve diameter so that the fluid velocity is within the following values:

- for water

 $V=0.7 \div 1.5$ m/s (residential use)

 $V= 1 \div 3.5 \text{ m/s}$ (industrial use)

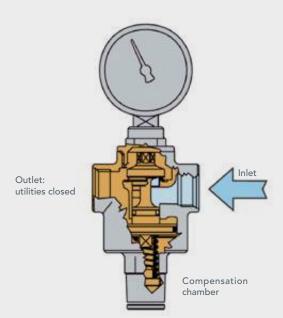
To avoid cavitation phenomena, and thus excessive component noise, the ratio between the max. upstream pressure and the regulating pressure downstream of the regulator must not exceed 2.5.

For example, for an end-user supply setting of no more than 3 bar, the pressure upstream of the reducing valve must remain within 7.5 bar.

For higher values, it is advisable to insert a second reducing valve in series with the first, in order to spread the total pressure difference over two reduction jumps.

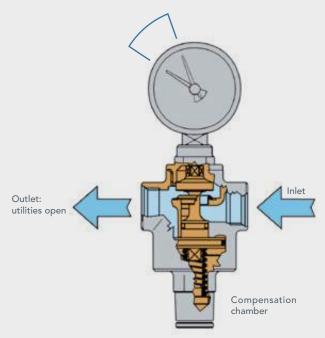
* 16 bar for the RIS model

Pressure stopped at the adjustment value of 3 bar



When the utilities to be served are closed, the downstream pressure increases by pushing the piston of the reducer to the bottom. In this way, the shutter closes the passage section of the pressure reducing valve, keeping the pressure constant at the set value set on the spring. The minimal pressure difference straddling the shutter allows it to close perfectly.

Pressure: P<3 bar





With the opening of the downstream utilities, the pressure exerted on the piston is less in favour of the force exerted by the spring on the shutter allowing its opening with the consequent fluid passage. The higher the demand for water from the utility network, the lower the pressure on the piston and the greater the water flow.





Series 1139.B

Ris

Adjustable pressure reducing valve, single seat, compensated piston operation. Suitable for water conveyance.

Nickel brass body. Elastomer seals. Threaded connections FF UNI-EN-ISO 228.

- Nominal pressure 16 Bar
- Max upstream pressure 16 Bar
- Adjustable downstream pressure 0.5 ÷ 4 Bar (with inlet pressure of 8 Bar)
- Max operating temperature 80 °C
- Default presetting 3 Bar

Certifications:



Code	Measure	Model	Pack	Outer	Cat.
1139.03.40	G 3/8"	Ris	1	30	06.01
1139.04.40	G 1/2"	Ris	1	30	06.01
1139.05.40	G 3/4"	Ris	1	30	06.01

Pre-calibrated.
Compact.

 $Version\,without\,pressure\,gauge\,holder\,connection.$



Series 1139.C

Ris

Pressure reducing valve with fixed calibration, single seat, compensated piston-operated. Suitable for water conveyance.

Brass body. Elastomer seals. Threaded connections FF UNI-EN-ISO 228.

- Nominal pressure 16 Bar
- Max upstream pressure 16 Bar
- Fixed downstream pressure 3 bar
- Max operating temperature 80 $^{\circ}$ C
- Fixed calibration 3 Bar

Certifications:



Code	Measure	Model	Pack	Outer	Cat.
1139.03.90	G 3/8"	Ris	1	30	06.01
1139.04.90	G 1/2"	Ris	1	30	06.01
1139.05.90	G 3/4"	Ris	1	30	06.01

Compact.

Version without pressure gauge holder connection.



66



Series 3072

Water hammer arrestor.

Brass body. Steel spring. Polymer piston. Elastomer seals. Threaded connection M UNI-EN-ISO 228.

- Max operating pressure 10 Bar
- Max operating temperature 90 °C
- $\bullet \ \ \mathsf{Start} \ \mathsf{of} \ \mathsf{active} \ \mathsf{intervention} \ \mathsf{3} \ \mathsf{Bar}$

Certifications:







WATER HAMMER **DAMPER**

The water hammer damper absorbs the overpressures generated in the system in the event of a sudden closing or opening of a circuit. In this way, the fluid pressure is maintained at optimum operating values. Absorption of overpressure prevents damage to the components that make up the system and makes it possible to significantly reduce the noise that occurs in the pipes due to vibrations caused by the sudden closing of shut-off devices.

- Preserves the system components
- Prevents vibrations and noise in the system
- Reduced overall dimensions
- No maintenance









OPERATING PRINCIPLE / POSSIBLE APPLICATIONS

The main function of the water hammer damper is to absorb the overpressures that are generated in the system, in case of sudden closure or opening a circuit.

The RBM water hammer dampers consist of a cylindrical body divided in two chambers (open chamber and closed chamber). The **closed chamber** is the cornerstone of the system, and is one that acts as a damper. It consists of a spring attached to a piston equipped with double O.R. sealing, all housed in an air chamber.

The **open chamber** is directly connected to the pipeline and is affected by changes in pressure in the hydraulic system. The overpressures generated in the system create a push on the spring, causing the change of pressure in the air contained in the

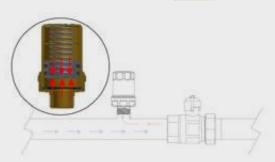
> Closed chamber

Open chamber

These opposing forces help absorb excess pressure.



When the utilities are open, the pressure remains constant throughout the pipeline.



When the utilities are **closed**, the pressure increases along the whole pipeline, causing it to overpressure. The presence of the RBM anti-water hammer device absorbs the overpressure generated, avoiding the trigger of the water hammer phenomenon, preserving in this way all the components in the system.



STATE OF THE ART INSTALLATION **OF RBM DEVICES**

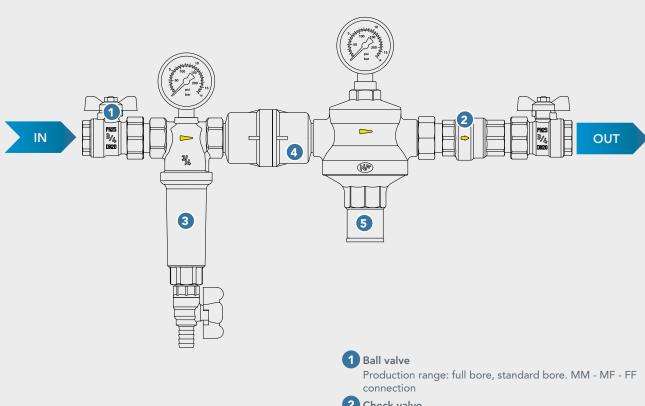
INSTALLATION

In order to have an optimal system and protect it from damage it is recommended to install the following devices:

- Ball valves
- Filter
- Magnetic anti-scale device
- Pressure reducing valve
- Check valve

PRECAUTIONS

- Always install a filter upstream of the system
- Perform periodic maintenance of the filters (clean/substitute filter cartridge when needed)
- Respect the arrow on the body of the device (flow direction them
- Use ball valves to allow maintenance operations
- Clean the pipes upstream and downstream of the system in order to avoid damages



- 2 Check valve
- 3 Filter with cartridge
 - Line filter
 - Y strainer
 - Self-cleaning filter
- 4 Magnetic anti-scale device
- 5 Pressure reducing valve

Production range: • Diaphragh operated (Rinox / RinoxPlus M / RinoxPlusSmart M) • Piston operated (RinoxDue / Ris)

01. HYDROTHERMAL DISTRIBUTION

07. CONTROL AND SAFETY COMPONENTS	
07.01 PRESSURE CONTROL AND SAFETY	70
Safety relief valves	
By-pass valve	
Filling units	
07.03 FLUIDS SECURITY CONTROL	80
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Anti-freeze valves



Standard safety relief valve with controlled rise for fluids and neutral gases.

Brass body. Stainless steel AISI 302 spring. Elastomer obturator seal. ${\it Elastomer\, diaphragm.}$ $Threaded\,angle\,connections\,FF\,UNI\text{-}EN\text{-}ISO\,228.$

- Maximum admissible pressure PS 10 bar
- Max operating temperature 110 °C
- Orifice diameter 15mm
- Opening overpressure < 20% Pt
- Closing discard pressure -20%
- Allowed fluid water-air (Gr.2)

Certifications:

PED

PESR

Standard safety relief valve 1/2" x 1/2" female connection

Code	Calibration (bar)	Max.Pwr. (kW)	Pack	Outer	Cat.
351.04.10	1,50	48	1	50	07.01
351.04.20	2,00	55	1	50	07.01
351.04.30	2,50	68	1	50	07.01
351.04.40	3,00	75	1	50	07.01
351.04.50	3,50	83	1	50	07.01
351.04.60	4,00	96	1	50	07.01
351.04.70	4,50	103	1	50	07.01
351.04.80	5,00	109	1	50	07.01
351.04.90	6,00	128	1	50	07.01
351.04.71	7,00	148	1	50	07.01
351.04.81	8,00	166	1	50	07.01
351.04.11	10,00	181	1	50	07.01

Standard safety relief valve 3/4" x 3/4" female connection

351.05.10 1,50 48 1 50 07.01 351.05.20 2,00 55 1 50 07.01 351.05.30 2,50 68 1 50 07.01 351.05.40 3,00 75 1 50 07.01 351.05.50 3,50 83 1 50 07.01 351.05.60 4,00 96 1 50 07.01 351.05.70 4,50 103 1 50 07.01	Code	Calibration (bar)	Max.Pwr. (kW)	Pack	Outer	Cat.
351.05.30 2,50 68 1 50 07.01 351.05.40 3,00 75 1 50 07.01 351.05.50 3,50 83 1 50 07.01 351.05.60 4,00 96 1 50 07.01	351.05.10	1,50	48	1	50	07.01
351.05.40 3,00 75 1 50 07.01 351.05.50 3,50 83 1 50 07.01 351.05.60 4,00 96 1 50 07.01	351.05.20	2,00	55	1	50	07.01
351.05.50 3,50 83 1 50 07.01 351.05.60 4,00 96 1 50 07.01	351.05.30	2,50	68	1	50	07.01
351.05.60 4,00 96 1 50 07.01	351.05.40	3,00	75	1	50	07.01
	351.05.50	3,50	83	1	50	07.01
351.05.70 4,50 103 1 50 07.01	351.05.60	4,00	96	1	50	07.01
	351.05.70	4,50	103	1	50	07.01
351.05.80 5,00 109 1 50 07.01	351.05.80	5,00	109	1	50	07.01
351.05.90 6,00 128 1 50 07.01	351.05.90	6,00	128	1	50	07.01
351.05.71 7,00 148 1 50 07.01	351.05.71	7,00	148	1	50	07.01
351.05.81 8,00 166 1 50 07.01	351.05.81	8,00	166	1	50	07.01
351.05.11 10,00 181 1 50 07.01	351.05.11	10,00	181	1	50	07.01



Series 352

Standard safety relief valve with controlled rise for fluids and neutral gases.

Brass body. Stainless steel AISI 302 spring. ${\it Elastomerobturatorseal}.$ Elastomer diaphragm. Threaded angle connections MF UNI-EN-ISO 228.

- Maximum admissible pressure PS 10 bar
- Max operating temperature 110 °C
- Orifice diameter 15mm
- Opening overpressure < 20% Pt
- Closing discard pressure -20%
- Allowed fluid water-air (Gr.2)

Certifications:

PED

PESR

Standard safety relief valve male 1/2" x female 1/2" connection

Code	Calibration (bar)	Max.Pwr. (kW)	Pack	Outer	Cat.
352.04.10	1,50	48	1	50	07.01
352.04.20	2,00	55	1	50	07.01
352.04.30	2,50	68	1	50	07.01
352.04.40	3,00	75	1	50	07.01
352.04.50	3,50	83	1	50	07.01
352.04.60	4,00	96	1	50	07.01
352.04.70	4,50	103	1	50	07.01
352.04.80	5,00	109	1	50	07.01
352.04.90	6,00	128	1	50	07.01
352.04.71	7,00	148	1	50	07.01
352.04.81	8,00	166	1	50	07.01
352.04.11	10,00	181	1	50	07.01

Standard safety relief valve male 1/2" x female 3/4" connection

	,				
Code	Calibration (bar)	Max.Pwr. (kW)	Pack	Outer	Cat.
352.05.10	1,50	48	1	50	07.01
352.05.20	2,00	55	1	50	07.01
352.05.30	2,50	68	1	50	07.01
352.05.40	3,00	75	1	50	07.01
352.05.50	3,50	83	1	50	07.01
352.05.60	4,00	96	1	50	07.01
352.05.70	4,50	103	1	50	07.01
352.05.80	5,00	109	1	50	07.01
352.05.90	6,00	128	1	50	07.01
352.05.71	7,00	148	1	50	07.01
352.05.81	8,00	166	1	50	07.01
352.05.11	10,00	181	1	50	07.01



SAFETY RELIEF VALVES

Compliant with P.E.D. directive

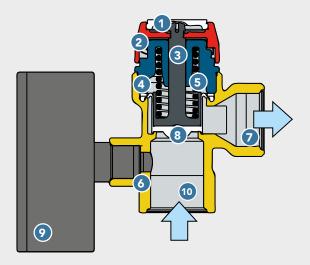
RBM safety relief valves are devices that have to be installed on a hydraulic circuit, immediately downstream of the heat generator or on the hot water storage tanks, on the supply piping, in order to discharge any overpressure which could generate inside of them.

RBM safety relief valves are supplied with a pre-established calibration pressure value. When operating, if that pressure is reached, the valve opens (the force generated by the pressure overcomes the resistance exerted by the spring), allowing part of the fluid to be discharged thus lowering pressure inside the system.



STANDARD SAFETY RELIEF VALVE

Standard safety relief valves with controlled rising are used on heat generators with heat rated capacity higher than 35 kW and whenever the certified safety relief valve is not required. The standard safety relief valve is also available in the version with pressure gauge to read the pressure.



- 1 Indicator disk
- 2 ABS hand wheel
- 3 Polymer rod
- 4 Polymer cap
- 5 Internal spring in AISI 302 stainless steel
- 6 Brass body
- 7 Excessive pressure discharge connection
- 8 Shutter with elastomer seal
- 9 Pressure gauge
- 10 Heat generator connection



ACCESSORIES

DRAIN CHANNEL, CONSISTING OF FITTING ELBOW AND COLLECTION FUNNEL
Combined with the safety valves, the drain channel allows the discharged fluid to be directed in the

desired direction.



Standard safety relief valve with controlled rise for fluids and neutral gases, complete with dial pressure gauge.

Brass body.
Stainless steel AISI 302 spring.
Elastomer obturator seal.
Elastomer diaphragm.
Threaded angle connections FF UNI-EN-ISO 228.
F1/4" pressure gauge connection (UNI-EN-ISO 228)

- Maximum admissible pressure PS 10 bar
- Max operating temperature 110 °C
- $\bullet \ \ Orifice \, diameter \, 15mm$
- Opening overpressure < 20% Pt
- Closing discard pressure -20%
- $\bullet \ \ \mathsf{Pressure} \ \mathsf{gauge} \ \mathsf{scale} \ \mathsf{0} \div \mathsf{4} \ \mathsf{Bar} \ \mathsf{for} \ \mathsf{valves} < \mathsf{4} \ \mathsf{Bar}$
- Pressure gauge scale 0 10 bar for valves > 4 bar
 Permitted fluid water-air (Un.2)

Certifications:

PED

PESR

0425 UK Standard safety relief valve 1/2" x 1/2" female connection with pressure gauge

Code	Calibration (bar)	Max.Pwr. (kW)	Pack	Outer	Cat.
353.04.10	1,50	48	1	48	07.01
353.04.20	2,00	55	1	48	07.01
353.04.30	2,50	68	1	48	07.01
353.04.40	3,00	75	1	48	07.01
353.04.50	3,50	83	1	48	07.01
353.04.60	4,00	96	1	48	07.01
353.04.70	4,50	103	1	48	07.01
353.04.80	5,00	109	1	48	07.01
353.04.90	6,00	128	1	48	07.01
353.04.71	7,00	148	1	48	07.01
353.04.81	8,00	166	1	48	07.01
353.04.11	10,00	181	1	48	07.01

Standard safety relief valve 3/4" x 3/4" female connection with pressure gauge

	-				
Code	Calibration (bar)	Max.Pwr. (kW)	Pack	Outer	Cat.
353.05.10	1,50	48	1	48	07.01
353.05.20	2,00	55	1	48	07.01
353.05.30	2,50	68	1	48	07.01
353.05.40	3,00	75	1	48	07.01
353.05.50	3,50	83	1	48	07.01
353.05.60	4,00	96	1	48	07.01
353.05.70	4,50	103	1	48	07.01
353.05.80	5,00	109	1	48	07.01
353.05.90	6,00	128	1	48	07.01
353.05.71	7,00	148	1	48	07.01
353.05.81	8,00	166	1	48	07.01
353.05.11	10,00	181	1	48	07.01



Series 354

Standard safety relief valve with controlled rise for fluids and neutral gases, complete with dial pressure gauge.

Brass body.
Stainless steel AISI 302 spring.
Elastomer obturator seal.
Elastomer diaphragm.
Threaded angle connections MF UNI-EN-ISO 228.
F1/4" pressure gauge connection (UNI-EN-ISO 228).

- Maximum admissible pressure PS 10 bar
- Max operating temperature 110 °C
- Orifice diameter 15mm
- Opening overpressure < 20% Pt
- Closing discard pressure -20%
- Pressure gauge scale 0 ÷ 4 Bar for valves < 4 Bar
- Pressure gauge scale 0 ÷ 10 Bar for valves > 4 Bar
- Allowed fluid water-air (Gr.2)

Certifications:

PED

PESR

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Code	Calibration (bar)	Max.Pwr. (kW)	Pack	Outer	Cat.
354.04.10	1,50	48	1	48	07.01
354.04.20	2,00	55	1	48	07.01
354.04.30	2,50	68	1	48	07.01
354.04.40	3,00	75	1	48	07.01
354.04.50	3,50	83	1	48	07.01
354.04.70	4,50	103	1	48	07.01
354.04.80	5,00	109	1	48	07.01
354.04.90	6,00	128	1	48	07.01
354.04.71	7,00	148	1	48	07.01
354.04.81	8,00	166	1	48	07.01
354.04.11	10,00	181	1	48	07.01





T&P combined safety valve.

Brass body.
Stainless steel AISI 302 spring.
Elastomer obturator seal.
Elastomer diaphragm.
Threaded connections M UNI-EN-ISO 228.
Copper pipe end connection.

- Maximum admissible pressure PS 10 bar
- Temperature calibration 90+2 °C

Certifications:

PED

PESR

C €UK

T&P combined safety valve 1/2" x Ø 15

Code	Calibra- tion (bar)	Max.Pwr. (kW)	Probe length	Pack	Outer	Cat.
2201.04.25	2,50	10	4"	1	50	07.01
2201.04.30	3,00	10	4"	1	50	07.01
2201.04.40	4,00	10	4"	1	50	07.01
2201.04.60	6,00	10	4"	1	50	07.01
2201.04.70	7,00	10	4"	1	50	07.01
2201.04.10	10,00	10	4"	1	50	07.01
2201.14.25	2,50	10	8″	1	40	07.01
2201.14.30	3,00	10	8"	1	40	07.01
2201.14.40	4,00	10	8″	1	40	07.01
2201.14.60	6,00	10	8″	1	40	07.01
2201.14.70	7,00	10	8″	1	40	07.01
2201.14.10	10,00	10	8"	1	40	07.01

T&P combined safety valve 3/4" x Ø 22

Code	Calibra- tion (bar)	Max.Pwr. (kW)	Probe length	Pack	Outer	Cat.
2545.05.30	3,00	25	4"	1	50	07.01
2545.05.40	4,00	25	4"	1	50	07.01
2545.05.60	6,00	25	4"	1	50	07.01
2545.05.70	7,00	25	4"	1	50	07.01
2545.05.10	10,00	25	4"	1	50	07.01
2545.15.30	3,00	25	8"	1	40	07.01
2545.15.40	4,00	25	8"	1	40	07.01
2545.15.60	6,00	25	8″	1	40	07.01
2545.15.70	7,00	25	8"	1	40	07.01
2545.15.10	10,00	25	8″	1	40	07.01



Series 2809

Standard safety relief valve with controlled rise for water outlet; suitable for sanitary installations.

Brass body.
Stainless steel AISI 302 spring.
Elastomer obturator seal.
Elastomer diaphragm.
Threaded angle connections FF UNI-EN-ISO 228.

- $\bullet \ \ \text{Max admissible pressure PS 12 bar}$
- Max operating temperature 100 °C
- Opening overpressure +10%
- Closing discard pressure -20%
- Allowed fluid water-air (Gr.2)

Certifications:

PEC





$Standard\,1/2"\,x\,3/4"\,female\,connection\,safety\,valve$

Code	Calibration (bar)	Max.Pwr. (kW)	Pack	Outer	Cat.
2809.04.60	4,00	75	1	45	07.01
2809.04.90	6,00	75	1	45	07.01
2809.04.81	8,00	75	1	45	07.01
2809.04.11	10,00	75	1	45	07.01

Standard 3/4" x 1" female connection safety valve

Code	Calibration (bar)	Max.Pwr. (kW)	Pack	Outer	Cat.
2809.05.60	4,00	150	1	20	07.01
2809.05.90	6,00	150	1	20	07.01
2809.05.81	8,00	150	1	20	07.01
2809.05.11	10,00	150	1	20	07.01

Standard female connection 1" x 1"1/4 safety valve

			-		
Code	Calibration (bar)	Max.Pwr. (kW)	Pack	Outer	Cat.
2809.06.60	4,00	250	1	20	07.01
2809.06.90	6,00	250	1	20	07.01
2809.06.81	8,00	250	1	20	07.01
2809.06.11	10,00	250	1	20	07.01

Standard female connection $1"1/4 \times 1"1/2$ safety valve

Code	Calibration (bar)	Max.Pwr. (kW)	Pack	Outer	Cat.
2809.07.90	6,00	350	1	10	07.01
2809.07.81	8,00	350	1	10	07.01
2809.07.11	10,00	350	1	10	07.01



Safety valve for sanitary installations.





Standard safety relief valve with controlled rise for water outlet; suitable for heating installations.

Brass body.
Stainless steel AISI 302 spring.
Elastomer obturator seal.
Elastomer diaphragm.
Threaded angle connections FF UNI-EN-ISO 228.

- Max admissible pressure PS 12 bar
- Max operating temperature 120 °C
- Opening overpressure +10%
- Closing discard pressure -20%
- Allowed fluid water-air (Gr.2)

Certifications:

PED



Standard 1/2" x 3/4" female connection safety valve

Code	Calibration (bar)	Max.Pwr. (kW)	Pack	Outer	Cat.
811.14.30	2,50	50	1	45	07.01
811.14.40	3,00	50	1	45	07.01

Standard 3/4" x 1" female connection safety valve

Code	Calibration (bar)	Max.Pwr. (kW)	Pack	Outer	Cat.
811.15.30	2,50	100	1	20	07.01

Standard female connection 1" x 1"1/4 safety valve

Code	Calibration (bar)	Max.Pwr. (kW)	Pack	Outer	Cat.
811.16.30	2,50	200	1	20	07.01
811.16.40	3,00	200	1	20	07.01

Standard female connection 1"1/4 x 1"1/2 safety valve

Code	Calibration (bar)	Max.Pwr. (kW)	Pack	Outer	Cat.
811.17.30	2,50	350	1	10	07.01
811.17.40	3,00	350	1	10	07.01



Safety valve for heating installations.



Series 666

Accessories for safety relief valve. Drain channel composed of fitting elbow and collection funnel.

Brass body. Channel connections MM UNI-EN-ISO 228. Funnel connections FF UNI-EN-ISO 228.

- Max operating temperature 110 $^{\circ}\text{C}$

Code	Measure	Pack	Outer	Cat.
666.05.00	G 3/4"	1	20	07.01
666.06.00	G 1"	1	1	07.01
666.07.00	G 1"1/4	1	1	07.01
666.08.00	G 1"1/2	1	1	07.01



Sold together elbow + collection funnel.





- 1" - 1"1/4).

Settable by-pass valve for total or partial overflow of thermal circuits.

Brass body. Elastomer seals. Stainless steel AISI 302 springs. Shockproof ABS handwheel. Graduated scale on knob. Threaded angle connections UNI-EN-ISO 228 (3/4"

Connections with fittings for copper pipe (Ø 22).

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar
 Setting range 0.1 ÷ 0.7 Bar
 Setting unit 0.1 Bar

Code	Measure	Pack	Outer	Cat.
124.05.00*	G 3/4"	1	10	07.01
124.06.00*	G 1"	1	10	07.01
124.07.00*	G 1"1/4	1	5	07.01
124.22.00**	Ø 22	1	10	07.01



^{*}Connections for steel pipe with union fitting
**Connections complete with fittings for copper pipe Ø 22

Cat.

07.01



Alinox

46.04.00 Il closed h nplete

Code

Measure

G 1/2"

Model

Alinox

Adjustable insulation shell to refill closed circuits, diaphragm operated with anti-water hammer function, complete with removable cartridge micro filter, built-in check valve and dial pressure gauge to view downstream pressure.

FILLING UNITS

Nickel brass body. Stainless steel seal seats. Elastomer seals. Threaded connections FF UNI-EN-ISO 228.

- Nominal pressure 25 Bar
- Max upstream pressure 25 Bar
- Adjustable downstream pressure 0.8 ÷ 5.5 Bar
- Max operating temperature 80 °C
- Pressure gauge scale 0 ÷ 10 Bar
- Filtering grade 800 μm

Code	Measure	Pack	Outer	Cat.
3856.04.00	G 1/2"	1	6	07.01
3856 05 00	G 3 //\"	1	6	07.01



Series 3856

SmartFiller 1/2"

Adjustable insulation shell to refill closed circuits, diaphragm operated, complete with self-lubricating technopolymer cartridge, built-in check valve, graduated calibration knob and dial pressure gauge to view downstream pressure.

Brass body. Stainless steel sealing ring. Elastomer seals. Threaded connections MF UNI-EN-ISO 228.

- Nominal pressure 16 Bar
- Max upstream pressure 16 Bar
- Adjustable downstream pressure 0.5 ÷ 4 Bar
- Max operating temperature 80 °C
- Pressure gauge scale 0 ÷ 4 Bar
- Filtering grade 500 µm

|--|

Series 3153

Filler

Adjustable insulation shell to refill closed circuits, piston operated, complete with cartridge micro filter, built-in check valve and dial pressure gauge to view downstream pressure.

Nickel brass body. Elastomer seals. Threaded connections MFUN HEN-ISO 228

- Nominal pressure 16 Bar
- $\bullet \ \ \mathsf{Max}\,\mathsf{upstream}\,\mathsf{pressure}\,\mathsf{16}\,\mathsf{Bar}$
- Adjustable downstream pressure 0.5 \div 4 Bar
- Max operating temperature 80 $^{\circ}\text{C}$
- Pressure gauge scale 0 ÷ 4 Bar
- Filtering grade 500 μm

Certifications:



Code	Measure	Model	Pack	Outer	Cat.
3153.04.00	G 1/2"	Filler	1	6	07.01



SMARTFILLER

Automatic diaphragm filling unit equipped with calibrating knob

RBM SmartFiller M is an automatic fi lling unit, a device that

It is composed of: a pressure reducing valve, a check valve and a shut-off valve.

reintegrates fluid into the heating systems.

The pressure reducing valve is diapgragm type and equipped with a pressure gauge to measure the output pressure. The cartridge is compensated seat: upstream pressure variations do not affect the downstream adjustment.



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USE

The **RBM SmartFiller M** units are crucial parts that automatically reintegrate any water coming out of the system. In fact, during the normal operation of a heating system, part of the fluid is lost through the deaerators, in the form of steam mixed with gases that develop continuously in the circuit. The space left free by the fluid, if not duly reinstated, will be occupied by the gases which, when dissolved, form acid solutions that can lead to corrosion.

Check valve and shut-off valve incorporated

Output pressure calibration knob

Pressure gauge

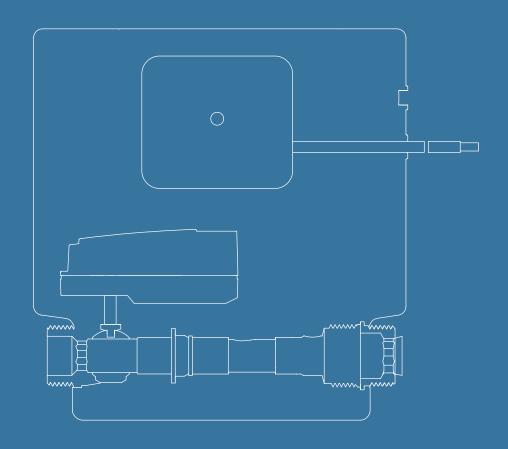
PN 16

Special ADZ treatment



- 1 Graduated calibration knob
 To immediately adjust the output
 calibration value.
- 2 Diaphragm made of elastomer
- 3 Pressure gauge
 This measures the pressure
 downstream of the filling unit, namely
 the pressure in the circuit to be filled.
- 4 Check valve
 Prevents the return of the liquid present
 in the system towards the aqueduct
 (upstream of the supply unit).
- 5 Filter
- 6 Shut-off valve

Cuts off the power supply and therefore excludes the refi ll function. This is useful during system maintenance, or in case of failure of any part of the circuit.



07. CONTROL AND SAFETY COMPONENTS

07.03 FLUIDS SECURITY CONTROL

80

Leak detectors



Stop Leak Electronic water leak detector.

Device that trips when leaks and abnormal energy consumption are detected, by cutting the power supply off and thus preventing flooding or unwanted consumption.

The Stop Leak system is composed of: Motorised shut-off valve;

Thermodynamic micro-leak detection sensor; Control electronics with potential-free contact interface and status remote control;

Management and commissioning App; Bluetooth protocol for commissioning and LORA for communication;

Remote display (only supplied with codes 3897.05.10 and 3897.06.10).

- Sensitivity: 0.2 l/h
- · Reaction time: programmable
- Tripping threshold: programmable
- Temperature Range: 0 60°C
- Power supply: 12V 24V AC/DC

Certifications:



Electronic system water leak detector with motorised shut-off

Code	Measure	Sensitivity (l/h)	Pack	Outer	Cat.
3897.05.80	3/4"	0,2	1	1	07.03
3897.06.80	1"	0,2	1	1	07.03

$Electronic \, system \, water \, leak \, detector \, with \, motorised \, shut-off \, valve \, and \, remote \, control \,$

C	ode	Measure	Sensitivity (l/h)	Pack	Outer	Cat.
3897	7.05.90	3/4"	0,2	1	1	07.03
3897	7.06.90	1"	0,2	1	1	07.03

Protection of your system from leaks or unwanted energy consumption during system downtime.

Prevention from any damage due to water leaks.

Saving on energy consumption.

Advantages for the community (water resource protection device).

Possibility to reduce your home insurance premium. Easy, smart programming.

The system is designed to adapt to the system conditions of use thanks to its self-learning logic.





Stop Leak template.

Template for set up of Stop Leak during plant construction.

Body in polymer.

Threaded connections MM UNI-EN-ISO 228 with flat seal.

PN 16 bar.

Max operating temperature 90 °C.

Code	Measure	Pack	Outer	Cat.
3898.05.00	3/4"	1	1	07.03
3898.06.00	1"	1	1	07.03



Stop | Leak leak detector



Choose **the future of home protection**; designed to detect even the smallest leaks, preventing flooding and costly damage.

BENEFITS FOR THE USER

- Protection of one's own system from breakage and/or leakage
- Prevention of damage due to water leakage
- Avoid litigation following a leakage problem
- Consumption savings
- Community benefits (saving water resources)
- Possibility of negotiating the premium for home insurance
- Simple programming

ADVANTAGES FOR THE INSTALLER

- Easy assembly
- Possibility of offering the customer greater security for the installation
- Protection against errors resulting from incorrect installation
- Customer loyalty



FOR A SAFER HOME

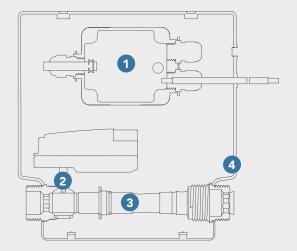
The Stop Leak system is the result of the latest technology for detecting water leaks: it is the only system capable of **detecting leaks in the order of 0.2 l/h**, slightly less than a table glass.

In hydraulic systems it is always difficult to identify such small leaks, which in the long run can cause serious damage. Similarly even protects the system from the onset of potential flooding caused by faults or omissions.

HOW DOES IT WORK?

Stop Leak, just like a circuit breaker for the electrical circuit, intervenes to prevent damage to your home. Its technology establishes whether, within the system, there is a normal withdrawal of water or an abnormal consumption.

After excluding normal operation, the system intervenes by closing the shut-off valve, by interrupting the inflow of water. The programmable regulator, located inside the home, will indicate the presence of a likely water leak on the display. The Stop Leak system consists of: flow sensor, motorised shut-off valve and programmable regulator.



- Programmable controller
- 2 Shut-off unit
- 3 Leak detection block with flow sensor
- 4 Housing box

01.
HYDROTHERMAL
DISTRIBUTION

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07. CONTROL AND SAFETY COMPONENTS

07.04 TEMPERATURE CONTROL AND SAFETY

83

Anti-freeze valves



Zerofrost Antifreeze valve for heat pumps

 $Brass\,body.$ Brass internal components. EPDM PEROX seals. Stainless steel AISI 302 springs.

- · Compatible fluid: water
- Max operating pressure 10 Bar

- Max operating pressure 10 Bar
 Temperature range 0-80°C
 Fluid temperature (open) 3°C
 Fluid temperature (closed) 4°C
 Sensitivity ± 1°C
 Max discharge flow rate at 3 bar: 1.5 l/h

	Code	Measure	Kv (m³/h)	Pack	Cat.
	4093.06.00	G 1"	55	1	07.04
	4093.07.00	G 1" 1/4	70	1	07.04



RBM Zer®frost

Antifreeze valve for heat pumps

The **Zerofrost anti-freeze valve** is designed to allow a small amount of the fluid contained inside the system to drain when its **temperature drops below 3 °C**. It automatically intervenes to prevent the formation of ice within the single-block heat pump circuit, preventing blockages or obstructions in the system that can reduce its efficiency and cause damage to the system.

Zerofrost is an **environmentally friendly solution** because it eliminates the risks of using potentially polluting glycol. It is also an economical choice because it **saves on running and maintenance costs**, keeping the system in perfect working order.

Zerofrost is available in two sizes: 1" and 1"1/4.







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It avoids negative influences from low ambient temperatures, allowing accurate system drainage only when necessary

High-performance bulb

Precision and speed of intervention guaranteed over time.

Filter ring

It protects the bulb from any debris suspended in the water that could cause the drain to malfunction.

Surface treatment of the operating device

Ensures proper operation and reliability over time.

Very low discharge rate (max 1,5 l/h)

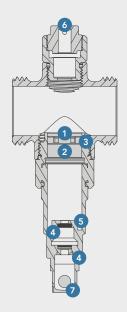
The special design of the drain guarantees dripping only. Unlike other devices whose drains are made with the classic shutter system, Zerofrost discharges only what is necessary, avoiding emptying the system.

Vacuum breaker valve

It prevents the creation of negative pressures in the system or piping generated during discharge.

Anti-drip

The innovative anti-drip feature prevents the formation of water bubbles and subsequent freezing.

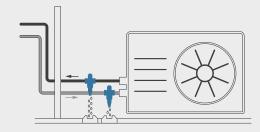


INSTALLATION

Zerofrost automatically intervenes to prevent the formation of ice within the circuit of the single-block heat pumps. Before installing the device, clean the piping thoroughly to prevent circulating impurities from impairing its performance.

Antifreeze valves should be **installed outside**, where the lowest temperature can be reached, **and away from heat sources** that could interfere with operation.

Zerofrost **can only be installed in a vertical position**, with the outlet pointing downwards, to allow the discharged water to flow out correctly, unobstructed.



Protects heat pumps from freezing

It is automatically activated when the fluid temperature drops below 3 °C

No power supply required

Maximum sensitivity (± 1 °C) and rapidity of intervention

Discharge only what is necessary (max. 1.5 l/h) avoiding draining the system

Avoids the use of glycol

01.
HYDROTHERMAL
DISTRIBUTION

08. BALL VALVES, CHECK VALVES AND SHUT-OFF DEVICES

08.01 BALL VALVES, CHECK VALVES AND SHUT-OFF DEVICES

86

Ball valves

Check valves

Accessories





hydrocarbons.

Arno
Heavy full bore ball valve, lever handle operated, FF connections. Suitable for water, water+ glycol, steam,

BALL VALVES

Nickel brass body. Thick chrome plated brass ball. PTFE seal. Threaded connections UNI-EN-ISO 228.

- Operating temperature with water -20 - + 120 °C

Certifications:

PED



CE certification only for sizes marked with an asterisk.

Code	Measure	PN	Pack	Outer	Cat.
3371 14NI	1/4"	40	10	160	08.01
3371 38NI	3/8"	40	10	160	08.01
3371 12NI	1/2"	40	8	64	08.01
3371 34NI	3/4"	40	6	48	08.01
3371 10NI	1"	40	6	48	08.01
3371 04NI	1"1/4*	40	4	32	08.01
3371 02NI	1"1/2*	40	2	16	08.01
3371 20NI	2"*	40	2	10	08.01
3371 22N	2"1/2*	25	8	8	08.01
3371 30N	3"*	25	6	6	08.01
3371 40N	4"*	10	4	4	08.01



Series 3372

Arno
Heavy full bore ball valve, butterfly
handle operated, FF connections.
Suitable for water, water+ glycol, steam,
hydrocarbons.

Nickel brass body. Thick chrome plated brass ball. PTFE seal. Threaded connections UNI-EN-ISO 228.

• Operating temperature with water -20 - + 120 $^{\circ}$ C

Certifications:

PED



CE certification only for sizes marked with an asterisk.

Code	Measure	PN	Pack	Outer	Cat.
3372 14NI	1/4"	40	10	160	08.01
3372 38NI	3/8"	40	10	160	08.01
3372 12NI	1/2"	40	10	120	08.01
3372 34NI	3/4"	40	5	80	08.01
3372 10NI	1"	40	5	60	08.01
3372 04NI	1"1/4*	40	4	32	08.01



Series 3373

Arno

Heavy full bore ball valve, lever handle operated, MF connections. Suitable for water, water+ glycol, steam, hydrocarbons.

Nickel brass body. Thick chrome plated brass ball. PTFE seal. Threaded connections UNI-EN-ISO-228.

- Operating temperature with water -20 - + 120 °C

Certifications:

PED



CE CE certification only for sizes marked with an asterisk.

Code	Measure	PN	Pack	Outer	Cat.
3373 14NI	1/4"	40	10	160	08.01
3373 38NI	3/8"	40	10	160	08.01
3373 12NI	1/2"	40	10	120	08.01
3373 34NI	3/4"	40	6	48	08.01
3373 10NI	1"	40	4	48	08.01
3373 04NI	1"1/4*	40	4	32	08.01
3373 02NI	1"1/2*	40	2	20	08.01
3373 20NI	2"*	40	2	10	08.01





Arno

Heavy full bore ball valve, butterfly handle operated, MF connections. Suitable for water, water+ glycol, steam, hydrocarbons.

Nickel brass body. Thick chrome plated brass ball. PTFE seal. Threaded connections UNI-EN-ISO 228.

• Operating temperature with water -20 - + 120 °C

Certifications:



Code	Measure	PN	Pack	Outer	Cat.
3374 14NI	1/4"	40	10	160	08.01
3374 38NI	3/8"	40	10	160	08.01
3374 12NI	1/2"	40	10	120	08.01
337434NI	3/4"	40	5	60	08.01
3374 10NI	1"	40	5	60	08.01

Series 3386

Arno

Heavy full bore angled ball valve, butterfly handle operated, F connection with M union. Suitable for water, water+ glycol, steam, hydrocarbons.

Nickel brass body. Thick chrome plated brass ball. PTFE seal. Threaded connections UNI-EN-ISO 228.

- Operating temperature with water -20 - + 120 $^{\circ}$ C

Certifications:



Code	Size A	Size B	PN	Pack	Outer	Cat.
3386 09NI	1/2"	1/2"	40	10	120	08.01
3386 A1NI	3/4"	3/4"	40	5	60	08.01
3386 A2NI	1"	1"	40	4	40	08.01



Series 3255

Arno

Curved ball bibcock, lever handle operated. Suitable for water, water+glycol, steam, hydrocarbons.

Nickel brass body. Thick chrome plated brass ball. PTFE seal. Elastomer OR gaskets. Threaded connections UNI-EN-ISO 228.

- Operating temperature with water -20 - + 120 $^{\circ}$ C

Code	Measure	PN	Pack	Outer	Cat.
3255 12NI	1/2"	30	10	80	08.01
3255 34NI	3/4"	30	5	50	08.01
3255 10NI	1"	30	4	20	08.01



Series 3256

Arno

Curved ball bibcock, butterfly handle operated. Suitable for water, water+glycol, steam, hydrocarbons.

Nickel brass body. Thick chrome plated brass ball. PTFE seal. Elastomer OR gaskets. Threaded connections UNI-EN-ISO 228.

- Operating temperature with water -20 - + 120 °C

Code	Measure	PN	Pack	Outer	Cat.
3256 12NI	1/2"	30	10	80	08.01
3256 34NI	3/4"	30	5	50	08.01
3256 10NI	1"	30	4	20	08.01





Series 854.A

Iro Standard bore ball valve, lever handle operated, FF connections. Suitable for water, water+glycol.

Nickel brass body. Thick chrome plated brass ball. PTFE seal. Elastomer OR gaskets. Threaded connections UNI-EN-ISO 228.

 Operating temperature with water -20 - +120 °C (without steam)

Code	Measure	PN	Pack	Outer	Cat.
855.03.32*	3/8"	50	20	80	08.01
854.04.32	1/2"	50	15	90	08.01
854.05.32	3/4"	50	12	48	08.01
854.06.32	1"	40	6	36	08.01
854.07.32	1"1/4	30	6	24	08.01
854.08.32	1"1/2	25	2	12	08.01
854.09.32	2"	25	2	8	08.01

*Full bore

Certifications:





Series 854.B

Iro Standard bore ball valve, lever handle operated, FF connections. Suitable for

operated, FF connections. Suitable for water, water+glycol.

Nickel brass body.

Thick chrome plated brass ball. PTFE seal. Elastomer OR gaskets. Threaded connections UNI-EN-ISO 228.

 Operating temperature with water -20 - +120 °C (without steam)

Code	Measure	PN	Pack	Outer	Cat.
855.03.42*	3/8"	50	20	80	08.01
854.04.42	1/2"	50	15	90	08.01
854.05.42	3/4"	50	12	48	08.01
854.06.42	1"	40	6	36	08.01
854.07.42	1"1/4	30	6	24	08.01
854.08.42	1"1/2	25	2	12	08.01
854.09.42	2"	25	2	8	08.01

*Full bore

Certifications:





Series 989

Iro Standard bore ball valve, butterfly handle operated, FF connections. Suitable for water, water+glycol.

Nickel brass body. Thick chrome plated brass ball. PTFE seal. Elastomer OR gaskets. Threaded connections UNI-EN-ISO 228.

 Operating temperature with water -20 - +120 °C (without steam)

Certifications:





Code	Measure	PN	Pack	Outer	Cat.
989.03.32*	3/8"	50	20	80	08.01
989.04.32	1/2"	50	15	90	08.01
989.05.32	3/4"	50	12	48	08.01
989.06.32	1"	40	6	36	08.01
989.07.32	1"1/4	30	8	24	08.01

*Full bore



Series 885.A

Iro Standard bore ball valve, lever handle operated, MM connections. Suitable for water, water+glycol.

 $Nickel\,brass\,body.$ $Thick \, chrome \, plated \, brass \, ball.$ PTFE seal. ${\sf Elastomer\,OR\,gaskets.}$ $Threaded\,connections\,UNI\text{-}EN\text{-}ISO\,228.$

- Operating temperature with water -20 - +120 $^{\circ}$ C (without steam)

Certifications:



Code	Measure	PN	Pack	Outer	Cat.
885.04.52	1/2"	50	15	60	08.01
885.05.52	3/4"	50	12	48	08.01
885.06.52	1"	40	6	36	08.01
*Full bore					

Series 885.B

Standard bore ball valve, lever handle $operated, MM \, connections. \, Suitable \, for \,$ water, water+glycol.

Nickel brass body. Thick chrome plated brass ball. PTFE seal. Elastomer OR gaskets. Threaded connections UNI-EN-ISO 228.

• Operating temperature with water -20 - +120 °C (without steam)

Certifications:





Code	Measure	PN	Pack	Outer	Cat.
885.03.32*	3/8"	50	20	80	08.01
885.04.32	1/2"	50	15	60	08.01
885.05.32	3/4"	50	12	48	08.01
885.06.32	1"	40	6	36	08.01

*Full bore

Seri	06	Q Q	5	r
2611	E3	u		•

Iro

Standard bore ball valve, butterfly handle operated, MM connections. Suitable for water, water+glycol.

Nickel brass body. Thick chrome plated brass ball. PTFE seal. ${\sf Elastomer\,OR\,gaskets.}$ Threaded connections UNI-EN-ISO 228.

- Operating temperature with water -20 - +120 $^{\circ}$ C (without steam)

Certifications:





 $WRAS\,only\,for\,code\,885.05.42$

Code	Measure	PN	Pack	Outer	Cat.
885.03.42*	3/8"	50	20	80	08.01
885.04.42	1/2"	50	15	60	08.01
885.05.42	3/4"	50	12	48	08.01
885.06.42	1"	40	6	36	08.01

*Full bore





Series 886.A

Iro Standard bore ball valve, lever handle operated, MF connections. Suitable for water, water+glycol.

Nickel brass body. Thick chrome plated brass ball. PTFE seal. Elastomer OR gaskets. Threaded connections UNI-EN-ISO 228.

 Operating temperature with water -20 - +120 °C (without steam)

Code	Measure	PN	Pack	Outer	Cat.
886.03.32*	3/8"	50	20	40	08.01
886.04.32	1/2"	50	15	90	08.01
886.05.32	3/4"	50	12	48	08.01
886.06.32	1"	40	6	36	08.01
886.07.32	1"1/4	30	5	20	08.01
886.08.32	1"1/2	25	2	12	08.01
886.09.32	2"	25	2	8	08.01

*Full bore

Certifications:





Series 886.B

Iro

Standard bore ball valve, lever handle operated, MF connections. Suitable for water, water+glycol.

Nickel brass body. Thick chrome plated brass ball. PTFE seal. Elastomer OR gaskets. Threaded connections UNI-EN-ISO 228.

 Operating temperature with water -20 - +120 °C (without steam)

Code	Measure	PN	Pack	Outer	Cat.
886.03.42*	3/8"	50	20	80	08.01
886.04.42	1/2"	50	15	90	08.01
886.05.42	3/4"	50	12	48	08.01
886.06.42	1"	40	6	36	08.01
886.07.42	1"1/4	30	5	20	08.01
886.08.42	1"1/2	25	2	12	08.01
886.09.42	2"	25	2	8	08.01

*Full bore

Certifications:







Series 887

Iro

Standard bore ball valve, butterfly handle operated, MF connections. Suitable for water, water+glycol.

Nickel brass body. Thick chrome plated brass ball. PTFE seal. Elastomer OR gaskets. Threaded connections UNI-EN-ISO 228.

 Operating temperature with water -20 - +120 °C (without steam)

Certifications:





Code	Measure	PN	Pack	Outer	Cat.
887.03.32*	3/8"	50	20	80	08.01
887.04.32	1/2"	50	15	90	08.01
887.05.32	3/4"	50	12	48	08.01
887.06.32	1"	40	6	36	08.01
887.07.32	1"1/4	30	6	18	08.01
*Full bore					

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Series 67.C

Iro
Standard bore ball valve, butterfly
handle operated, F connection with M
union coupling. Suitable for water,
water+glycol.

Nickel brass body. Thick chrome plated brass ball. PTFE seal. Elastomer OR gaskets. Threaded connections UNI-EN-ISO 228.

 Operating temperature with water -20 - +120 °C (without steam)

Certifications:



Code	Size A	Size B	PN	Pack	Outer	Cat.
67.04.02	1/2"	1/2"	25	20	80	08.01
67.05.02	3/4"	3/4"	25	12	48	08.01
67.06.02	1"	1"	25	6	24	08.01
67.07.02	1"1/4	1"1/4	25	4	16	08.01



Series 67.D

Iro

Standard bore ball valve, butterfly handle operated, F connection with M union coupling. Suitable for water, water+glycol.

Nickel brass body. Thick chrome plated brass ball. PTFE seal. Elastomer OR gaskets. Threaded connections UNI-EN-ISO 228.

 Operating temperature with water -20 - +120 °C (without steam)





Code	Size A	Size B	PN	Pack	Outer	Cat.
67.04.12	1/2"	1/2"	25	20	80	08.01
67.05.12	3/4"	3/4"	25	12	48	08.01
67.06.12	1"	1"	25	6	24	08.01
67.07.12	1"1/4	1"1/4	25	4	16	08.01





Series 2544.A

Iro

Standard bore ball valve, with built-in check valve, butterfly handle operated, 1"1/2 pump connection. Suitable for water, water+glycol.

Nickel brass body.
Thick chrome plated brass ball.
PTFE seal.
VITON OR gaskets.
Threaded connections UNI-EN-ISO 228.

 Operating temperature with water-20 - +120 °C (without steam)

Certifications:



Code	Size A	Size B	PN	Pack	Outer	Cat.
2544.05.00	3/4"	1"1/2	50	8	24	08.01

(i)

Ball valve + built-in check valve.



Series 2544.B

Iro

Standard bore ball valve, butterfly handle operated, 1"1/2 pump connection. Suitable for water, water+glycol.

Nickel brass body. Thick chrome plated brass ball. PTFE seal. VITON OR gaskets. Threaded connections UNI-EN-ISO 228.

 Operating temperature with water -20 - +120 °C (without steam)

Certifications:



Code	Size A	Size B	PN	Pack	Outer	Cat.
2544.05.10	3/4"	1"1/2	50	8	24	08.01



Series 2544.D

Iro

Standard bore ball valve, butterfly handle operated, copper pipe compression connection and 1"1/2 pump connection. Suitable for water, water+glycol.

Nickel brass body. Thick chrome plated brass ball. PTFE seal. VITON OR gaskets. Threaded connections UNI-EN-ISO 228. Copper pipe end connections.

 Operating temperature with water -20 - +120 °C (without steam)



Code	Size A	Size B	PN	Pack	Outer	Cat.
2544.22.10	22	1"1/2	50	8	24	08.01







Series 2093.A

Iro

Standard bore ball valve, lever handle operated, copper pipe end connections. Suitable for water, water+glycol.

Nickel brass body. Thick chrome plated brass ball. PTFE seal. Elastomer OR gaskets. Copper pipe end connections.

 Operating temperature with water -20 - +120 °C (without steam)

Code	Measure	PN	Pack	Outer	Cat.
2093.15.20	15	50	15	60	08.01
2093.22.20	22	50	10	40	08.01
2093.28.20	28	40	6	24	08.01
2093.35.20	35	30	4	40	08.01
2093.42.20	42	25	2	10	08.01
2093.54.20	54	25	1	4	08.01

 $The \, measurement \, is \, expressed \, in \, mm$

Certifications:





Series 2093.B

Iro

Standard bore ball valve, butterfly handle operated, copper pipe end connections. Suitable for water, water+glycol.

Nickel brass body. Thick chrome plated brass ball. PTFE seal. Elastomer OR gaskets. Copper pipe end connections.

 Operating temperature with water -20 - +120 °C (without steam)

Certifications:



Code	Measure	PN	Pack	Outer	Cat.
2093.15.00	15	50	20	80	08.01
2093.22.00	22	50	12	80	08.01
2093.28.00	28	40	6	24	08.01
2093.35.00	35	30	4	16	08.01

The measurement is expressed in mm

Series 3465

Iro

Standard bore ball valve, lever handle operated, FF connections. Suitable for water, water+glycol.

Nickel brass body. Thick chrome plated brass ball. PTFE seal. Elastomer OR gaskets. Threaded connections UNI-EN-ISO 228.

- Operating temperature with water 0 - +80 $^{\circ}\text{C}$



Code	Measure	PN	Pack	Outer	Cat.
3465.04.00	1/2"	50	1	60	08.01
3465.05.00	3/4"	50	1	50	08.01
3465.06.00	1"	40	1	30	08.01





Everest Check valve, FF connections. Suitable for water.

CHECK VALVES

Brass body. Elastomer gaskets. Threaded connections FF UNI-EN-ISO 228.

- Operating temperature with water 0 - +80 $^{\circ}$ C

Code	Measure	PN	Pack	Outer	Cat.
3085 381	3/8"	16	10	120	08.01
3085 121	1/2"	16	10	120	08.01
3085 34I	3/4"	16	10	120	08.01
3085 10I	1"	16	5	50	08.01
3085 041	1"1/4	16	4	40	08.01
3085 021	1"1/2	16	4	32	08.01
3085 201	2"	16	2	20	08.01
3082.22.00	2"1/2	6	2	16	08.01
3082.30.00	3"	6	2	12	08.01
3082.40.00	4"	6	1	1	08.01



Series 3086

Filter with threaded fitting. Matched with the check valves, it provides proper protection for the pumps.

Stainless steel AISI 304L filter. $Nylon\,6.6\,th readed\,fitting.$

- Max operating temperature 90 $^{\circ}\text{C}$

Code	Measure	Pack	Outer	Cat.
3086381	3/8"	10	120	08.01
3086 121	1/2"	10	120	08.01
3086 341	3/4"	10	120	08.01
3086 101	1"	10	100	08.01
3086 041	1"1/4	8	80	08.01
3086 021	1"1/2	8	64	08.01
3086 201	2"	4	40	08.01
3086.22.00	2"1/2	3	24	08.01
3086.30.00	3"	2	16	08.01
3086.40.00	4"	1	8	08.01



Series 860

 ${\bf Check\,valve, FF\,connections.\,Suitable\,for}$ water.

Brass body. Elastomer gaskets. Stainless steel AISI 302 spring. Threaded connections FF UNI-EN-ISO 228.

- Min. opening pressure 0.04 Bar
- Max operating temperature 90 °C (Water)
- Max operating temperature 110 °C (Air)

Certifications:





Check valve, FF connections, brass rod

Code	Measure	PN	Pack	Outer	Cat.
860.04.02	1/2"	25	30	120	08.01
860.05.02	3/4"	25	16	64	08.01
860.06.02	1"	25	10	60	08.01
860.07.02	1"1/4	16	8	32	08.01
860.08.02	1"1/2	16	4	24	08.01
860.09.02	2"	16	2	12	08.01

$Check\,valve, FF\,connections, plastic\,rod$

	Code	Measure	PN	Pack	Outer	Cat.
86	0.04.12	1/2"	25	30	120	08.01
86	0.05.12	3/4"	25	16	64	08.01
86	0.06.12	1"	25	10	60	08.01
86	0.07.12	1"1/4	16	8	32	08.01
86	0.08.12	1"1/2	16	4	24	08.01
86	0.09.12	2"	16	2	12	08.01





Hydrant box with ball valve with hose connection. Suitable for water.

Brass valve body.
Thick chrome plated brass ball.
Polypropylene well.
PTFE valve seals.
Threaded connections UNI-EN-ISO 228.
PN 16.

- Operating temperature with water 0 - +80 $^{\circ}\text{C}$

Code	Size A	Size B	hose connection size	PN	Pack	Outer	Cat.
589.05.00	3/4"	3/4"	ø 15	16	1	10	08.01
589.06.00	3/4"	1"	ø 20	16	1	10	08.01



Series 24

Wall siphon for washing machine.

Nickel brass body. Stainless steel ceiling rose. Hose connection Ø 22 mm. Drain pipe connection Ø 32 mm.

- Max operating temperature 100 $^{\circ}\text{C}$

Code	Model	Pack	Outer	Cat.
24.32.10	System	10	40	08.01



01. HYDROTHERMAL DISTRIBUTION

09. FITTINGS

09.01 FITTINGS

97

Fittings for valves and piping Fittings for manifolds







Series 41.A

Compression fitting for annealed copper pipe.

Brass nut and pipe clamping ogive. Nickel plated nut. Elastomer seal ogive. Standard RBM threaded F connection.

- Max operating temperature 95 $^{\circ}$ C
- Max operating pressure 10 Bar

Code	Measure	Pack	Outer	Cat.
41.10.20	RBM Ø 10	10	100	09.01
41.12.20	RBMØ12	10	100	09.01
41.14.20	RBMØ14	10	100	09.01
41.15.20	RBMØ15	10	100	09.01
41.16.20	RBMØ16	10	100	09.01

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Series 41.B

Compression fitting for annealed copper pipe.

 $Brass\,nut\,and\,pipe\,clamping\,ogive.$ $Nickel\, plated\, nut.$ Elastomer seal ring. $Standard\,RBM\,threaded\,F\,connection.$

- Max operating temperature 95 °C
- Max operating pressure 10 Bar

Code	Measure	Pack	Outer	Cat.
41.18.40	RBMØ18	10	100	09.01

Standard RBM thread W 24.5x19 F

Standard RBM thread W 24.5x19 F



Only to be used with seat set at Ø18. To be used with reducing coupling code 57.18.00 (see page 106) to connect the Ø18 fitting to valves/manifolds with RBM Standard thread.







Series 602

Compression fitting for raw copper pipe $in \, bars, annealed \, copper, \, brass, \, soft \, steel$ and stainless steel.

 $Brass\,nut\,and\,pipe\,clamping\,ogive.$ Nickel plated nut. Elastomer seal ogive. ${\sf Standard\,RBM\,threaded\,F\,connection.}$

- Max operating temperature 95 $^{\circ}$ C
- Max operating pressure 10 Bar

Code	Measure	Pack	Outer	Cat.
602.10.00	RBM Ø 10	10	100	09.01
602.12.00	RBMØ12	10	100	09.01
602.14.00	RBMØ14	10	100	09.01
602.15.00	RBMØ15	10	100	09.01
602.16.00	RBM Ø 16	10	100	09.01

Standard RBM thread W 24.5x19 F Patent n° TO2001U000071





Compression fitting for polyethylene pipe.

 $Brass\,nut, core\, and\, pipe\, clamping\, ogive.$ Nickel plated nut. Elastomer seal ring. Standard RBM threaded F connection.

- Max operating temperature 95 $^{\circ}$ C
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Pack	Outer	Cat.
71.10.30	10x1,2	10	100	09.01
71.12.00	12x2	10	100	09.01
71.12.20	12x1,3	10	100	09.01
71.14.00	14x2	10	100	09.01
71.15.00	15x2,5	10	100	09.01
71.15.10	15x2	10	100	09.01
71.16.00	16x2	10	100	09.01
71.16.20	16x1,5	10	100	09.01
71.16.30	16x2,7	10	100	09.01
71.16.40	16x2,2	10	100	09.01
71.17.00	17x2	10	100	09.01
71.18.00	18x2,5	10	100	09.01
71.18.30	18x2	10	100	09.01
71.20.10	20x2	10	100	09.01
71.20.40	20x2,8	10	100	09.01

Standard RBM thread W 24.5x19 F Size: Outside Øx pipe thickness



Series 122

Compression fitting for polyethylene

 $Brass\,nut, core\, and\, pipe\, clamping\, ogive.$ Nickel plated nut. Elastomer seals. $Standard\,RBM\,threaded\,F\,connection.$

- Max operating temperature 95 °C
- Max operating pressure 10 Bar

Certifications:

 ${\it CSTB} (certification only valid if used with {\it CSTB} \\ certified {\it RBM KILMA-FLEX PE-RT pipe}). \\$







Code	Measure	Pack	Outer	Cat.
122.12.00	12x1,1	10	100	09.01
122.16.00	16x1,5	10	100	09.01
122.20.00	20x1,9	10	100	09.01

Standard RBM thread W 24.5x19 F $\textit{Size: Outside } \emptyset \textit{x pipe thickness}$









Fitting for metal-plastic multilayer pipe.

 $Compatible \ with \ Q-Tec \ copper \ pipe \ in \ matching$ $sizes.\,Respect\,the\,pipe\,flaring\,and\,gauging$ conditions.

 $Brass\,nut, core\, and\, pipe\, clamping\, ogive.$ Nickel plated nut. Elastomer seals. $Standard\,RBM\,threaded\,F\,connection.$

- Max operating temperature 95 °C
- Max operating pressure 10 Bar

Certifications:







Code	Measure	Pack	Outer	Cat.
70.14.00	14x2	10	100	09.01
70.14.90	14,4x2,2	10	100	09.01
70.16.00	16x2	10	100	09.01
70.16.10	16x2,5	10	100	09.01
70.16.20	16x2,25	10	100	09.01
70.16.30	16,2x2,6	10	100	09.01
70.16.90	16,4x2,2	10	100	09.01
70.17.10	17x2	10	100	09.01
70.17.30	17x3	10	100	09.01
70.17.40	17,2x3	10	100	09.01
70.18.00	18x2	10	100	09.01
70.20.00	20x2	10	100	09.01
70.20.10	20x2,5	10	100	09.01
70.20.20	20x2,25	10	100	09.01
70.20.30	20x2,9	10	100	09.01

Standard RBM thread W 24.5x19 F Size: Outside Øx pipe thickness







Series 1216

Fitting for metal-plastic multilayer pipe, technopolymer core

 $Brass\,nut\,and\,pipe\,clamping\,ogive.$ Nickel plated nut. Technopolymer core. Elastomer seal ring. Standard RBM threaded F connection.

- Max operating temperature 95 °C
- Max operating pressure 10 Bar

Code	Measure	Pack	Outer	Cat.
1216.14.00	14x2	10	100	09.01
1216.16.00	16x2	10	100	09.01

Standard RBM thread W 24.5x19 F $\textit{Size: Outside } \emptyset \textit{x pipe thickness}$





Series 5.A

Heavy three-piece elbow fitting.

Nickel brass body. O-Ring seal in FKM. Threaded connections MF UNI-EN-ISO 228.

- Max operating temperature 180 °C
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Pack	Outer	Cat.
5.03.1B	3/8"	10	60	09.01
5.04.1B	1/2"	10	60	09.01
5.05.1B	3/4"	10	40	09.01
5.06.1B	1"	10	40	09.01
5.07.1B	1"1/4	8	32	09.01
5.08.1B	1"1/2	4	16	09.01
5.09.1B	2"	2	8	09.01

Suitable for gas, air, hot and cold drinking water, hydrocarbons, solar systems.



Series 58

Fitting for pipe connection to manifold / Heavy three-piece straight fitting.

Nickel brass body. O-Ring seal in FKM. Threaded connections MF UNI-EN-ISO 228.

- Max operating temperature 180 °C
- Max operating pressure 10 Bar

Certifications:





Code	Measure	Pack	Outer	Cat.
58.03.00	3/8"	10	60	09.01
58.04.00	1/2"	10	60	09.01
58.05.00	3/4"	10	40	09.01
58.06.00	1"	10	40	09.01
58.07.00	1"1/4	8	32	09.01
58.08.00	1"1/2	5	20	09.01
58.09.00	2"	2	8	09.01

Suitable for gas, air, hot and cold drinking water, hydrocarbons, solar systems.



Series 5.B

Three-piece elbow fitting.

Brass body. O-Ring seal in FKM. Threaded connections MF UNI-EN-ISO 228.

- Max operating temperature 180 °C
- Max operating pressure 10 Bar

Certifications:





Code	Measure	Pack	Outer	Cat.
5.03.10	3/8"	10	60	09.01
5.04.10	1/2"	10	60	09.01
5.05.10	3/4"	10	40	09.01
5.06.10	1"	10	40	09.01
5.07.10	1"1/4	8	32	09.01
5.08.10	1"1/2	4	16	09.01
5.09.10	2"	2	8	09.01

Suitable for gas, air, hot and cold drinking water, hydrocarbons, solar systems.



Series 6

Three-piece straight fitting.

Brass body.
O-Ring seal in FKM.
Threaded connections MF UNI-EN-ISO 228.

- Max operating temperature 180 °C
- Max operating pressure 10 Bar

Certifications:





Code	Measure	Pack	Outer	Cat.
6.03.10	3/8"	10	60	09.01
6.04.10	1/2"	10	60	09.01
6.05.10	3/4"	10	40	09.01
6.06.10	1"	10	40	09.01
6.07.10	1"1/4	8	32	09.01
6.08.10	1"1/2	5	20	09.01
6.09.10	2"	2	8	09.01

Suitable for gas, air, hot and cold drinking water, hydrocarbons, solar systems.





Fitting for pipe connection to manifold / Three-piece straight fitting, with 5 mm off-centre adjustment.

 $Nickel\,brass\,body.$ Elastomer O-Ring seal. $\label{eq:threaded} \bar{\text{Threaded connections MF UNI-EN-ISO 228.}}$

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Pack	Outer	Cat.
97.05.00	3/4"	10	10	09.01
97.06.00	1"	10	10	09.01



Series 72

Three-piece MM joint straight fitting

Nickel brass body. ${\sf Elastomer\,O-Ring\,seal\,on\,connections.}$ $Threaded\,connections\,MM\,UNI\text{-EN-ISO}\,228.$

- Max operating temperature 110 $^{\circ}$ C
- Max operating pressure 10 Bar

Certifications:



Code	Size A	Size B	Pack	Outer	Cat.
72.04.00	1/2"	1/2"	25	25	09.01
72.05.00	3/4"	3/4"	10	40	09.01
72.06.00	1"	1"	10	40	09.01
72.06.50	1"	1"1/4	6	24	09.01
72.07.00	1"1/4	1"1/4	10	10	09.01
72.08.00	1"1/2	1"1/2	5	5	09.01
72.09.00	2"	2"	2	2	09.01



Series 1100

Three-piece MM joint fitting with OR seal on connections.

Nickel-plated brass body ${\sf Elastomer}\, o\text{-}{\sf Ring}\, {\sf seal}\, on\, the\, connections$ Threaded connections MM UNI-EN-ISO 228

- Max operating temperature 100 °C
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Pack	Outer	Cat.
1100.06.00	1"	10	10	09.01



Use for connecting manifolds to zone valves. Used on RBM $\,$ $products\,with\,prearrangement\,on\,OR\,seal\,(filters,pressure$ reducing valves, etc...).





Nickel brass body. Elastomer seals. $Standard\,RBM\,threaded\,F\,connection.$

- Max operating temperature 95 $^{\circ}$ C
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Pack	Outer	Cat.
164.04.00	RBM Ø 10	10	40	09.01
164.04.10	RBMØ12	10	40	09.01
164.04.20	RBMØ14	10	40	09.01

Standard RBM thread W 24.5x19 F





Series 164.B

40 mm extension for multilayer polyethylene pipe.

Nickel brass body. Elastomer seals. Standard RBM threaded F connection.

- Max operating temperature 95 °C
- Max operating pressure 10 Bar

Certifications:



	Code	Measure	Pack	Outer	Cat.
1	164.16.20	16x2	10	40	09.01

RBM standard thread W 24.5x19F F

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Series 81

 $In-line\ fitting\ for\ joining\ copper,$ polyethylene and multilayer metalplastic pipes.

Nickel brass body. Standard RBM threaded M connection.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Certifications:



Code	Size A	Size B	Pack	Outer	Cat.
81.00.00	RBM	RBM	10	10	09.01

Standard RBM thread W 24.5x19 F



Series 83

In-line fitting for joining copper, polyethylene and multilayer metalplastic pipes.

Nickel brass body. Threaded connection: M UNI-EN-ISO 228 (A) M standard RBM (Standard RBM thread W24,5x19F)

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Certifications:



Code	Size A	Size B	Pack	Outer	Cat.
83.03.00	G 3/8" M	RBM	10	10	09.01
83.04.00	G 1/2" M	RBM	10	10	09.01

Standard RBM thread W 24.5x19 F



A dapter piece iron pipe valves for copper or plyethylene pipe.



Series 3576

Copper pipe adapter for 1/2" iron connection valves.

 $Nickel-plated\, brass\, ogive\, presser.$ Brass ogive and adapter. $Threaded \ connection \ M\ UNI-EN-ISO\ 228.$

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Code	Size A	Size B	Pack	Outer	Cat.
3576.10.50	1/2"	Ø 10	10	100	09.01
3576.12.50	1/2"	Ø 12	10	100	09.01
3576.14.50	1/2"	Ø 14	10	100	09.01





Series 263

Compression fitting for annealed copper pipe.

Brass ogive. Nickel plated brass nut. Elastomer seal ogive. Euroconus F G3/4" threaded connection.

- Max operating temperature 95 °CMax operating pressure 10 Bar

Code	Measure	Pack	Outer	Cat.
263.12.20	Ø 12	10	100	09.01
263.15.20	Ø 15	10	100	09.01

Euroconus G 3/4" thread UNI-EN-ISO 228



Series 361

$Compression \, fitting \, for \, annealed \, copper \,$ pipe.

Brass ogive. $Nickel\,plated\,brass\,nut.$ ${\it Elastomer seal ogive.}$ $Euroconus\,F\,G3/4"\,threaded\,connection.$

- Max operating temperature 95 $^{\circ}$ C
- Max operating pressure 10 Bar

Code	Size A	Size B	Pack	Outer	Cat.
361.10.00	G 3/4"	Ø 10	10	100	09.01
361.12.00	G 3/4"	Ø 12	10	100	09.01
361.14.00	G 3/4"	Ø 14	10	100	09.01
361.15.00	G 3/4"	Ø 15	10	100	09.01
361.16.00	G 3/4"	Ø 16	10	100	09.01
361.18.00	G 3/4"	Ø 18	10	100	09.01

Euroconus G 3/4" thread UNI-EN-ISO 228



Series 217.A

Compression fitting for polyethylene pipe.

Brass ogive. Nickel plated brass nut. Elastomer seal ring.
Euroconus F G3/4" threaded connection.

- Max operating temperature 95 $^{\circ}$ C
- Max operating pressure 10 Bar

Certifications:



Polyethylene pipe fitting

Code	Measure	Pack	Outer	Cat.
217.12.00	12x2	10	100	09.01
217.15.00	15x2	10	100	09.01
217.15.10	15x2,5	10	100	09.01
217.16.10	16x2,2	10	100	09.01
217.18.00	18x2	10	100	09.01
217.20.10	20x2,8	10	100	09.01
217.21.00	21x2,5	10	100	09.01

Euroconus G 3/4" thread UNI-EN-ISO 228 $\textit{Size: Outside } \emptyset \textit{x pipe thickness}$

$Komo\,certified\,fitting\,for\,polyethylene\,pipe$

Code	Measure	Pack	Outer	Cat.
217.16.60	16x2	10	100	09.01
217.17.60	17x2	10	100	09.01
217.20.60	20x2	10	100	09.01





Compression fitting for polyethylene pipe.

Brass ogive. Nickel plated brass nut. Elastomer seal ring. Euroconus F G3/4" threaded connection.

- Max operating temperature 95 $^{\circ}$ C
- Max operating pressure 10 Bar

Certifications:

 ${\sf CSTB}\,(certification\,only\,valid\,if\,used\,with\,CSTB}$ $certified\,RBM\,KILMA-FLEX\,PE-RT\,pipe).$







Code	Measure	Pack	Outer	Cat.
123.12.00	12x1,1	10	100	09.01
123.16.00	16x1,5	10	100	09.01
123.20.00	20x1,9	10	100	09.01

Euroconus G 3/4" thread UNI-EN-ISO 228 Size: Outside Øx pipe thickness



Series 224.A

Compression fitting for metal-plasticmultilayer pipe.

 $Compatible \ with \ Q-tec\ copper\ pipe\ with\ matching$ Respect pipe flaring and gauging conditions.

Brass ogive. Nickel plated brass nut. Elastomer seal ring. Euroconus F G3/4" threaded connection.

- Max operating temperature 95 °C
- Max operating pressure 10 Bar

Certifications:





Code	Measure	Pack	Outer	Cat.
224.14.00	14x2	10	100	09.01
224.16.10	16,2x2,6	10	100	09.01
224.16.20	16x2,25	10	100	09.01
224.17.00	17x2	10	100	09.01
224.18.00	18x2	10	100	09.01
224.20.30	20x2,25	10	100	09.01
224.20.10	20x2,5	10	100	09.01
224.20.20	20x2,9	10	100	09.01

Euroconus G 3/4" thread UNI-EN-ISO 228 $\textit{Size: Outside } \emptyset \textit{x pipe thickness}$



Series 222

In-line fitting for joining copper, polyethylene and multilayer metalplastic pipes.

Nickel brass body. Threaded connections: Euroconus MG3/4". M 1/2" UNI-EN-ISO 228.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Certifications:



Code	Size A	Size B	Pack	Outer	Cat.
222.05.10	G 3/4"	Euroconus	10	100	09.01
222.05.00	G 1/2"	Euroconus	10	100	09.01

Euroconus G 3/4" thread UNI-EN-ISO 228



Series 1401

Compression fitting for copper pipe.

Nickel brass body. Elastomer seals. Standard RBM threaded F connection.

- Max operating temperature 110 $^{\circ}$ C
- Max operating pressure 10 Bar

Code	Measure	Pack	Outer	Cat.
1401.12.00	RBM Ø 12	10	100	09.01
1401.16.00	RBM Ø 16	10	100	09.01

Standard RBM thread W24.5x19F



Price List



Compression fitting for copper pipe.

Nickel brass body. Elastomer seals. FG1/2" threaded connection.

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Code	Size A	Size B	Pack	Outer	Cat.
139.10.50	G 1/2"	Ø 10	10	100	09.01
139.12.50	G 1/2"	Ø 12	10	100	09.01
139.14.50	G 1/2"	Ø 14	10	100	09.01
139.15.50	G 1/2"	Ø 15	10	100	09.01

Tapered seat.

Used with extension lead code 164.04.X0 (see page 101)



Series 735

Compression fitting for polyethylenepipe, flat seat.

Nickel brass body. Elastomer seals. FG1/2" threaded connection.

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Pack	Outer	Cat.
735.12.00	12x1,1	10	100	09.01
735.16.00	16x1,5	10	100	09.01
735.16.10*	16x2	10	100	09.01
735.16.20*	16x2	10	100	09.01

*Can also be used for multilayer polyethylene pipe Thread FG 1/2"



Flat seat.







Series 2796

Compression fitting for metal-plastic $multilayer\,pipe.$

Nickel brass body. Elastomer seals. $FG1/2"\,threaded\,connection.$

- Max operating temperature 110 $^{\circ}$ C
- Max operating pressure 10 Bar

Code	Measure	Pack	Outer	Cat.
2796.16.00	16x2	10	100	09.01
Thread FG 1/2"				



Series 140

Blind side cap.

Nickel brass body. PTFE seals. FG1/2" threaded connection.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Pack	Outer	Cat.
140.04.00	G 1/2"	10	40	09.01

Thread FG 1/2"



Flat seat.



Series 120

 $PN16\,Threaded\,flange\,suited\,for$ connecting threaded reducers, filters $and \, ball \, valves \, to \, flange \, distribution \,$ networks.

Nickel brass body. $Threaded\,connection\,M\,UNI\text{-}EN\text{-}ISO\,228.$ $Flanged\,connection\,suited\,for\,coupling\,with$ counter flange UNI EN 1092-1.

- Max operating temperature 150 $^{\circ}\text{C}$

Certifications:



Code	Size A	Size B	Pack	Outer	Cat.
120.09.00	2"	DN 50	2	2	09.01
120.10.00	2"1/2	DN 65	1	1	09.01
120.11.00	3"	DN 80	1	1	09.01
120.13.00	4"	DN 100	1	1	09.01

 $Flange \, suitable \, for \, coupling \, with \, counter-flange \, UNI \, EN \, 1092-1.$ Floating flange





Series 42.A

Blind cap for manifold ways.

Nickel brass body. PTFE seal. Standard RBM threaded F connection.

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Code	Measure	Pack	Outer	Cat.
42.00.00	RBM	10	40	09.01

Standard RBM thread W 24.5x19 F

Certifications:





Series 240

Blind cap G3/4" for manifold ways.

Nickel brass body. PTFE seal. Euroconus F G3/4" threaded connection.

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Code	Measure	Pack	Outer	Cat.
240.05.00	G 3/4"	10	40	09.01

Euroconus G 3/4" thread UNI-EN-ISO 228

Certifications:





Series 242

Blind cap G1/2" M for manifold ways.

Brass body. Elastomer seal. Threaded connection M UNI-EN-ISO 228.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Code	Measure	Pack	Outer	Cat.
242.04.00	1/2"	10	100	09.01



Used for manifolds with female G 1/2" junction female connections (code 35.0X.40).







Series 2944.B

$Blind\,cap\,for\,fittings\,with\,standard\,RBM\,threaded\,connection.$

Brass body. Standard RBM threaded M connection.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Code	Measure	Pack	Outer	Cat.
294.40.04	RBM	1	1	09.01

Standard RBM thread W 24.5 x 19 F



For testing system.

Certifications:





Extension and reduction for RBM connection.

Nickel brass body. PTFE seal. Threaded MF standard RBM connection.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Code	Measure	Pack	Outer	Cat.
57.16.00*	RBM	10	100	09.01
57.18.00**	RBM	10	100	09.01

*Lengthens the standard RBM connection by 10 mm

**Makes it possible to use Ø18 copper pipes









Series 43.A

Fitting for side connection of valve to manifold.

Nickel brass body. PTFE seal. Threaded F standard RBM connection F UNI-EN-ISO 228.

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Code	Measure	Pack	Outer	Cat.
43.03.00	G 3/8"	10	100	09.01
43.04.00	G 1/2"	10	100	09.01

Standard RBM thread W 24.5x19 F

Certifications:





Series 45

Pipe connection junction.

Nickel brass body. Threaded connections MF UNI-EN-ISO 228.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Code	Measure	Pack	Outer	Cat.
45.05.00	 G 3/4"	10	100	09.01

Certifications:





Series 42.B

Blind head cap for manifolds.

Nickel brass body. PTFE seal. $Threaded\,connection\,F\,UNI\text{-EN-ISO}\,228.$

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Code	Measure	Pack	Outer	Cat.
42.05.00	G 3/4"	10	100	09.01
42.06.00	G 1"	10	100	09.01

Certifications:





Series 42.C

$Perforated \, head \, cap \, for \, manifolds.$

Nickel brass body. PTFE seal. Connection to manifold F UNI-EN-ISO 228. F 3/8" head connection UNI-EN-ISO 228.

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Code	Size A	Size B	Pack	Outer	Cat.
42.05.30	G 3/8"	G 3/4"	10	100	09.01
42.06.30	G 3/8"	G 1"	10	100	09.01

Certifications:







Series 43.B

Head connection for manifolds with copper or polyethylene fitting connection.

Nickel brass body. PTFE seal. $Threaded\,connections:$ $M\,standard\,RBM.$ FUNI-EN-ISO 228.

- Max operating temperature 110 $^{\circ}$ C
- Max operating pressure 10 Bar

Code	Measure	Pack	Outer	Cat.
43.05.00	G 3/4"	10	100	09.01
43.06.00	G 1"	10	100	09.01

Standard RBM thread W 24.5x19 F







Series 56.A

Blind head cap for manifolds.

Nickel brass body. PTFE seal. $Threaded\,connection\,M\,UNI\text{-EN-ISO}\,228.$

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Pack	Outer	Cat.
56.05.00	G 3/4"	10	100	09.01
56.06.00	G 1"	10	100	09.01
56.07.00	G 1"1/4	10	100	09.01

Series 56.B

Head connection for manifolds.

Nickel brass body. PTFE seal. Connection to manifold M UNI-EN-ISO 228. Head connection F 3/8" UNI-EN-ISO 228."

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Certifications:



Code	Size A	Size B	Pack	Outer	Cat.
56.05.30	G 3/8"	G 3/4"	10	100	09.01
56.06.30	G 3/8"	G 1"	10	100	09.01



Series 57.B

Head connection for manifolds with copper or polyethylene fitting connection.

Nickel brass body. PTFE seal. Threaded connections: $M\,standard\,RBM.$ M UNI-EN-ISO 228.

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Pack	Outer	Cat.
57.05.00	G 3/4"	10	100	09.01
57.06.00	G 1"	10	100	09.01

Standard RBM thread W 24.5x19 F



Series 178

Copper pipe adapter.

 $Nickel\,brass\,body.$ ${\it Elastomer\,O-Ring\,seal.}$ $Threaded\,connection\,M\,UNI\text{-EN-ISO}\,228.$

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar



Size A	Size B	Pack	Outer	Cat.
1/2"	Ø 15	10	40	09.01
3/4"	Ø 22	10	40	09.01
1"	Ø 28	10	40	09.01
	1/2" 3/4"	1/2" Ø 15 3/4" Ø 22	1/2" Ø 15 10 3/4" Ø 22 10	1/2" Ø 15 10 40 3/4" Ø 22 10 40



01. HYDROTHERMAL DISTRIBUTION

•••••

10. WATER DISTRIBUTION

10.01 MULTI-LAYER PIPES

110

PE-Xc bare multi-layer pipe

PE-Xc multi-layer thermally coated pipe

PE-Xc multi-layer pipe with anti-condensation coating

PE-RT bare multi-layer pipe

PE-RT multi-layer thermally coated pipe

PE-RT multi-layer pipe with anti-condensation coating

10.02 FITTINGS FOR MULTI-LAYER PIPES

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Press fittings for multi-layer pipes

Shut-off taps

Compression fittings for multi-layer pipes

110



$PE-Xc\,RBM\,Tita-fix\,multilayer\,pipe.$

 $\label{lem:multilayer} \textbf{Multilayer pipe for underfloor heating in polyethylene, aluminium and polyethylene.} \textbf{Welded aluminium layer type A}$

- Composition PE-Xc/AI/PE-RTWhite

- wnite
 Poper 10 Bar
 Tmal 95 °C
 Duration at operating conditions ~ 50 years
- Type: PE-Xc

PE-Xc RBM Tita-fix multilayer pipe in roll

Code	Pipe size (mm)	Aluminium th.(mm)	Roll (m)	Pack (m)	Pallet- (m)	Cat.
1542.16.00	16x2	0,20	100	100	1400	10.01
1542.16.40	16x2	0,20	250	250	2500	10.01
1542.16.30	16x2	0,20	500	500	3000	10.01
1542.20.00	20x2	0,30	100	100	1400	10.01
1542.26.00	26x3	0,40	50	50	550	10.01
1542.32.00	32x3	0,40	50	50	600	10.01

 $Size: Outside \emptyset x pipe thickness$

$PE-Xc\,RBM\,Tita-fix\,multilayer\,pipe\,in\,bars$

Code	Pipe size (mm)	Aluminium th. (mm)	Bar (m)	Pack- (m)	Cat.
1543.16.00	16x2	0,20	4	100	10.01
1543.20.00	20x2	0,30	4	76	10.01
1543.26.00	26x3	0,40	4	40	10.01
1543.32.00	32x3	0,40	4	24	10.01

 $\textit{Size: Outside } \emptyset \textit{xpipe thickness}$



 $The \,entire\,package\,must\,be\,ordered.$

Certifications:

Compliant with: EN ISO 21003 - DM 174/04



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Series 1541.B



Code	Pipe size (mm)	Aluminium th.(mm)	Roll (m)	Pack (m)	Pallet- (m)	Cat.
1541.16.50*	16x2	0,20	50	1	750	10.01
1541.20.50	20x2	0,30	50	1	650	10.01
1541.26.50	26x3	0,40	50	1	600	10.01
1541.32.50	32x3	0,40	25	1	300	10.01

Size: Outside Øx pipe thickness

PE-Xc RBM Tita-fix multilayer pipe externally insulated with closed cell expanded polyethylene conduit, CFC-free, flame retardant.

Pipe features as in code 1542-1543.

 $Insulating \, conduit \, features:$

- Density 35 kg/m³
- Thermal conductivity at 40 °C
- only conduit: 0.038 W/mK
- conduit + pipe (average value): 0.069 W/mK
- Steam permeability µ 5.482
- Insulation thickness 6 mm



PE-XC MULTI-LAYER THERMALLY COATED PIPE

Suitable for heating and domestic hot water distribution systems.

Certifications:

Compliant with: EN ISO 21003 - DM 174/04

 $Conduit\,thickness\,compliant\,with\,law\,9\,January\,1991\,n.\,10\,and\,valid\,for\,pipes\,installed\,in$ $heated\ premises\ and/or\ facilities\ neither\ facing\ outside\ or\ unheated\ rooms.$



^{*} Insulation thickness compliant with law 09 January 1991 n. 10 and valid for pipes installed in heated premises and/or facilities neither facing outside or unheated rooms.

Series 1541.C



Code	Pipe size (mm)	Aluminium th.(mm)	Roll (m)	Pack (m)	Pallet- (m)	Cat.
1541.16.40	16x2	0,20	50	1	550	10.01
1541.20.40	20x2	0,30	50	1	450	10.01
1541.26.40	26x3	0,40	50	1	450	10.01
1541.32.40	32x3	0,40	25	1	250	10.01

Size: Outside Øx pipe thickness

PE-Xc RBM Tita-fix multilayer pipe externally insulated with closed cell expanded polyethylene anticondensation conduit, CFC-free, flame retardant.

Pipe features as in code 1542-1543.

 $Insulating\,conduit\,features:$

- Density 35 kg/m³
- Thermal conductivity at 40 °C
- conduit only 0.038 W/mK
- conduit+pipe (average value) 0.062 W/mK
- Steam permeability µ 5.482
- Insulation thickness 10 mm



 $Suitable for \, hydronic \, refrigeration \, and \, heating \, systems$

Certifications:

Compliant with: EN ISO 21003 - DM 174/04

 $Insulation thickness compliant with law 09 January 1991 \ n. 10 \ and valid for pipes in stalled in heated premises and/or facilities neither facing outside or unheated rooms.$

Series 1541.A



 $\label{eq:percentage} PE-Xc\,RBM\,Tita-fix\,multilayer\,pipe\,in\,roll\,with\,protective\,corrugated\,conduit\,-\,Blue$

Code	Pipe size (mm)	Aluminium th.(mm)	Roll (m)	Pack (m)	Pallet- (m)	Cat.
1541.20.80	20x2	0.30	50	1	650	10.01

 $\label{eq:percentage} \mbox{PE-Xc\,RBM\,Tita-fix\,multilayer\,pipe\,in\,roll\,with\,protective\,corrugated\,conduit\,-\,Red}$

Code	Pipe size (mm)	Aluminium th.(mm)	Roll (m)	Pack (m)	Pallet- (m)	Cat.
1541.20.90	20x2	0,30	50	1	650	10.01

 $\textit{Size: Outside } \emptyset \textit{x pipe thickness}$

$\label{perconstraint} \textbf{PE-Xc} \, \textbf{RBM} \, \textbf{Tita-fix} \, \textbf{multilayer} \, \textbf{pipe}, \, \textbf{protected} \, \textbf{externally} \, \\ \textbf{with} \, \textbf{polypropylene} \, \textbf{corrugated} \, \textbf{conduit}.$

 $Pipe features \, as \, in \, code \, 1542\text{-}1543.$

Corrugated conduit features:

- outside diameter of pipe 16x2: 25 mm
- outside diameter of pipe 20x2: 32 mm



Suitable for domestic hot water distribution systems.

Certifications:

Compliant with: EN ISO 21003 - DM 174/04





PE-RT RBM Tita-fix multilayer pipe in roll

	Code	Pipe size (mm)	Aluminium th.(mm)	Roll (m)	Pack (m)	Pallet-(m)	Cat.
	1545.16.00	16x2	0,20	100	100	1400	10.01
	1545.16.20	16x2	0,20	250	250	2500	10.01
	1545.16.10	16x2	0,20	500	500	3000	10.01
	1545.20.00	20x2	0,30	100	100	1400	10.01
	1545.20.10	20x2	0,30	250	250	1750	10.01
	1545.20.50	20x2	0,30	500	500	2500	10.01
	1545.26.00	26x3	0,40	50	1	550	10.01
	1545.32.00	32x3	0,40	50	1	600	10.01
	1545.40.00	40x3,5	0,50	25	1	300	10.01

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Size: Outside Øx pipe thickness

$PE-RT\,RBM\,Tita-fix\,multilayer\,pipe\,in\,bars$

Code	Pipe size (mm)	Aluminium th.(mm)	Bar (m)	Pack-(m)	Pallet-(m)	Cat.
1546.16.00	16x2	0,20	4	100	-	10.01
1546.20.00	20x2	0,30	4	76	-	10.01
1546.26.00	26x3	0,40	4	40	-	10.01
1546.32.00	32x3	0,40	4	24	-	10.01
1546.40.00	40x3,5	0,50	5	50	800	10.01
1546.50.00	50x4	0,60	5	15	500	10.01
1546.63.00	63x4,5	0,80	5	5	385	10.01

 $\textit{Size: Outside } \emptyset \textit{xpipe thickness}$

PE-RT RBM Tita-fix multilayer pipe.

 $\label{lem:multilayer} \textbf{Multilayer pipe for underfloor heating in polyethylene, aluminium and polyethylene.} \textbf{Welded aluminium layer type A}$

- Composition PE-RT/AI/PE-RTWhite

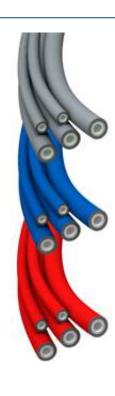
- Poper 10 Bar
 Tmal 95 °C
 Duration at operating conditions ~ 50 years
 Type: PE-RT

Certifications:

Compliant with: EN ISO 21003 - DM 174/04







Series 1544.B

PE-RT RBM Tita-fix multilayer pipe externally insulated with closed cell expanded polyethylene conduit, CFC-free, flame retardant.

Pipe features as in code 1545-1546.

Insulating conduit features:

- Density 35 kg/m³
- Thermal conductivity at 40 °C
- only conduit: 0.038 W/mK
- conduit + pipe (average value): 0.069 W/mK
- Steam permeability µ 5.482
 Insulation thickness 6 mm
- · Type: PE-RT

Certifications:

Compliant with: EN ISO 21003-DM 174/04

 $Conduit\,thickness\,compliant\,with\,law\,9\,January$ $1991\,n.\,10\,and\,valid\,for\,pipes\,installed\,in\,heated$ $premises\, and/or\, facilities\, neither\, facing\, outside\, or\,$



 $PE-RT\,RBM\,Tita-fix\,multilayer\,pipe\,in\,roll\,with\,thermal\,insulation$ - Grey

Code	Pipe size (mm)	Alumi- nium th. (mm)	Roll (m)	Pack (m)	Pallet- (m)	Cat.
1544.16.50*	16x2	0,20	50	1	750	10.01
1544.20.50	20x2	0,30	50	1	650	10.01
1544.26.50	26x3	0,40	50	1	600	10.01
1544.32.50	32x3	0,40	25	1	300	10.01

 $PE-RT\,RBM\,Tita-fix\,multilayer\,pipe\,in\,roll\,with\,thermal\,insulation$

Code	Pipe size (mm)	Alumi- nium th. (mm)	Roll (m)	Pack (m)	Pallet- (m)	Cat.
1946.16.20*	16x2	0,20	50	1	750	10.01
1946.20.20	20x2	0,30	50	1	650	10.01
1946.26.20	26x3	0,40	50	1	600	10.01
1946.32.20	32x3	0,40	25	1	300	10.01

PE-RT RBM Tita-fix multilayer pipe in roll with thermal insulation

Code	Pipe size (mm)	Alumi- nium th. (mm)	Roll (m)	Pack (m)	Pallet- (m)	Cat.
1946.16.30*	16x2	0,20	50	1	750	10.01
1946.20.30	20x2	0,30	50	1	650	10.01
1946.26.30	26x3	0,40	50	1	600	10.01
1946.32.30	32x3	0,40	25	1	300	10.01

 $\textit{Size: Outside } \emptyset \textit{xpipe thickness}$

^{*}Insulation thickness compliant with law 09 January 1991 n. 10 and valid for pipes installed in heated premises and/or facilities neither facing outside or $unheated \, rooms.$



Suitable for heating and domestic hot water distributionsystems.



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Series 1544.C

PE-RT RBM Tita-fix multilayer pipe externally insulated with closed cell expanded polyethylene anti $condensation\,conduit, CFC-free, flame$

Pipe features as in code 1545-1546.

 $Insulating \ conduit \ features:$

- Density 35 kg/m³
- Thermal conductivity at 40 °C
- conduit only 0.038 W/mK
- conduit+pipe (average value) 0.062 W/mK
- Steam permeability µ 5.482
- Insulation thickness 10 mm

Certifications:

Compliant with: EN ISO 21003 - DM 174/04

Insulation thickness compliant with law 09 January 1991 n. 10 and valid for pipes installed in heated $premises \, and/or \, facilities \, neither \, facing \, outside \, or \,$ unheated rooms.

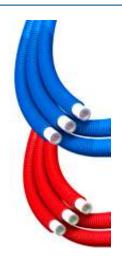


Code	Pipe size (mm)	Alumi- nium th. (mm)	Roll (m)	Pack (m)	Pallet- (m)	Cat.
1544.16.40	16x2	0,20	50	1	550	10.01
1544.20.40	20x2	0,30	50	1	450	10.01
1544.26.40	26x3	0,40	50	1	450	10.01
1544.32.40	32x3	0,40	25	1	250	10.01

Size: Outside Øx pipe thickness



 $Suitable for hydronic \, refrigeration \, and \, heating \, systems.$



Series 1544.A

PE-RT RBM Tita-fix multilayer pipe, protected externally with polypropylene corrugated conduit.

Pipe features as in code 1545-1546.

Corrugated conduit features:

- outside diameter of pipe 16x2: 25 mm
- outside diameter of pipe 20x2: 32 mm
- Type: PE-RT

Certifications:

Compliant with: EN ISO 21003 - DM 174/04



PE-RT RBM Tita-fix multilayer pipe in roll with protective corrugated conduit - Blue

9						
Code	Pipe size (mm)	Alumi- nium th. (mm)	Roll (m)	Pack (m)	Pallet- (m)	Cat.
1544.16.80	16x2	0,20	50	1	700	10.01
1544.20.80	20x2	0,30	50	1	650	10.01

PE-RT RBM Tita-fix multilayer pipe in roll with protective corrugated conduit - Red

Code	Pipe size (mm)	Alumi- nium th. (mm)	Roll (m)	Pack (m)	Pallet- (m)	Cat.
1544.16.90	16x2	0,20	50	1	700	10.01
1544.20.90	20x2	0,30	50	1	650	10.01

 $\textit{Size: Outside } \emptyset \textit{x pipe thickness}$



Suitable for domestic hot water distribution systems.



RBM TITA-FIX

Hydrothermal distribution system





Due to its mechanical properties and geometric stability, **RBM Tita-Fix** pipe can be used in a variety of thermo-technical and plumbing applications in the civil and industrial sector, such as heating and sanitary installations.

It consists of an inner polyethylene layer covered with a middle aluminium layer, which makes the multilayer pipe impermeable to oxygen infiltration, and of an outer polyethylene layer, which protects the aluminium. The **RBM Tita-Fix** pipe offers in a single product, the best traditions of reliability and solidity of metal pipes and the installation convenience of plastic pipes.

The 'TIG - butt' welding of the aluminium strip, a special feature of the RBM Tita-Fix pipe, is able to guarantee the pipe maximum strength and reliability, combined with lightness and flexibility.

TESTING

Prior to the final bricklaying of the installation, it is mandatory to test both the sanitary and heating installations. Below are the titles of the reference standards setting out the testing criteria, referring you to reading the full text:

UNI 5364:1976

"Hot water heating systems. Rules for tender submission and acceptance"

UNI 9182:2008

"Cold and hot water supply and distribution systems. Design, testing and management criteria."

UNI EN 1264-4:2003

"Underfloor Heating - Systems and Components - Installation."

DIN 1988-1

"Drinking water supply system; general (DVGW code of practice)."

- 1 Internal polyethylene layer (PE-Xc PE-RT)
- Intermediate aluminium layer
- 3 Adhesive layer
- 4 External polyethylene layer (PE-RT)

QUALITY CONTROL

For effective quality control, RBM Tita-Fix pipes are tested before sale with helium gas to find even the smallest leaks

PEELING TEST

Through the 'peeling test', the adhesion of the plastic layers to the aluminium interlayer is measured and monitored; the test is carried out for each production batch.

FLARING

A conical punch is inserted into the end section of the pipe, and the pipe is expanded by at least 10% compared to the original diameter; the test is carried out for each production batch.

TESTING FOR OBSTRUCTIONS

Once the roll has been produced, the entire length of the roll is traversed by a steel ball, which makes it possible to check for internal obstructions.

FURTHER PRODUCT TESTING

In our laboratories, we carry out all the tests required by the main standards to verify the quality of the pipe and the tightness of the pipe-connection system, such as, for example:

- pressure cycles
- thermal cycles
- vacuum test
- pull-out resistance, etc

In production, controls are constant, both during the extrusion phase and afterwards

01.
HYDROTHERMAL
DISTRIBUTION

10. WATER DISTRIBUTION

10.02 FITTINGS FOR MULTI-LAYER PIPES

Press fittings for multi-layer pipes
Shut-off taps
Compression fittings for multi-layer pipes

B

Series 812

Press fitting for multilayer pipe - rotary nut - flat seat gas thread

Multi-clamp fitting.
Compatible with clamps series:
TH, H, U, B, F for Ø 16x2 - 18x2 and 20x2;

- TH, H, B for Ø 26x3;
- TH, H for Ø 32x3;

Externally nickel-plated brass body Elastomer seals Stainless steel pipe clamping bush Dielectric pipe clamp cover in PE Threaded connection UNI-EN-ISO 228 Max operating temperature 95°C Max operating pressure 10 Bar

Certifications:







Code	Size A	Size B	Pack	Outer	Cat.
812.16.10	16x2	3/8" F	10	200	10.02
812.16.20	16x2	1/2" F	10	200	10.02
812.16.30	16x2	3/4" F	10	160	10.02
812.18.30	18x2	3/4" F	10	160	10.02
812.20.20	20x2	1/2" F	10	160	10.02
812.20.30	20x2	3/4" F	10	160	10.02
812.26.30	26x3	3/4" F	10	100	10.02
812.26.40	26x3	1" F	10	100	10.02
812.26.50	26x3	1"1/4 F	1	50	10.02
812.32.40	32x3	1" F	10	80	10.02
812.32.50	32x3	1"1/4 F	10	80	10.02

 $Size A: Outside \emptyset x pipe thickness$



Series 963

Press fitting for metal-plastic multilayer pipe.

Multi-clamp fitting. Compatible with clamps series:

- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH, H, B for Ø 26x3;
- TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

Externally nickel-plated brass body Elastomer seals Stainless steel pipe clamping bush Dielectric pipe clamp cover in PE Euroconus threaded connection G3/4" UNI-EN-ISO 228

Max operating temperature 95 °C Max operating pressure 10 Bar

Certifications:











Code	Size A	Size B	Pack	Outer	Cat.
963.16.30	16x2	Euroconus	10	100	10.02
963.18.30	18x2	Euroconus	10	100	10.02
963.20.30	20x2	Euroconus	10	100	10.02
963.26.30	26x3	Euroconus	10	50	10.02

Size A: Outside Øx pipe thickness

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Series 826

Gas press fitting for metal-plastic multilayer pipe - rotary nut - standard RBM thread

Multi-clamp fitting.
Compatible with clamps series:

- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH, H, B for Ø 26x3;
- TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

Externally nickel-plated brass body Elastomer seals Stainless steel pipe clamping bush Dielectric pipe clamp cover in PE Standard RBM threaded connection W24.5x19F Max operating temperature 95 °C Max operating pressure 10 Bar

Certifications:









Code	Size A	Size B	Pack	Outer	Cat.
826.16.00	16x2	RBM	10	100	10.02
826.18.00	18x2	RBM	10	100	10.02
826.20.00	20x2	RBM	10	100	10.02
	826.16.00 826.18.00	826.16.00 16x2 826.18.00 18x2	826.16.00 16x2 RBM 826.18.00 18x2 RBM	826.16.00 16x2 RBM 10 826.18.00 18x2 RBM 10	826.16.00 16x2 RBM 10 100 826.18.00 18x2 RBM 10 100

 $\textit{Size A: Outside } \emptyset \textit{x pipe thickness}$





Press fitting for multilayer pipe - straight -intermediate

Multi-clamp fitting. Compatible with clamps series:

- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH, H, B for Ø 26x3;
- TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

 ${\sf Externally}\, nickel-plated\, brass\, body$ ${\sf Elastomerseals}$ $Stainless\,steel\,pipe\,clamping\,bush$ $Dielectric\,pipe\,clamp\,cover\,in\,PE$ Max operating temperature 95 °C $Max\,operating\,pressure\,10\,Bar$

Certifications:







Code	Size A	Pack	Outer	Cat.
671.16.00	16x2	10	240	10.02
671.18.00	18x2	10	200	10.02
671.20.00	20x2	10	200	10.02
671.26.00	26x3	10	120	10.02
671.32.00	32x3	5	100	10.02
671.40.00	40x3,5	5	60	10.02
671.50.00	50x4	4	40	10.02
671.63.00	63x4,5	3	18	10.02
671.32.00 671.40.00 671.50.00	32x3 40x3,5 50x4	5 5 4	100 60 40	10.0 10.0

 $\textit{Size A: Outside } \emptyset \textit{x pipe thickness}$



Series 672

Press fitting for multilayer pipe - straight -female gas connection

 ${\bf Multi-clamp\,fitting.}$

 $Compatible\,with\,clamps\,series:$ TH, H, U, B, F for Ø 16x2 - 18x2 and 20x2;

- TH, H, B for Ø 26x3;
- TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

Externally nickel-plated brass body **Elastomer seals** Stainless steel pipe clamping bush Dielectric pipe clamp cover in PE Straight threaded connection F UNI-EN-ISO 228 Max operating temperature 95 $^{\circ}\text{C}$ $Max\,operating\,pressure\,10\,Bar$

Certifications:









Code	Size A	Size B	Pack	Outer	Cat.
672.16.20	16x2	1/2" F	10	200	10.02
672.16.30	16x2	3/4" F	-	-	10.02
672.18.20	18x2	1/2" F	10	200	10.02
672.18.30	18x2	3/4" F	10	160	10.02
672.20.20	20x2	1/2" F	10	200	10.02
672.20.30	20x2	3/4" F	10	160	10.02
672.26.30	26x3	3/4" F	10	100	10.02
672.26.40	26x3	1" F	10	100	10.02
672.32.40	32x3	1" F	5	80	10.02
672.40.40	40x3,5	1" F	5	40	10.02
672.40.50	40x3,5	1"1/4 F	5	40	10.02
672.50.60	50x4	1"1/2 F	5	20	10.02
672.63.70	63x4,5	2" F	1	16	10.02

 $\textit{Size A: Outside } \emptyset \textit{x pipe thickness}$





Press fitting for multilayer pipe - straight - male gas connection

Multi-clamp fitting.

Compatible with clamps series:

- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH, H, B for Ø 26x3;
- TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

 $Externally\,nickel\text{-}plated\,brass\,body$ Elastomer seals $Stainless\,steel\,pipe\,clamping\,bush$ Dielectric pipe clamp cover in PE $Straight\,threaded\,connection\,M\,UNI\text{-EN-ISO}\,228$ Max operating temperature 95 °C $Max\,operating\,pressure\,10\,Bar$

Certifications:









Code	Size A	Size B	Pack	Outer	Cat.
673.16.10	16x2	3/8" M	10	240	10.02
673.16.20	16x2	1/2" M	10	240	10.02
673.16.30	16x2	3/4" M	-	-	10.02
673.18.20	18x2	1/2" M	10	200	10.02
673.18.30	18x2	3/4" M	10	200	10.02
673.20.20	20x2	1/2" M	10	200	10.02
673.20.30	20x2	3/4" M	10	200	10.02
673.26.30	26x3	3/4" M	10	120	10.02
673.26.40	26x3	1" M	10	120	10.02
673.32.40	32x3	1" M	5	100	10.02
673.40.50	40x3,5	1"1/4 M	5	60	10.02
673.50.60	50x4	1"1/2 M	5	40	10.02
673.63.70	63x4,5	2" M	1	40	10.02

Size A: Outside Øx pipe thickness

Size A

Code



Series 674

Press fitting for multilayer pipe - angle intermediate

Multi-clamp fitting. Compatible with clamps series:

- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH, H, B for Ø 26x3;
- TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

 $Externally\,nickel\text{-}plated\,brass\,body$ Elastomer seals $Stainless\,steel\,pipe\,clamping\,bush$ Dielectric pipe clamp cover in PE Max operating temperature 95 $^{\circ}\text{C}$ Max operating pressure 10 Bar

Certifications:









074.10.00	TOXZ	10	100	10.02
674.18.00	18x2	10	160	10.02
674.20.00	20x2	10	160	10.02
674.26.00	26x3	5	80	10.02
674.32.00	32x3	5	60	10.02
674.40.00	40x3,5	5	40	10.02
674.50.00	50x4	1	16	10.02
674.63.00	63x4,5	1	16	10.02
Size A: Outside Ø	x pipe thickness			

Pack

Outer

Cat.



Series 675

Press fitting for multilayer pipe - angle female gas connection

Multi-clamp fitting.

Compatible with clamps series:

- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH, H, B for Ø 26x3;
- TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

Externally nickel-plated brass body **Elastomer seals** Stainless steel pipe clamping bush Dielectric pipe clamp cover in PE $Angle\,threaded\,connection\,F\,UNI\text{-}EN\text{-}ISO\,228$ Max operating temperature 95 °C Max operating pressure 10 Bar

Certifications:











Code	Size A	Size B	Pack	Outer	Cat.
675.16.20	16x2	1/2" F	10	200	10.02
675.18.20	18x2	1/2" F	10	160	10.02
675.18.30	18x2	3/4" F	10	160	10.02
675.20.20	20x2	1/2" F	10	160	10.02
675.20.30	20x2	3/4" F	10	120	10.02
675.26.30	26x3	3/4" F	5	80	10.02
675.26.40	26x3	1" F	-	-	10.02
675.32.40	32x3	1" F	5	60	10.02
675.40.50	40x3,5	1"1/4 F	5	40	10.02
675.50.60	50x4	1"1/2 F	1	20	10.02

Size A: Outside Øx pipe thickness





Press fitting for multilayer pipe - angle - male gas connection

Multi-clamp fitting.

Compatible with clamps series:

- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH, H, B for Ø 26x3;
- TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

 $Externally\,nickel-plated\,brass\,body$ Elastomer seals $Stainless\,steel\,pipe\,clamping\,bush$ Dielectric pipe clamp cover in PE $Angle\,threaded\,connection\,M\,UNI\text{-}EN\text{-}ISO\,228$ Max operating temperature 95 °C Max operating pressure 10 Bar

Cart	 	









Code	Size A	Size B	Pack	Outer	Cat.			
676.16.10	16x2	3/8" M	-	-	10.02			
676.16.20	16x2	1/2" M	10	200	10.02			
676.18.20	18x2	1/2" M	10	200	10.02			
676.18.30	18x2	3/4" M	10	160	10.02			
676.20.20	20x2	1/2" M	10	160	10.02			
676.20.30	20x2	3/4" M	10	160	10.02			
676.26.30	26x3	3/4" M	10	80	10.02			
676.26.40	26x3	1" M	-	-	10.02			
676.32.40	32x3	1" M	5	60	10.02			
676.40.50	40x3,5	1"1/4" M	5	32	10.02			
Single On the Great and the Land								

 $Size A: Outside \emptyset x pipe thickness$



Series 677

Press fitting for multilayer pipe -T-shaped-intermediate

Multi-clamp fitting. Compatible with clamps series:

- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH, H, B for Ø 26x3;
- TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

Externally nickel-plated brass body Elastomer seals Stainless steel pipe clamping bush Dielectric pipe clamp cover in PE Max operating temperature 95 °C Max operating pressure 10 Bar

Certifications:











Code	Size A	Pack	Outer	Cat.
677.16.00	16x2	10	120	10.02
677.18.00	18x2	5	80	10.02
677.20.00	20x2	10	80	10.02
677.26.00	26x3	5	40	10.02
677.32.00	32x3	5	40	10.02
677.40.00	40x3,5	5	20	10.02
677.50.00	50x4	1	8	10.02
677.63.00	63x4,5	1	8	10.02

 $Size A: Outside \emptyset x pipe thickness$



Series 678

Press fitting for multilayer pipe -T-shaped - gas central female connection

Multi-clamp fitting.

Compatible with clamps series:

- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH, H, B for Ø 26x3;
- TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

Externally nickel-plated brass body **Elastomer seals** Stainless steel pipe clamping bush Dielectric pipe clamp cover in PE $Threaded\,connection\,F\,UNI\text{-}EN\text{-}ISO\,228$ Max operating temperature 95 °C Max operating pressure 10 Bar

Certifications:











Code	Size A	Size B	Pack	Outer	Cat.
678.16.20	16x2	1/2" F	10	120	10.02
678.18.20	18x2	1/2" F	5	80	10.02
678.18.30	18x2	3/4" F	5	80	10.02
678.20.20	20x2	1/2" F	10	80	10.02
678.20.30	20x2	3/4" F	10	80	10.02
678.26.30	26x3	3/4" F	5	60	10.02
678.32.30	32x3	3/4" F	5	40	10.02
678.32.40	32x3	1" F	5	40	10.02
678.40.40	40x3,5	1" F	5	20	10.02
678.40.50	40x3,5	1"1/4 F	5	24	10.02
678.50.40	50x4	1" F	1	12	10.02

Size A: Outside Øx pipe thickness





Press fitting for multilayer pipe-T-shaped - gas side female connection -double branch.

Multi-clamp fitting. $Compatible\,with\,clamps\,series:$

- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH, H, B for Ø 26x3;
- TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

Externally nickel-plated brass body **Elastomer seals** Stainless steel pipe clamping bush Dielectric pipe clamp cover in PE Threaded connection F UNI-EN-ISO 228 Max operating temperature 95 °C Max operating pressure 10 Bar

Certifications:









Code	Size A	Size B	Pack	Outer	Cat.
679.16.20	16x2	1/2" F	10	60	10.02
679.18.20	18x2	1/2" F	10	60	10.02
679.18.30	18x2	3/4" F	10	60	10.02
679.20.20	20x2	1/2" F	10	60	10.02
679.20.30	20x2	3/4" F	10	60	10.02
679.26.30	26x3	3/4" F	10	40	10.02
679.32.40	32x3	1" F	5	30	10.02

 $\textit{Size A: Outside } \emptyset \textit{x pipe thickness}$



Series 680

Press fitting for multilayer pipe -T-shaped - gas central male connection

Multi-clamp fitting. Compatible with clamps series:

- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH, H, B for Ø 26x3;
- TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

Externally nickel-plated brass body Elastomer seals Stainless steel pipe clamping bush Dielectric pipe clamp cover in PE $Threaded\,connection\,M\,UNI\text{-}EN\text{-}ISO\,228$ Max operating temperature 95 $^{\circ}\text{C}$ Max operating pressure 10 Bar

Certifications:







Code	Size A	Size B	Pack	Outer	Cat.
680.16.20	16x2	1/2" M	10	120	10.02
680.18.20	18x2	1/2" M	10	80	10.02
680.18.30	18x2	3/4" M	10	80	10.02
680.20.20	20x2	1/2" M	10	80	10.02
680.20.30	20x2	3/4" M	10	80	10.02
680.26.30	26x3	3/4" M	5	60	10.02
680.26.40	26x3	1" M	5	60	10.02
680.32.30	32x3	3/4" M	5	40	10.02
680.32.40	32x3	1" M	5	40	10.02
680.40.40	40x3,5	1" M	5	20	10.02
680.40.50	40x3,5	1"1/4 M	5	20	10.02

Size A: Outside Øx pipe thickness



Series 890

Press fitting for multilayer pipe-straight reduced.

Multi-clamp fitting.

Compatible with clamps series:

- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH, H, B for Ø 26x3;
- TH. H for Ø 32x3:
- TH for Ø 40x3.5 50x4 e 63x4.5

 $Externally\,nickel-plated\,brass\,body$ Elastomer seals $Stainless\,steel\,pipe\,clamping\,bush$ $Dielectric\,pipe\,clamp\,cover\,in\,PE$ $Max\,operating\,pressure\,95^{\circ}C$ Max operating pressure 10 Bar

Certifications:







Code	Size A	Size B	Pack	Outer	Cat.
890.18.10	18x2	16x2	10	240	10.02
890.20.10	20x2	16x2	10	240	10.02
890.20.20	20x2	18x2	10	240	10.02
890.26.00	26x3	16x2	10	160	10.02
890.26.10	26x3	18x2	10	160	10.02
890.26.20	26x3	20x2	10	160	10.02
890.32.00	32x3	16x2	5	120	10.02
890.32.10	32x3	20x2	5	120	10.02
890.32.20	32x3	26x3	5	120	10.02
890.40.10	40x3,5	32x3	5	40	10.02
890.50.10	50x4	32x3	5	40	10.02
890.50.00	50x4	40x3,5	5	40	10.02
890.63.10	63x4,5	40x3,5	1	4	10.02
890.63.00	63x4,5	50x4	1	4	10.02

Size A-B: Outside Øx pipe thickness





Series 851.A

Press fitting for multilayer pipe-T-shaped - reduced lateral way

Multi-clamp fitting. Compatible with clamps series:

- TH, H, U, B for Ø 14x2;
- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH, H, B for Ø 26x3; • TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

Externally nickel-plated brass body Elastomer seals $Stainless\,steel\,pipe\,clamping\,bush$ Dielectric pipe clamp cover in PE $Max\,operating\,pressure\,95^{\circ}C$ Max operating pressure 10 Bar

Certifications:







Code	Size A	Size B	Pack	Outer	Cat.
851.20.10	20x2	16x2	10	80	10.02
851.26.10	26x3	16x2	5	60	10.02
851.26.20	26x3	20x2	5	60	10.02
851.32.10	32x3	16x2	5	40	10.02
851.32.00	32x3	20x2	5	40	10.02
851.32.20	32x3	26x3	5	40	10.02

 $\textit{Size A-B: Outside } \emptyset \textit{x pipe thickness}$



Series 851.B

Press fitting for multilayer pipe -T-shaped - reduced central way

Multi-clamp fitting.

Compatible with clamps series:

- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH, H, B for Ø 26x3;
- TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

Externally nickel-plated brass body **Elastomer seals** Stainless steel pipe clamping bush Dielectric pipe clamp cover in PE Max operating pressure 95°C Max operating pressure 10 Bar

Certifications:







Code	Size A	Size B	Pack	Outer	Cat.
Code	Size A	SizeB	Pack	Outer	Cat.
851.16.20	18x2	16x2	10	80	10.02
851.16.30	20x2	16x2	10	80	10.02
851.18.00	20x2	18x2	5	80	10.02
851.16.60	26x3	16x2	5	60	10.02
851.18.20	26x3	18x2	10	60	10.02
851.20.20	26x3	20x2	5	60	10.02
933.16.00	32x3	16x2	5	40	10.02
851.18.30	32x3	18x2	5	40	10.02
851.20.40	32x3	20x2	5	40	10.02
851.26.00	32x3	26x3	5	40	10.02
851.40.10	40x3,5	26x3	1	20	10.02
851.40.00	40x3,5	32x3	5	20	10.02
851.50.20	50x4	26x3	1	12	10.02
851.50.00	50x4	40x3,5	1	12	10.02
851.63.40	63x4,5	26x3	1	8	10.02
851.63.20	63x4,5	40x3,5	1	8	10.02

 $Size A-B: Outside \emptyset x pipe thickness$



Series 851.C

Press fitting for multilayer pipe -T-shaped - reduced central and lateral

Multi-clamp fitting.

Compatible with clamps series:

- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH, H, B for Ø 26x3;
- TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

 $Externally\,nickel\text{-}plated\,brass\,body$ Elastomer seals $Stainless\,steel\,pipe\,clamping\,bush$ $Dielectric\,pipe\,clamp\,cover\,in\,PE$ Max operating pressure 95°C Max operating pressure 10 Bar

Certifications:



Code	Size A	Size B	Pack	Outer	Cat.
851.16.40	18x2	16x2	10	80	10.02
851.16.10	20x2	16x2	10	80	10.02
851.18.10	20x2	18x2	5	80	10.02
851.16.90	26x3	16x2	5	60	10.02
851.20.70	26x3	20x2	5	60	10.02
851.20.90	32x3	20x2	5	40	10.02
851.26.40	32x3	26x3	5	40	10.02

Size A-B: Outside Øx pipe thickness





10.02 FITTINGS FOR MULTI-LAYER PIPES

Series 851.D

Press fitting for multilayer pipe-T-shaped - reduced lateral ways.

- Multi-clamp fitting.
- · Compatible with clamps series:
- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH, H, B for Ø 26x3;
- TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

Externally nickel-plated brass body Elastomer seals Stainless steel pipe clamping bush Dielectric pipe clamp cover in PE Max operating pressure 95°C Max operating pressure 10 Bar

Code	Size A	Size B	Pack	Outer	Cat.
851.18.40	18x2	16x2	5	80	10.02
851.20.00	20x2	16x2	10	80	10.02
851.26.50	26x3	20x2	5	60	10.02
851.32.30	32x3	26x3	5	40	10.02

 $Size A-B: Outside \emptyset x pipe thickness$

Certifications:









Series 999

Press fitting for multilayer pipe -T-shaped - different sized ways.

Multi-clamp fitting.

Compatible with clamps series:

- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH, H, B for Ø 26x3;
- TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

Externally nickel-plated brass body Elastomer seals Stainless steel pipe clamping bush Dielectric pipe clamp cover in PE Max operating pressure 95°C Max operating pressure 10 Bar

Code	Size A	Size B	Size C	Pack	Outer	Cat.
999.20.00	26x3	20x2	 16x2	10	40	10.02

Size A-B-C: Outside Øx pipe thickness

Certifications:











Series 853.A

Press fitting for multilayer pipe - flanged elbow-standard length-F Gas connection

Multi-clamp fitting.

Compatible with clamps series:

- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH, H, B for Ø 26x3;
- TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

Externally nickel-plated brass body **Elastomer seals** Stainless steel pipe clamping bush Dielectric pipe clamp cover in PE Threaded connection F UNI-EN-ISO 228 Max operating pressure 95°C Max operating pressure 10 Bar

Code	Size A	Size B	Pack	Outer	Cat.
853.04.00	16x2	1/2" F	10	60	10.02
853.04.20	18x2	1/2" F	10	60	10.02
853.04.10	20x2	1/2" F	10	60	10.02

 $\textit{Size A: Outside } \emptyset \textit{x pipe thickness}$



Fixing on specific Fixing Plate code 934.00.00

Certifications:









Series 4149.A

Press fitting for multilayer pipe - flanged elbow-standard length-F Gas connection

Multi-clamp fitting.

Compatible with clamps series:

- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH, H, B for Ø 26x3;
- TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

Externally nickel-plated brass body Elastomer seals Stainless steel pipe clamping bush Dielectric pipe clamp cover in PE Threaded connection F UNI-EN-ISO 228 Max operating pressure 95°C Max operating pressure 10 Bar

Code	Size A	Size B	Pack	Outer	Cat.
4149.04.00	16x2	1/2" F	10	60	10.02
4149.04.10	20x2	1/2" F	10	60	10.02
4149.05.10	20x2	3/4" F	10	100	10.02

Size A: Outside Øx pipe thickness



 $Fixing \, on \, specific \, Fixing \, Plate \, code \, 934.00.00$

Certifications:









Series 4149.B

Press fitting for multilayer pipe - flanged elbow - XL 50 mm length - F Gas connection

Multi-clamp fitting.

 $Compatible \ with \ clamps \ series:$

- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH, H, B for Ø 26x3;
- TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

Externally nickel-plated brass body Elastomer seals Stainless steel pipe clamping bush Dielectric pipe clamp cover in PE Threaded connection F UNI-EN-ISO 228 Max operating pressure 95°C Max operating pressure 10 Bar

Code	Size A	Size B	Pack	Outer	Cat.
4149.04.90	16x2	1/2"F	5	40	10.02

 $Size A: Outside \emptyset x pipe thickness$



Fixing on specific Fixing Plate code 934.00.00

Certifications:





Series 853.B

Press fitting for multilayer pipe - flanged elbow - XL length 77 mm - F Gas connection

Multi-clamp fitting.
Compatible with clamps series:

- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH. H. B for Ø 26x3:
- TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

Externally nickel-plated brass body Elastomer seals Stainless steel pipe clamping bush Dielectric pipe clamp cover in PE Threaded connection F UNI-EN-ISO 228 Max operating pressure 95°C Max operating pressure 10 Bar

Code	Size A	Size B	Pack	Outer	Cat.
853.04.90	16x2	1/2" F	5	40	10.02

Size A: Outside Øx pipe thickness



Fixing on specific Fixing Plate code 934.00.00

Certifications:









Series 852

Press fitting for multilayer pipe - flanged - F gas connection

Multi-clamp fitting. Compatible with clamps series:

- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH, H, B for Ø 26x3;
- TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

Externally nickel-plated brass body Elastomer seals Stainless steel pipe clamping bush Dielectric pipe clamp cover in PE Threaded connection F UNI-EN-ISO 228 Max operating pressure 95°C Max operating pressure 10 Bar

Code	Size A	Size B	Pack	Outer	Cat.
852.04.00	16x2	1/2" F	10	60	10.02
852.04.30	20x2	1/2" F	5	60	10.02

Size A: Outside Øx pipe thickness



Fixing on specific Fixing Plate code 934.00.00

Certifications:









Series 934.A

Flanged fittings fixing plate.

Galvanised steel material Flanged fitting application with prefixed centre distance of 80-100-120-150-160 mm Possibility of choosing bracket attachments at only centre distance 80 mm

Code	Pack	Outer	Cat.
934.00.00	1	6	10.02



Series 934.B

Fixing and positioning bracket.

Galvanised steel material Complete with fixing nut

Code	Pack	Outer	Cat.
934.00.50	1	6	10.02



 $Plate\,bracket\,code\,934.00.00$





Brackets with press fitting for Tita-fix multilayer pipe.

Multi-clamp fitting. Compatible with clamps series:

- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH, H, B for Ø 26x3;
- TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

 $Externally\,nickel-plated\,brass\,body$ ${\sf Elastomerseals}$ $Stainless\,steel\,pipe\,clamping\,bush$ Dielectric pipe clamp cover in PE Threaded connection F UNI-EN-ISO 228 $Galvanised\,steel\,bracket$ $Fittings\,applied\,at\,prefixed\,interest$ $Fittings\, free\, to\, rotate$ Connection G 1/2" F

Certifications:



Code	Size A	Centre distance (mm)	Pack	Outer	Cat.
1253.04.00	16x2	80	5	20	10.02
1253.04.20	16x2	150	5	20	10.02
1253.04.10	16x2	160	5	20	10.02
1253.04.60	20x2	150	5	20	10.02
1253.04.50	20x2	160	5	20	10.02

Size A: Outside Øx pipe thickness



Series 3902

Press fitting for multilayer pipe - bent 90° -rotary flat seat

Multi-clamp fitting. Compatible with clamps series: • TH, H, U, B, F for Ø 16x2 e 20x2; • TH, H, B for Ø 26x3;

 $Externally\,nickel\text{-}plated\,brass\,body$ Elastomer seals $Stainless\,steel\,pipe\,clamping\,bush$ $Dielectric\,pipe\,clamp\,cover\,in\,PE$ $Angle\,threaded\,connection\,F\,UNI\text{-}EN\text{-}ISO\,228$ Max operating temperature 95 °C Max operating pressure 10 Bar

Certifications:









Code	Size A	Size B	Pack	Outer	Cat.
3902.16.20	16x2	1/2" M	1	200	10.02
3902.20.20	20x2	1/2" M	1	160	10.02
3902.16.30	16x2	3/4" M	1	160	10.02
3902.20.30	20x2	3/4" M	1	160	10.02
3902.26.30	26x3	3/4" M	1	80	10.02
3902.26.40	26x3	1" M	-	-	10.02
3902.16.20 3902.20.20 3902.16.30 3902.20.30 3902.26.30	16x2 20x2 16x2 20x2 20x2 26x3	1/2" M 1/2" M 3/4" M 3/4" M 3/4" M	1 1 1 1	200 160 160 160 80	10.02 10.02 10.02 10.02 10.02

Size A: Outside Øx pipe thickness





Series 20.A

Recessed shut-off cock with chromeplated plug and press fittings for Tita-fix multilayer pipe.

Multi-clamp fitting. Compatible with clamps series:

- TH, H, U, B, F for Ø 16x2 18x2 and 20x2;
- TH, H, B for Ø 26x3;
- TH, H for Ø 32x3;
- TH for Ø 40x3.5 50x4 e 63x4.5

Brass body Chrome plated cap and manoeuvre knob Elastomer seals Press connections with dielectric cover in PE and stainless steel pipe clamping bush Max operating temperature 95 °C Max operating pressure 10 Bar

Certifications:



Code	Size A	Size B	Pack	Outer	Cat.
20.04.10	16x2	1/2"	5	30	10.02
20.05.10	20x2	3/4"	3	30	10.02
20.05.20*	26x3	3/4"	3	30	10.02

*Fitting supplied disassembled

(i)

 $30\,mm$ extension for spacer fitting kit available. See spare parts pricelist. Product code 3516.00.02



Series 20.B

Recessed shut-off cock with chrome-plated plug.

Brass body. Chromed cap and manoeuvering knob. Elastomer seals. Threaded connections FF UNI-EN-ISO 228.

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Model	Pack	Outer	Cat.
20.04.00	1/2"	Т	10	40	10.02
20.05.00	3/4"	T	5	40	10.02

 \bigcirc

30 mm extension for spacer fitting kit available. See spare parts pricelist. Product code 3516.00.02





Compression fittings for multilayer straight-intermediate pipe

Nickel plated brass body and nut. Brass pipe clip ring nut. Elastomer gaskets.

- Max operating temperature 95 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Certifications:



Code	Size A	Pack	Outer	Cat.
1930.16.02	16x2	10	180	10.02
1930.18.02	18x2	10	150	10.02
1930.20.02	20x2	10	120	10.02
1930.26.02	26x3	5	75	10.02
1930.32.02	32x3	5	35	10.02

 $\textit{Size A: Outside } \emptyset \textit{x pipe thickness}$

(i)

Suitable for polyethylene and multilayer pipe.



Series 1929

Compression fittings for straight multilayer pipe - female gas connection

Nickel plated brass body and nut. Brass pipe clip ring nut. Elastomer gaskets.

- Size A: Pipe outside diameter
- Size B: Thread UNI-EN-ISO 228.
- Max operating temperature 95 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Certifications:







Code	Size A	Size B	Pack	Outer	Cat.
1929.16.02	16x2	1/2" F	10	250	10.02
1929.16.12	16x2	3/4" F	10	160	10.02
1929.18.02	18x2	1/2" F	10	160	10.02
1929.18.12	18x2	3/4" F	10	140	10.02
1929.20.02	20x2	1/2" F	10	150	10.02
1929.20.12	20x2	3/4" F	10	140	10.02
1929.26.12	26x3	3/4" F	5	70	10.02
1929.26.22	26x3	1" F	5	70	10.02
1929.32.22	32x3	1" F	5	50	10.02



Suitable for polyethylene and multilayer pipe.



Series 1928

Compression fittings for straight multilayer pipe - male gas connection

Nickel plated brass body and nut. Brass pipe clip ring nut. Elastomer gaskets.

- Max operating temperature 95 °C
- Max operating pressure 10 Bar

Certifications:





Code	Size A	Size B	Pack	Outer	Cat.
1928.16.02	16x2	1/2" M	10	300	10.02
1928.16.12	16x2	3/4" M	10	160	10.02
1928.18.02	18x2	1/2" M	10	160	10.02
1928.18.12	18x2	3/4" M	10	160	10.02
1928.20.02	20x2	1/2" M	10	150	10.02
1928.20.12	20x2	3/4" M	10	150	10.02
1928.26.12	26x3	3/4" M	5	80	10.02
1928.26.22	26x3	1" M	5	80	10.02
1928.32.22	32x3	1" M	5	50	10.02

Size A: Outside Øx pipe thickness Size B: thread UNI-EN-ISO 228



Suitable for polyethylene and multilayer pipe.





Compression fittings for angleintermediate multilayer pipe

Nickel plated brass body and nut. Brass pipe clip ring nut. Elastomer gaskets.

- Max operating temperature 95 °C
- Max operating pressure 10 Bar

Certifications:





Code	Size A	Pack	Outer	Cat.
1934.16.02	16x2	10	160	10.02
1934.18.02	18x2	10	100	10.02
1934.20.02	20x2	10	100	10.02
1934.26.02	26x3	5	50	10.02
1934.32.02	32x3	5	25	10.02

 $\textit{Size A: Outside } \emptyset \textit{x pipe thickness}$

Suitable for polyethylene and multilayer pipe.



Series 1935

Compression fittings for angle multilayerpipe-female gas connection

 $Nickel\,plated\,brass\,body\,and\,nut.$ Brass pipe clip ring nut. ${\it Elastomer}\, gaskets.$

- Max operating temperature 95 °C
- Max operating pressure 10 Bar

Certifications:







Code	Size A	Size B	Pack	Outer	Cat.
1935.16.02	16x2	1/2" F	10	160	10.02
1935.16.12	16x2	3/4" F	10	120	10.02
1935.18.02	18x2	1/2" F	10	120	10.02
1935.18.12	18x2	3/4" F	10	100	10.02
1935.20.02	20x2	1/2" F	10	120	10.02
1935.20.12	20x2	3/4" F	10	100	10.02
1935.26.12	26x3	3/4" F	5	60	10.02
1935.26.22	26x3	1" F	5	50	10.02
1935.32.22	32x3	1" F	5	25	10.02

Size A: Outside Øx pipe thickness Size B: thread UNI-EN-ISO 228



Suitable for polyethylene and multilayer pipe.



Series 1936

Compression fittings for angle multilayerpipe-male gas connection

 $Nickel\,plated\,brass\,body\,and\,nut.$ Brass pipe clip ring nut. Elastomer gaskets.

- Max operating temperature 95 °C
- Max operating pressure 10 Bar

Certifications:







Code	Size A	Size B	Pack	Outer	Cat.
1936.16.02	16x2	1/2" M	10	180	10.02
1936.16.12	16x2	3/4" M	10	120	10.02
1936.18.02	18x2	1/2" M	10	120	10.02
1936.18.12	18x2	3/4" M	10	120	10.02
1936.20.02	20x2	1/2" M	10	120	10.02
1936.20.12	20x2	3/4" M	10	120	10.02
1936.26.12	26x3	3/4" M	5	60	10.02
1936.26.22	26x3	1" M	5	60	10.02
1936.32.22	32x3	1" M	5	30	10.02

Size A: Outside Øx pipe thickness Size B: thread UNI-EN-ISO 228



Suitable for polyethylene and multilayer pipe.





Compression fittings for flanged elbow multilayer pipe - female gas connection

Nickel plated brass body and nut. Brass pipe clip ring nut. Elastomer gaskets.

- Max operating temperature 95 $^{\circ}$ C
- Max operating pressure 10 Bar

Certifications:





Code	Size A	Size B	Pack	Outer	Cat.
1937.16.02	16x2	1/2" F	10	120	10.02
1937.18.02	18x2	1/2" F	10	100	10.02
1937.20.02	20x2	1/2" F	10	100	10.02

Size A: Outside Øx pipe thickness Size B: thread UNI-EN-ISO 228



Suitable for polyethylene and multilayer pipe.



Series 1931

Compression fittings for T-shaped-intermediate multilayer pipe

Nickel plated brass body and nut. Brass pipe clip ring nut. Elastomer gaskets.

- Max operating temperature 95 $^{\circ}$ C
- Max operating pressure 10 Bar

Certifications:





Code	Size A	Pack	Outer	Cat.
1931.16.02	16x2	10	100	10.02
1931.18.02	18x2	10	80	10.02
1931.20.02	20x2	5	70	10.02
1931.26.02	26x3	3	30	10.02
1931.32.02	32x3	2	16	10.02

Size A: Outside Øx pipe thickness



Suitable for polyethylene and multilayer pipe.



Series 1932

Compression fittings for T-shaped multilayer pipe - central female gas connection

Nickel plated brass body and nut. Brass pipe clip ring nut. Elastomer gaskets.

- Max operating temperature 95 °C
- Max operating pressure 10 Bar

Certifications:







Code	Size A	Size B	Pack	Outer	Cat.
1932.16.02	16x2	1/2" F	10	100	10.02
1932.16.12	16x2	3/4" F	5	50	10.02
1932.18.02	18x2	1/2" F	10	80	10.02
1932.18.12	18x2	3/4" F	5	50	10.02
1932.20.02	20x2	1/2" F	5	60	10.02
1932.20.12	20x2	3/4" F	5	50	10.02
1932.26.12	26x3	3/4" F	3	30	10.02
1932.26.22	26x3	1" F	3	30	10.02
1932.32.22	32x3	1" F	2	18	10.02

Size A: Outside Øx pipe thickness Size B: thread UNI-EN-ISO 228



Suitable for polyethylene and multilayer pipe.

01. HYDROTHERMAL DISTRIBUTION

11. EQUIPMENT AND TOOLS

11.01 EQUIPMENT AND TOOLS

132

Equipment for compression valves and fittings Equipment for multi-layer system Equipment for radiant system



Cap adjusting wrench.

To adjust the kvs by simply acting on the external end of the control rod's thermostatic screw unit.

Code	Pack	Outer	Cat.
2878.00.00	10	10	11.01

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To be used to adjust valves size 3/8" - 1/2" - 3/4". Not suitable to adjust 1" valves.



Series 69

Spanner for fitting with Standard RBM thread.

Square 1/2" connection, for combination or torque wrenches, to easily tighten fittings in any position.

Code	Measure	Pack	Outer	Cat.
69.00.00	Ch 28	2	26	11.01



Series 246

Spanner for fitting with Euroconus thread.

Square 1/2" connection, for combination or torque wrenches, to easily tighten fittings in any position.

Code	Measure	Pack	Outer	Cat.
246.00.00	CH30	2	26	11.01



Series 2441

 $Fastening\, spanner\, for\, adapters.$

Code	Measure	Pack	Outer	Cat.
244.10.05	Ø 15 22 28	1	10	11.01

(i)

For use with fitting 178.XX.00



Series 33

Mechanical extractor.

Can be used to remove the cap unit from the thermostatic valve body, with the system running.

Mechanical extractor

Code	Pack	Outer	Cat.
33.00.00	1	1	11.01

Gasket kit for mechanical extractor

Code	Pack	Outer	Cat.
2740.00.00	1	1	11.01

Compatible with size RBM 3/8" - 1/2" - 3/4" thermostatic valves





Series 553.A

Manual shears.

 ${\sf Suitable} \ for \ pipes \ in \ {\sf PE}, {\sf PB}, {\sf PP}, {\sf PVC}, {\sf PVDF}.$

Code	Model	For pipe Ø	Pack	Outer	Cat.
553.00.42	CS 6/35 RV	6 ÷ 35	1	1	11.01
553.00.52	CS 6/42 RV	6 ÷ 42	1	1	11.01



Series 553.B

Manual pipe cutter.

Suitable for multiplayer, PVC and copper pipe. Complete with deburring tool.

Code	Model	For pipe Ø	Pack	Outer	Cat.
553.00.62	TG 67S	6÷67	1	1	11.01
553.00.72	TG 32	6÷32	1	1	11.01



Series 2179

Manual shears.

Suitable for a precise and quick cut.

Code	For pipe Ø	Pack	Outer	Cat.
2179.00.02	6÷26	1	1	11.01



Series 1875

 $\label{eq:manual-pipe-bender} \textbf{Manual pipe bender spring for multilayer pipe.}$

 $Prevents\,crushing\,pipe\,during\,bending\,operation.$

Code	Measure	Pack	Outer	Cat.
1875.14.02	Ø 14	1	1	11.01
1875.16.02	Ø 16	1	1	11.01
1875.18.02	Ø 18	1	1	11.01
1875.20.02	Ø 20	1	1	11.01
1875.26.02	Ø 26	1	1	11.01

Size:Pipe outside Ø

Its use is recommended to correctly perform bending.





Series 553.C

Hydraulic pipe bending kit, for multilayer pipe.

Prevents crushing pipe during bending operation.

Supply includes: Manual hydraulic pump; Shockproof containment and carrying case; Aluminium pipe bending templates suitable for pipes with outside diameter 14-16-18-20-26-32; Quick coupling aluminium counter templates.

Code	Pack	Outer	Cat.
553.00.32	1	1	11.01

1

Its use is recommended to correctly perform bending.



Series 1165

Wireless screwdriver drill.

Set includes: n°1 wireless drill; n°2 batteries, 14.4V 1.5 Ah; n°1 battery charger for screwdriver drill; n°1 case containing entire screwdriver drill set.

Code	Pack	Outer	Cat.
1165.00.02	1	1	11.01



Series 2007

Knob for gauging-flaring tools.

Knob form anual use of flaring tool suitable for flaring RBM multilayer pipes.

Code	Pack	Outer	Cat.
2007.00.02	1	1	11.01



Tool suitable for calibrating/flaring pipes with a diameter up to 32x3. An RBM screwdriver drill with a screw drill bit is required to calibrate/flare larger diameters, code 1165.00.02



Series 2006

${\bf Gauging-flaring\,tools\,for\,multilayer\,pipe.}$

Eliminates internal and external burrs and gauges the inside diameter of the pipe at the cutting zone. Prearranged for manual use with specific knob and for use with screwdriver drill.

Code	Size A	Pack	Outer	Cat.
2006.14.02	Ø 14x2	1	1	11.01
2006.16.02	Ø 16x2	1	1	11.01
2006.18.02	Ø 18x2	1	1	11.01
2006.20.02	Ø 20x2	1	1	11.01
2006.26.02	Ø 26x3	1	1	11.01
2006.32.02	Ø 32x3	1	1	11.01
2006.40.02	Ø 40x3.5	1	1	11.01
2006.50.02	Ø 50x4	1	1	11.01
2006.63.02	Ø 63x4.5	1	1	11.01

Size: Outside Øx pipe thickness.

11.01



Series 2008

Complete set of gauging-flaring tools for multilayer pipe.

Case containing gauging and flaring tools, sizes ø 16 - 20 - 26 - 32 with specific knob for manual tool used.

Code	For pipe Ø	Pack	Outer	Cat.
2008.00.02	Ø 16 - 20 - 26 - 32	1	1	11.01



Series 553.D

${\bf Electric\, press\, for\, press\, fittings.}$

Electric mains power supply. Supply complete with shockproof containment and carry case.

- Power supply 230VAC
- Weight in use 4.5KgDimensions 415x180x80 mm
- $\bullet \ \ Clamps \, that \, can \, be \, coupled \, series \, TH$

Certifications:

CE



Series 553.E

Wireless press for press fitting.

Rechargeable battery power supply. Supply complete with shock proof containmentand carry case.

- Battery 18V 4Ah
- Weight in use 3.6Kg
- Dimensions 445x125x75 mm
- Clamps that can be coupled series TH

Certifications:

CE

Portable wireless press

Code	Pack	Outer	Cat.
553.00.02	1	1	11.01

Spare battery

553.00.12

Code	Pack	Outer	Cat.
1495.00.02	1	1	11.01



Series 681

Series TH clamps for press fittings

Suitable for RBM press code 553.00.X2

Code	Measure	Pack	Outer	Cat.
681.14.02	Ø 14	1	1	11.01
681.16.02	Ø 16	1	1	11.01
681.18.02	Ø 18	1	1	11.01
681.20.02	Ø 20	1	1	11.01
681.26.02	Ø 26	1	1	11.01
681.32.02	Ø32	1	1	11.01
681.40.02	Ø40	1	1	11.01
681.50.02	Ø 50	1	1	11.01
681.63.02	Ø 63	1	1	11.01

Size: Pipe outside Ø.





Series 1338

Wireless press for press fitting.

 $Rechargeable\,battery\,power\,supply.$ $Supplied\,complete\,with\,battery\,charger\,kit\,and$ $shock proof \, containment \, and \, carrying \, case.$

- Battery 18V 2Ah
- Weight in use 2.5KgDimensions 336x143x76 mm

Certifications:



Portable wireless press

Code	Pack	Outer	Cat.
1338.00.02	1	1	11.01

Spare battery

Code	Pack	Outer	Cat.	
1496.00.02	1	1	11.01	







Series 1339

 ${\bf Clamp\ and\ interchangeable\ inserts\ for}$ press fittings.

 $Suitable for RBM\,press\,code\,1338.00.02$

Code	Measure	Pack	Outer	Cat.
1339.00.02	clamp	1	1	11.01
1340.14.02	Ø 14	1	1	11.01
1340.16.02	Ø 16	1	1	11.01
1340.18.02	Ø 18	1	1	11.01
1340.20.02	Ø 20	1	1	11.01
1340.26.02	Ø 26	1	1	11.01
1340.32.02	Ø32	1	1	11.01

Size: Pipe outside Ø.





Fastener clip tool.

Easy to use tool for quick installation of the pipe fastener clip, code 468.45.00, 468.39.02, 1947.57.02 and 2003.42.02.

Code	Pack	Outer	Cat.
469.00.02	1	1	11.01

 $Accessory \,to\,be\,used\,on\,the\,Kilma-Graf\,radiant\,system.$



Series 667

 $Universal\,unwinder\,for\,pipe\,coils, made$ of galvanised box-section steel.

Easy and quick to assemble.

The coil, once resting on the scrolling surface, is unwound easily thanks to the ball bearing.

Code	Pack	Outer	Cat.
667.00.00	1	1	11.01

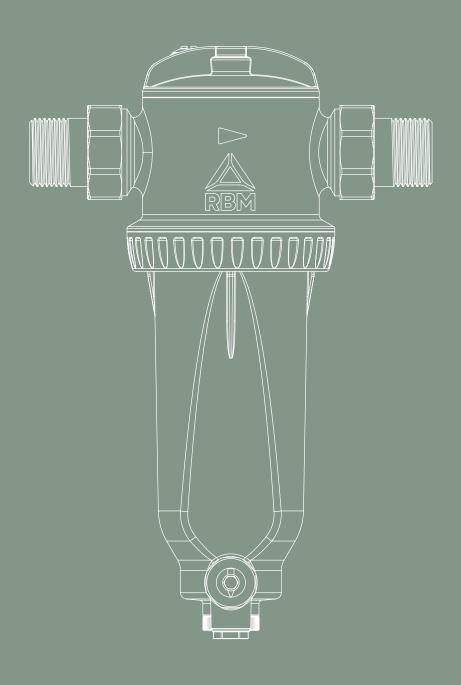


RBM02. ENERGY EFFICIENCY

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02. ENERGY EFFICIENCY



20. WATER TREATMENT

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142

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Air relief valves

Deaerators

Sludge remover filters

Sludge remover/deareator filters

20.03 MAGNETIC TREATMENT

163

Compact magnetic sludge remover filters for boilers

Magnetic sludge remover filters for heat pumps

Magnetic sludge remover filters

Magnetic sludge remover/deareator filters

 $Magnetic\,sludge\,remover\,filters\,for\,boiler\,rooms$

Magnetic anti-scale device

Magnetic dirt separator filters kit

20.04 CHEMICAL TREATMENT

193

Condensation neutraliser filter

Domestic polyphosphate dosers

Chemical conditioners for air-conditioning circuits

02. ENERGY EFFICIENCY

20. WATER TREATMENT

20.02 PHYSICAL TREATMENT

143

Cartridge filters

Air relief valves

Deaerators

Sludge remover filters

Sludge remover/deareator filters

H20 LAB water treatment



WATER TREATMENT: THE EFFICIENCY CHALLENGE

H2O Lab is RBM's range of products dedicated to water treatment in hydrothermal plants.

A complete range of **physical**, **magnetic or chemical solutions**, all designed by **RBM's Research and Development department** to preserve the effectiveness and efficiency of the systems over a long period of time, while fully respecting the characteristics of the individual system and the needs of its users.

From filters and magnetic sludge remover filters to air vent valves and de-aerators, polyphosphate dispensers, cleaning products and protectors for heating and cooling systems, the products in the H2O Lab range can be used individually or in combination to achieve the most effective solution for cleaning and removing impurities in the heating system.

Physical treatment

RBM's H20 Lab product range dedicated to physical water treatment includes vent valves to remove air and gas bubbles from the system, automatic vent valves, deaerators, cartridge filters and traditional sludge remover filters.

Chemical treatment

Designed to ensure effective cleaning and prolonged protection, the chemical water treatment products in RBM's H20 Lab range meet the needs of any domestic installation, whether new or being upgraded.

Magnetic treatment

Developed from RBM's specialised research in the field of magnetic filtration, the magnetic water treatment products in the H20 Lab range provide effective and continuous protection on the boiler, limiting the circulation of particles that risk damaging the system.



Line filter with removable filtering cartridge, FF connection. Suitable for water.

Nickel brass body. Stainless steel AISI 304 stretched mesh filter. Elastomer seals. Threaded connections FF UNI-EN-ISO 228.

- Max operating pressure 16 Bar
- Max operating temperature 100 °C
- Filtering grade: 50-100-300-800 μm

Certifications:





Line filter 800 μm ff connection

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
3.03.00	G 3/8"	2,60	10	40	20.02
3.04.00	G 1/2"	3,40	10	40	20.02
3.05.00	G 3/4"	5,00	6	24	20.02
3.06.00	G 1"	8,70	6	24	20.02
3.07.00	G 1"1/4	14,10	4	4	20.02
3.08.00	G 1"1/2	26,50	2	2	20.02
3.09.00	G 2"	26,50	2	2	20.02
3.10.00	G 2"1/2	104,70	1	1	20.02
3.11.00	G 3"	108,20	1	1	20.02
3.13.00	G4"	111,80	1	1	20.02

Line filter 300 μm ff connection

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
3.03.10	G 3/8"	2,00	10	40	20.02
3.04.10	G 1/2"	3,30	10	40	20.02
3.05.10	G 3/4"	4,90	6	24	20.02
3.06.10	G 1"	8,40	6	24	20.02
3.07.10	G 1"1/4	13,70	4	4	20.02
3.08.10	G 1"1/2	24,40	2	2	20.02
3.09.10	G 2"	24,40	2	2	20.02
3.10.10	G 2"1/2	100,10	1	1	20.02
3.11.10	G3"	101,70	1	1	20.02
3.13.10	G4"	108,00	1	1	20.02

Line filter 100 μm ff connection

	•				
Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
3.03.70	G 3/8"	2,00	10	40	20.02
3.04.70	G 1/2"	3,30	10	100	20.02
3.05.70	G 3/4"	4,90	6	24	20.02
3.06.70	G 1"	8,20	6	24	20.02
3.07.70	G 1"1/4	13,40	4	4	20.02
3.08.70	G 1"1/2	23,60	2	2	20.02
3.09.70	G 2"	23,60	2	2	20.02

Line filter 50 μm ff connection

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.	
3.03.20	G 3/8"	1,60	10	40	20.02	
3.04.20	G 1/2"	1,90	10	40	20.02	
3.05.20	G 3/4"	3,50	6	24	20.02	
3.06.20	G 1"	4,30	6	24	20.02	
3.07.20	G 1"1/4	6,60	4	4	20.02	
3.08.20	G 1"1/2	11,20	2	2	20.02	
3.09.20	G 2"	11,20	2	2	20.02	
3.10.20	G 2"1/2	-	1	1	20.02	
3.11.20	G 3"	-	1	1	20.02	
3.13.20	G 4"	-	1	1	20.02	

Replaceable filtering cartridge. See BU Service.



20.02 PHYSICAL TREATMENT CARTRIDGE FILTERS



Series 4

Line filter with removable filtering cartridge, MF connection. Suitable for water.

Nickel brass body. Stainless steel AISI 304 stretched mesh filter. Elastomer seals. Threaded connections MF UNI-EN-ISO 228.

- Max operating pressure 16 Bar
- Max operating temperature 100 °C
- Filtering grade: 50-100-300-800 μm

Certifications:



Line filter 800 μm mf connection

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
4.04.00	G 1/2"	3,40	10	40	20.02
4.05.00	G 3/4"	5,00	6	24	20.02
4.06.00	G 1"	8,70	6	24	20.02
4.07.00	G 1"1/4	14,10	4	4	20.02
4.08.00	G 1"1/2	26,50	2	2	20.02
4.09.00	G 2"	26,50	2	2	20.02

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Line filter 300 μm mf connection

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
4.04.10	G 1/2"	3,30	10	40	20.02
4.05.10	G 3/4"	4,90	6	24	20.02
4.06.10	G 1"	8,40	6	24	20.02
4.07.10	G 1"1/4	13,70	4	4	20.02
4.08.10	G 1"1/2	24,40	2	2	20.02
4.09.10	G 2"	24,40	2	2	20.02

Line filter 100 μm mf connection

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
4.04.70	G 1/2"	3,30	10	40	20.02
4.05.70	G 3/4"	4,90	6	24	20.02
4.06.70	G 1"	8,20	6	24	20.02
4.07.70	G 1"1/4	13,40	4	4	20.02
4.08.70	G 1"1/2	23,60	2	2	20.02
4.09.70	G 2"	23,60	2	2	20.02

Line filter 50 $\mu m\, mf$ connection

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
4.04.20	G 1/2"	1,90	10	40	20.02
4.05.20	G 3/4"	3,50	6	24	20.02
4.06.20	G 1"	4,30	6	24	20.02
4.07.20	G 1"1/4	6,60	4	4	20.02
4.08.20	G 1"1/2	11,20	2	2	20.02
4.09.20	G 2"	11,20	2	2	20.02

Replaceable filtering cartridge.
See BU Service.





Y-shaped purifying filter with removable $filtering\, cartridge.\, Suitable\, for\, water.$

Brass body and cap. Fibre sealing gaskets. Stainless steel AISI 304 stretched mesh filter. Elastomer seals. Threaded connections FF UNI-EN-ISO 228.

- Max operating pressure 16 Bar
- Max operating temperature 100°C
 Filtering grade: 100-300-800 µm

Certifications:





Y-strainer 800 μm

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
858.04.12	G 1/2"	3,69	20	80	20.02
858.05.12	G 3/4"	6,57	12	48	20.02
858.06.12	G 1"	9,23	8	32	20.02
858.07.12	G 1"1/4	15,60	3	12	20.02
858.08.12	G 1"1/2	25,10	2	2	20.02
858.09.12	G 2"	38,80	1	1	20.02

Y-strainer 300 μm

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
858.04.02	G 1/2"	3,00	20	80	20.02
858.05.02	G 3/4"	6,53	12	48	20.02
858.06.02	G 1"	8,79	8	32	20.02
858.07.02	G 1"1/4	14,15	3	12	20.02
858.08.02	G 1"1/2	23,80	2	2	20.02
858.09.02	G 2"	36,20	1	1	20.02

Y-strainer 100 µm

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
858.04.72	G 1/2"	2,57	20	80	20.02
858.05.72	G 3/4"	5,74	12	48	20.02
858.06.72	G 1"	5,84	8	32	20.02
858.07.72	G 1"1/4	10,80	3	12	20.02
858.08.72	G 1"1/2	16,80	2	2	20.02
858.09.72	G 2"	28,20	1	1	20.02

Replaceable filtering cartridge. See BU Service.



Series 126

Water 100 μm self-cleaning filter with $removable filtering \, cartridge. \, Complete$ with dial pressure gauge and discharge $ball\,cock\,with\,hose\,connection.$

Nickel brass body. Stainless steel AISI 304 stretched mesh filter. Elastomer seals. Threaded connections FF UNI-EN-ISO 228.

- Max operating pressure 16 Bar
- Max operating temperature 100 °C
 Pressure gauge scale 0 ÷ 16 bar
- Standard filtering 100 μm

Certifications:







ı	Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
	126.03.10	G 3/8"	1,80	1	10	20.02
	126.04.10	G 1/2"	3,10	1	10	20.02
	126.05.10	G 3/4"	5,80	1	10	20.02
	126.06.10	G 1"	8,55	1	10	20.02
	126.07.10	G 1"1/4	14,85	1	1	20.02
	126.08.10	G 1"1/2	24,40	1	6	20.02
	126.09.10	G 2"	26,10	1	6	20.02
	126.10.10	G 2"1/2	107,80	1	1	20.02
	126.11.10	G 3"	120,20	1	1	20.02
	126.13.10	G 4"	129,00	1	1	20.02

Replaceable filtering cartridge. See BU Service.



SELF-CLEANING FILTER

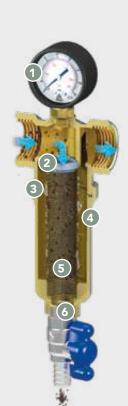
With extractable cartridge (filtration level: 100-300-800 micron) complete with pressure gauge and ball-valve with hose connection

RBM self-cleaning filter solve system problems caused by particles in suspension pollution. RBM product range is suitable for small, medium and big water systems. The specific structure of the filter allows impurities collect on the bottom of the filter seat making the maintenance easier.

Cartridge can be cleaned opening the discharge ball valve with hose connection and leave the water pass through it.

INSTALLATION

Correct installation of the filter is in **horizontal position**, with filter seat pointed to the bottom. For a correct assembly please be careful to the arrow (representing water flowing direction) on the body of the ball valve.



- Pressure gauge pressure 0-16 bar
- 2 O-Ring in PTFE
- 3 O-Ring
- 4 Body and cap made of nickeled brass
- 5 Extractable stainless steel cartridge (100-300-800 micron)
- 6 Discharge ball valve

SELF-CLEANING: Easy and effective clean of the cartridge opening the discharge ball valve

Resistance to high pressure due to reinforced cartridge (PN 16)





MAINTENANCE

Passing through the meshes of the cartridge, water get cleaned and the impurities are collected on the bottom of the filter seat (*). Periodically the filter must be cleaned.

Operation for the replace of the filtering cartridge

- Place the container under the filter.
- Close ball valves 1 and 2.
- Unscrew filter house-cap (in the case of high temperature system, be cautious and use right protections to avoid direct contact with fluid).
- Extract the cartridge and shortly open the ball-valve. Brush it under the water; in the case of damage replace it.
- Put the cleaned cartridge inside the seat.
- Close the cap.
- Open the ball-valves.

Operation for the cleaning of the filtering cartridge

Cartridge can be cleaned opening the discharge with hose connection and leave the water pass through it.



WARNING: During this operation ball valves 1 and 2 must be opened.

H20 LAB water treatment

SMALL SIZE AUTOMATIC AIR VENT VALVES

RBM manufactures automatic air vent valves with float operation. Also called wild card valves, these devices have the function of removing air and gases from air conditioning systems, so they **must be installed in all areas** of the system where bubble formation is expected.



Miniluft CP Series 791 Max. discharge pressure 4 Bar Size: G 3/8" - G 1/2"





Miniluft Compact Series 2827. A Max. discharge pressure 4 Bar Size: G 3/8" - G 1/2"





Miniluft Compact Series 2827.B Max. discharge pressure 4 Bar Size: G 3/8" - G 1/2"





Miniluft Series 2828 Max. discharge pressure 6 Bar Size: G 3/8" - G 1/2"





Miniluft HP Series 3574 Max. discharge pressure 8 Bar Size: G 3/8" - G 1/2" - G 3/4"





Vasa Series 37.A Max. discharge pressure 6 Bar Size: G 3/8" - G 1/2" - G 3/4" - G 1"





VasaTre Series 216 Max. discharge pressure 6 Bar Size: G 3/4" - G 1" - G 1"1/4





Megaluft Series 2840 Max. discharge pressure 5 Bar Size: G 3/8" - G 1/2"





Megaluft HP Series 2836 Max. discharge pressure 6 Bar Size: G 1/2"





VasaSette Series 37.B Max. discharge pressure 6 Bar Size: G 3/4"





Valvolina manuale di spurgo e sfogo aria Series 18

Max. discharge pressure 10 Bar Size: G 1/8" - G 1/4" - G 3/8" - G 1/2"





Check valve for the automatic shut-off of air vent valves, models Vasa, Miniluft and Megaluft.

Brass body. ${\it Elastomer seals}.$ Threaded connections MF UNI-EN-ISO 228.

• Max operating temperature 100 °C

• Max operating pressure 6 Bar (without air

Check valve

Code	Size A	Size B	Pack	Outer	Cat.
38.04.10	G 1/2" F	G 1/2" M	10	500	20.02

Check valve with pre-treated threading

Code	Size A	Size B	Pack	Outer	Cat.
3829.03.70	G 3/8" F	G 3/8" M	10	800	20.02
3829.04.70	G 3/8" F	G 1/2" M	10	600	20.02
38.04.50	G 1/2" F	G 1/2" M	10	500	20.02



Series 791

Miniluft CP

Compact automatic air vent valve for $small \, and \, medium \, circuits, complete$ with manual locking pawl and check valve for automatic shut-off. Floatoperation.

 $Polymer\,body.\,Polymer\,cap\,unit.$ Float in PP. Stainless steel AISI 302 spring. Elastomer seals. Threaded connection M UNI-EN-ISO 228.

- $\bullet \ \ Max\, operating\, pressure\, 6\, Bar$
- Max nominal pressure tolerable 10 Bar
- Max operating discharge pressure 4 Bar
- Max operating temperature 100 $^{\circ}$ C
- Allowed fluid water and water+glycol 30 %

Features:



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Code	Measure	Model	Pack	Outer	Cat.
791.03.40	G 3/8"	Miniluft CP	1	50	20.02
791.04.40	G 1/2"	Miniluft CP	1	50	20.02



Series 2827.A

Miniluft Compact Compact automatic air vent valve for smaller systems, complete with manual locking pawl. Lateral discharge. Float operation.

 $Brass\,body.\,Polymer\,cap\,unit.$ Float in PP. Stainless steel AISI 302 spring. Elastomer seals. $Polymerair\,pocket\,breaker$ $Threaded\,connection\,M\,UNI\text{-EN-ISO}\,228.$

- Max operating pressure 10 Bar
- $\bullet \ \ \mathsf{Max}\,\mathsf{operating}\,\mathsf{discharge}\,\mathsf{pressure}\,\mathsf{4}\,\mathsf{Bar}$
- Max operating temperature 115 $^{\circ}\text{C}$
- Allowed fluid water and water+glycol 30 %

Features:



Code	Measure	Model	Pack	Outer	Cat.
2827.03.10*	G 3/8"	Miniluft Compact	1	10	20.02
2827.04.00	G 1/2"	Miniluft Compact	1	50	20.02

*Valve fitted with air pocket breaker



Compact!





Series 2827.B

Miniluft Compact

Chrome-plated compact automatic air vent valve for smaller systems, complete with manual locking pawl. Lateral discharge. Float operation.

Chrome brass body and cap. Float in PP. Stainless steel AISI 302 spring. Elastomer seals. Threaded connection M UNI-EN-ISO 228.

- Max operating pressure 10 Bar
- Max operating discharge pressure 4 Bar
- Max operating temperature 115 °C
- Allowed fluid water and water+glycol 30 %

Features:



Code	Measure	Model	Pack	Outer	Cat.
2827.03.90	G 3/8"	Miniluft Compact	1	50	20.02
2827.04.90	G 1/2"	Miniluft Compact	1	50	20.02



Compact!



Series 2828

Miniluft

Compact automatic air vent valve for smaller systems, complete with manual locking pawl. Vertical discharge. Float operation.

Brass body. Polymer cap unit. Float in PP. Stainless steel AISI 302 spring. Elastomer seals. Polymer air pocket breaker Threaded connection M UNI-EN-ISO 228.

- Max operating pressure 10 Bar
- Max operating discharge pressure 6 Bar
- Max operating temperature 115 °C
- Allowed fluid water and water+glycol 30 %

Certifications:



WRAS certificate only for code 2828.04.00 $\,$

Features:



Code	Measure	Model	Pack	Outer	Cat.
2828.03.10*	G 3/8"	Miniluft	1	50	20.02
2828.04.00	G 1/2"	Miniluft	1	50	20.02

*Valve fitted with air pocket breaker

(i)

Vertical discharge.



Series 3574

Miniluft HP

Automatic high-performance air vent valve with manual locking pawl. Vertical discharge. Float operation.

Brass bottom and cap. Float in PP. Stainless steel AISI 302 spring. Elastomer seals. Threaded connection M UNI-EN-ISO 228.

- Max operating pressure 10 Bar
- $\bullet \ \ \mathsf{Max}\,\mathsf{operating}\,\mathsf{discharge}\,\mathsf{pressure}\,\mathsf{8}\,\mathsf{Bar}$
- Max operating temperature 115 °C
- Allowed fluid water and water+glycol 30 %

Features:



Code	Measure	Model	Pack	Outer	Cat.
3574.03.00	G 3/8"	${\sf MiniluftHP}$	1	50	20.02
3574.04.00	G 1/2"	Miniluft HP	1	50	20.02
3574.05.00	G 3/4"	Miniluft HP	1	50	20.02



Compact! – high performance



H₂O L_AB water treatment



MINILUFT **COMPACT & MINILUFT**

Automatic compact air vent valves

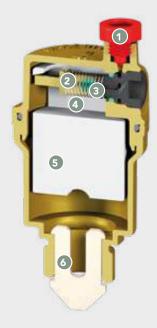
RBM Miniluft valves are automatic, float-operated air vent valves designed to remove air and gases from heating or cooling

Their small size makes them ideal for applications on manifolds or distribution kits housed in containment boxes.

Despite their small size, they are very effective in removing air during both loading and emptying, helping keep the various areas of the system where they are installed free of air.

With their high functional guarantee, these automatic air vent valves must be considered a system safety device.











MINILUFT COMPACT **CHROME** Lateral discharge



MINILUFT Vertical discharge

- Closure cap
- 2 Spring
- 3 Gas ejection device

The ejection of gases (such as oxygen, hydrogen, carbon dioxide) prevents the latter, if retained, from forming corrosive acid solutions or activating galvanic drilling processes in the presence of stray currents. The gas ejection device can be closed by completely screwing the cap.

- 4 Camera pressostatica di accumulo aria La camera pressostatica è concepita per impedire il contatto tra le impurità presenti sul pelo libero del fluido e il dispositivo di tenuta, soprattutto all'avvio della pompa di circolazione.
- 5 Float

Technopolymer float, fitted inside the body in such a way that its functionality cannot be influenced by external movements, including rotation and vibration.

6 Air pocket breaker

(only available in size 3/8")

Prevents the formation of air pockets in the system that could block the drain flow. If combined with Series 38 check valve, remove the air pocket breaker from the valve.

Structure completely made of brass.

OPERATING PRINCIPLE

The accumulation of air bubbles in the upper part of the valve body (air accumulation pressostatic chamber) causes the float descent and, consequently, the gas ejection device opening.

For the valve to properly operate, make sure that the water pressure remains lower than the maximum discharge pressure value (4 bar for the model Miniluft Compact - 6 bar for the model Miniluft).





Valve position **OPEN**

H₂O L_AB water treatment

MINILUFT HP

High performance compact automatic air venting valve

RBM Miniluft HP valves are automatic, float-operated air vent valves designed to remove air and gases from heating or cooling systems. They are ideal for application on vertical or horizontal columns, on manifolds or boilers, and can be installed in every zone of the system where bubbles may develop.

Featuring a small size and high performance (they have a wider pressostatic chamber compared to Miniluft valves), they are very effective in removing air both during filling and emptying, helping you keep the areas on the system where they are installed free from air. With their high functional guarantee, these automatic air vent valves must be considered a system safety device.





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Ensures system efficiency

Limited overall dimensions

High performance

Automatic air venting

- Closure cap
- 2 Spring
- Gas ejection device

The ejection of gases (such as oxygen, hydrogen, carbon dioxide) prevents the latter, if retained, from forming corrosive acid solutions or activating galvanic drilling processes in the presence of stray currents. The gas ejection device can be closed by completely screwing the cap.

- 4 Air accumulation pressostatic chamber The pressostatic chamber is designed to prevent contact between the impurities present on the fluid free surface and the sealing device, especially when the circulation pump is started.

Technopolymer float, fitted inside the body in such a way that its functionality cannot be influenced by external movements, including rotation and vibration.

Structure completely made of brass

OPERATING PRINCIPLE

The accumulation of air bubbles in the upper part of the valve body (air accumulation pressostatic chamber) causes the float descent and, consequently, the gas ejection device opening.

For the valve to properly operate, make sure that the water pressure remains lower than the maximum discharge pressure value.





Valve position **OPEN**



Series 37.A

Vasa Automatic air vent valve, degasser. Float operation.

Nickel brass body. Float and lever in PP. Stainless steel AISI 302 spring. Elastomer seals. Threaded connection M UNI-EN-ISO 228.

- Max operating pressure 6 Bar
- Max operating discharge pressure 2.5 Bar
 Max operating temperature 100 °C
- Allowed fluid water and water+glycol 30 %

Certifications:



Features:



Code	Measure	Model	Pack	Outer	Cat.
37.03.60	G 3/8"	Vasa	10	40	20.02
37.04.60	G 1/2"	Vasa	10	40	20.02
37.05.60	G 3/4"	Vasa	10	40	20.02
37.06.60	G 1"	Vasa	10	40	20.02

 $Notes: To \ be \ in stalled \ on \ circuits \ with \ positive \ pumping \ pressures.$ $For {\it circuits\,with\,negative\,pumping\,pressures, always\,provide\,for\,component}$ $manual \, shut-off \, by \, interposing \, a \, suitable \, ball \, valve.$



Replaceable float unit. Cod. 891.00.00 See spare parts pricelist.



Series 216

VasaTre

Automatic air vent valve, degasser, complete with built-in drain valve and Gardena quick connector, pressure gauge connection. Float operation.

Nickel brass body. Float and lever in PP. Threaded angle connection M UNI-EN-ISO 228. Pressure gauge connection F G1/4.

- Max operating pressure 6 Bar
- Max operating temperature 100 °C
- Allowed fluid water and water+glycol 30 %

Features:



Code	Measure	Model	Pack	Outer	Cat.
216.05.60	G 3/4"	VasaTre	3	12	20.02
216.06.60	G 1"	VasaTre	3	12	20.02
216.07.60	G 1"1/4	VasaTre	3	3	20.02

 $Notes: To \ be installed \ on \ circuits \ with \ positive \ pumping \ pressures.$ $Assembly on horizontally {\it developed manifolds and pipes.}$



Replaceable float unit. Cod. 891.00.00



Series 2840

Megaluft

High-capacity automatic air vent valve, degasser. Float operation.

Brass body. Float and lever in PP. Stainless steel AISI 302 spring. Elastomer seals. Threaded connection M UNI-EN-ISO 228.

- Max operating pressure 10 Bar
- Max operating discharge pressure 5 Bar
- Max operating temperature 115 °C
- Allowed fluid water and water+glycol 30 %

Features:



Code	Measure	Model	Pack	Outer	Cat.
2840.03.00	G 3/8"	Megaluft	1	50	20.02
2840.04.00	G 1/2"	Megaluft	1	50	20.02





${\bf Manual\,air\,purge\,and\,venting\,valve.}$

Nickel brass body. Heat resistant control knob. Threaded connection M UNI-EN-ISO 228 with pre-gasket ring in PTFE.

- Max operating pressure 10 BarMax operating temperature 90 °C

	Code	Measure	Pack	Outer	Cat.
	18.01.00	1/8"	11	200	20.02
	18.02.00	1/4"	12	200	20.02
	18.03.00	3/8"	13	200	20.02
	18.04.00	1/2"	14	200	20.02



Cat.

20.02



Series 2836

Megaluft HP Deaerator with high discharge capacity. Float operation.

Code

2836.04.00

Measure Model

G 1/2"

Megaluft HP

Brass body. Float and lever in PP. Stainless steel AISI 302 spring. Elastomer seals. Threaded connection M UNI-EN-ISO 228.

- Max operating pressure 10 Bar
- Max operating discharge pressure 10 Bar
- Max operating temperature 115 °C
 Allowed fluid water and water+glycol 30 %

Features:





Series 2830.A

Airterm Line deaerator. Float operated.

Brass body. Float and lever in PP. Stainless steel AISI 302 spring. Stainless steel 304 3 Layers cartridge. Elastomer seals.

Threaded connections F UNI-EN-ISO 228.

- Max operating pressure 10 Bar
- Max operating discharge pressure 10 Bar
- Max operating temperature 110 $^{\circ}\text{C}$
- Allowed fluid water and water+glycol 30 %

Features:



Code	Measure	Model	Pack	Outer	Cat.
2830.04.00	G 1/2"	Airterm	1	6	20.02
2830.05.00	G 3/4"	Airterm	1	6	20.02
2830.06.00	G 1"	Airterm	1	6	20.02
2830.07.00	G 1"1/4	Airterm	1	6	20.02
2830.08.00	G 1"1/2	Airterm	1	6	20.02
2830.09.00	G 2"	Airterm	1	1	20.02



Series 3740.A

Insulation shell for Airterm in-line deaerator (threaded) consisting of half-casings made of expanded $polyethylene\ with\ external\ antiscratch$ coating.

Fire behaviour class I Density 33 kg/m³ Max operating temperature -40 \div +90 °C

Code	Measure	Pack	Outer	Cat.
3740.04.12	1/2" F	1	1	20.02
3740.05.12	3/4" F	1	1	20.02
3740.06.12	1" F	1	1	20.02
3740.07.12	1"1/4 F	1	1	20.02
3740.08.12	1"1/2 F	1	1	20.02
3740.09.12	2" F	1	1	20.02



H20 LAB

water treatment

MEGALUFT AND MEGALUFT HP

Automatic high capacity air vent valves

Megaluft are high performance, float-operated automatic air vent valves with high discharge capacity.

They are designed to remove any air and gas contained in the heating or cooling system.

They are ideal for application on vertical or horizontal columns, on manifolds or boilers, and can be installed in every zone of the system where bubbles may develop.

Megaluft and Megaluft HP are intended to remove air both during loading and emptying, without the need for manual intervention. Thanks to their high discharge capacity, they help keep all points of the system where they are installed air free. With their high functional guarantee, these automatic air vent valves must be considered a system safety device.





Ensures system efficiency
High discharge capacity
High performance
Automatic air venting

- 1 Closure cap
- 2 Spring
- 3 Gas ejection device

Located far away from the water free surface, outside of the valve, it prevents residual impurities present in the system liquid from impairing the ejection device tightness. The ejection of gases (such as oxygen, hydrogen, carbon dioxide) prevents the latter, if retained, from forming corrosive acid solutions or activating galvanic drilling processes in the presence of stray currents. The gas ejection device can be closed by completely screwing the cap.

- 4 Air accumulation pressostatic chamber
 The pressostatic chamber is wide and it is designed to prevent contact between the impurities present on the fluid free surface and the sealing device, especially when the circulation pump is started.
- 5 Float

Technopolymer float, fitted inside the body in such a way that its functionality cannot be influenced by external movements, including rotation and vibration.

Structure completely made of brass

OPERATING PRINCIPLE

The accumulation of air bubbles in the upper part of the valve body (air accumulation pressostatic chamber) causes the float descent and, consequently, the gas ejection device opening. For the valve to properly operate, make sure that the water pressure remains lower than the maximum discharge pressure value. (5 bar for the model Megaluft - 10 bar for the model Megaluft HP).



Valve position CLOSED



Valve position **OPEN**

water treatment

AIRTERM & AIRTERM UP

Float operated deaerators

In-line **RBM Airterm** and adjustable **RBM Airterm UP** deaerators are devices designed to eliminate any micro air bubbles contained in the systems.

They are essentially made up of two parts:

ACTIVE: The area where microbubbles are formed as a result of strong turbulence and swirling motion. Microbubbles blend together becoming bubbles.

PASSIVE: Float-operated air vent valve to eliminate air bubbles.

With their capacity to absorb air bubbles nestled in the system's critical areas, deaerators help guarantee system efficiency and are therefore considered safety devices.







AIRTERM In-line deaerator

DISCHARGE 10 bar

AIRTERM UP Adjustable deaerator

Ensuressystem efficiency

High discharge capacity

High performance (max. discharge pressure 10 bar)

Bi-directional (model Airterm)

Can be mounted on vertical, horizontal and diagonal piping (model Airterm UP)

1 Passive part
High-performance air vent valve (discharge guaranteed up to 10 bar).

2 Innovative cartridge

made up of stainless steel sheets with different filtering grades. Stainless steel is an exceptional guarantee of long service life, maximum reliability in variable pressure, temperature, resistance to corrosion and wear conditions, generated by impurities (as it is increasingly less possible to predict what they are comprised of). The flow goes directly through the cartridge, and the continuous changes in sections lead to the creation of swirling movements which promote the

release of micro bubbles. Nonetheless, the cartridge offers little resistance to flow passage and is characterised by very low head losses. The micro bubbles settle on the internal metal cage and, after reaching an adequate size, they move upwards and are ejected by the passive part of the device.





2 Innovative spiral cartridge

made of stainless steel. Stainless steel is an exceptional guarantee of long service life, maximum reliability in variable pressure, temperature, resistance to corrosion and wear conditions, generated by impurities (as it is increasingly less possible to predict what they are comprised of). The flow goes directly through the cartridge, and the continuous changes in sections lead to the creation of swirling

movements which promote the release of micro bubbles. Nonetheless, the cartridge offers little resistance to flow passage and is characterised by very low head losses. The micro bubbles settle on the internal metal cage and, after reaching an adequate size, they move upwards and are ejected by the passive part of the device.







0





Series 2830.B

Airterm Flanged in-line deaerator. Float operation.

Painted steel body. Valve body and brass degasser. Elastomer degasser seals. PN16 flanged connections.

- Max operating pressure 10 Bar
- Max operating discharge pressure 10 Bar
- Max operating temperature 110 $^{\circ}\text{C}$
- Allowed fluid water and water+glycol 30 %

Code	Measure	Model	Pack	Outer	Cat.
Code	Measure	Model	rack	Outer	Cat.
2830.09.72	DN 50	Airterm	1	1	20.02
2830.10.72	DN 65	Airterm	1	1	20.02
2830.11.72	DN 80	Airterm	1	1	20.02
2830.13.72	DN 100	Airterm	1	1	20.02
2830.14.72	DN 125	Airterm	1	1	20.02
2830.15.72	DN 150	Airterm	1	1	20.02



Flange suitable for coupling with counter-flange UNIEN 1092-1.

Features:





Series 3740.B

Insulation shell for Airterm in-line deaerator (flanged) consisting of half-casings made of expanded polyethylene with external antiscratch coating.

Fire behaviour class I Density 33 kg/m³ Max operating temperature -40 \div +90 °C

Code	Measure	Pack	Outer	Cat.
3740.09.02	DN50	1	1	20.02
3740.10.02	DN65	1	1	20.02
3740.11.02	DN80	1	1	20.02
3740.13.02	DN100	1	1	20.02
3740.14.02	DN125	1	1	20.02
3740.15.02	DN150	1	1	20.02



Series 2649

Airterm UP Adjustable deaerator. Float operation.

Brass body. Float and lever in PP. Stainless steel AISI 302 spring. Stainless steel AISI 304 cartridge. Elastomer seals. Threaded connections F UNI-EN-ISO 228.

- Max operating pressure 10 Bar
- Max operating discharge pressure 10 Bar
- Max operating temperature 115 °C
- Allowed fluid water and water+glycol 30 %

Code	Measure	Model	Pack	Outer	Cat.
2649.05.00	G 3/4"	Airterm UP	1	6	20.02
2649.06.00	G 1"	Airterm UP	1	6	20.02



Can be mounted on vertical, horizontal and diagonal piping. $Possibility of mounting series\,2343. A\,accessory\,connector\,(see$ page 179) for system washing.

Features:





Series 37.B

VasaSette

High-capacity automatic air vent valve, degasser, with conveyable drain. Float operation.

Nickel brass body. Float in PP. Elastomer seals. Threaded connections FF UNI-EN-ISO 228. Channelled air discharge FG 1/2"."

- Max operating pressure 6 Bar
- Max operating discharge pressure 3 Bar
- Max operating temperature 100 °C
- Allowed fluid water and water+glycol 30 %

Code	Size A	Size B	Model	Pack	Outer	Cat.
37.05.70	G 3/4"	1/2"	VasaSette	1	4	20.02



Large capacity discharge. Channelled venting valve.











Series 2829.A

Dirterm Self-cleaning dirt separator. Complete with drain ball cock with hose connection.

Brass body. $Stainless\,steel\,AISI\,304\,3\,Layers\,filtering\,cartridge.$ ${\it Elastomer\, hydraulic\, seals.}$ Threaded connections FF UNI-EN-ISO 228.

- Max operating pressure 10 Bar
- Operating temperature 0 ÷ +110 °C

Certifications:



6.1		w (3a)			
Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
2829.04.00	G 1/2"	7,40	1	6	20.02
2829.05.00	G 3/4"	12,66	1	6	20.02
2829.06.00	G 1"	20,44	1	6	20.02
2829.07.00	G 1"1/4	28,14	1	6	20.02
2829.08.00	G 1"1/2	44,45	1	6	20.02
2829.09.00	G 2"	65,58	1	6	20.02



Series 3739.A

Insulation shell for Dirterm self-cleaning dirt separator (threaded) consisting of half-casings made of expanded $polyethylene\ with\ external\ antiscratch$ coating.

Fire behaviour class I Density 33 kg/m³ Max operating temperature -40 ÷ +90 °C

Code	Measure	Pack	Outer	Cat.
3739.04.12	1/2" F	1	1	20.02
3739.05.12	3/4" F	1	1	20.02
3739.06.12	1" F	1	1	20.02
3739.07.12	1"1/4 F	1	1	20.02
3739.08.12	1"1/2 F	1	1	20.02
3739.09.12	2"F	1	1	20.02



Series 3491

Dirterm UP

 $\label{lem:Adjustable self-cleaning dirt separator.} Adjustable self-cleaning dirt separator.$ Complete with drain ball cock with hose connection.

Brass body.

Stainless steel AISI 304 3 Layers filtering cartridge. Elastomer hydraulic seals. Threaded connections FF UNI-EN-ISO 228.

- Max operating pressure 10 Bar
- Operating temperature 0 \div +110 °C

Certifications:



Code	Measure	Pack	Outer	Cat.
3491.05.00	G 3/4"	1	1	20.02
3491.06.00	G 1"	1	1	20.02



Can be mounted on vertical, horizontal and diagonal piping. Possibility of mounting series 2343. A accessory connector (see page179) for system washing.





Series 2831.A

Airterm Dirt

Self-cleaning dirt separator / deaerator. Float operated deaerator. Complete with drain ball cock with hose connection.

SLUDGE REMOVER/DEAREATOR FILTERS

Brass body. Lever floating device in PP. Stainless steel AISI 304 3 Layers filtering cartridge. Elastomer hydraulic seals. Threaded connections FF UNI-EN-ISO 228.

- Max operating pressure 10 Bar
- Max operating discharge pressure 10 Bar
- Operating temperature $0 \div +110\,^{\circ}\text{C}$

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
2831.04.00	G 1/2"	7,40	1	1	20.02
2831.05.00	G 3/4"	12,66	1	1	20.02
2831.06.00	G 1"	20,44	1	1	20.02
2831.07.00	G 1"1/4	28,14	1	1	20.02



 $Dirt\, separator + embedded\, deaerator.$

Certifications:



Features:





Series 3741.A

Insulation shell for Airterm Dirt Selfcleaning dirt separator/deaerator (threaded) consisting of half-casings made of expanded polyethylene with external antiscratch coating.

Fire behaviour class I Density 33 kg/m³ Max operating temperature -40 ÷ +90 °C

Code	Measure	Pack	Outer	Cat.
3741.04.12	1/2" F	1	1	20.02
3741.05.12	3/4" F	1	1	20.02
3741.06.12	1" F	1	1	20.02
3741.07.12	1"1/4 F	1	1	20.02



Series 2831.B

Airterm Dirt Self-cleaning dirt separator/flanged deaerator. Float operation.

Painted steel body. Valve body and brass degasser. Elastomer degasser seals. PN16 flanged connections.

- Max operating pressure 10 Bar
- Max operating discharge pressure 10 Bar
- Max operating temperature 110 $^{\circ}$ C
- Allowed fluid water and water+glycol 30 %

Code	Measure	Pack	Outer	Cat.
2831.09.72	DN 50	1	1	20.02
2831.10.72	DN 65	1	1	20.02
2831.11.72	DN 80	1	1	20.02
2831.13.72	DN 100	1	1	20.02
2831.14.72	DN 125	1	1	20.02
2831.15.72	DN 150	1	1	20.02



Dirt separator + embedded deaerator.

Flange suitable for coupling with counter-flange UNI EN 1092-1.

Certifications:



Features:





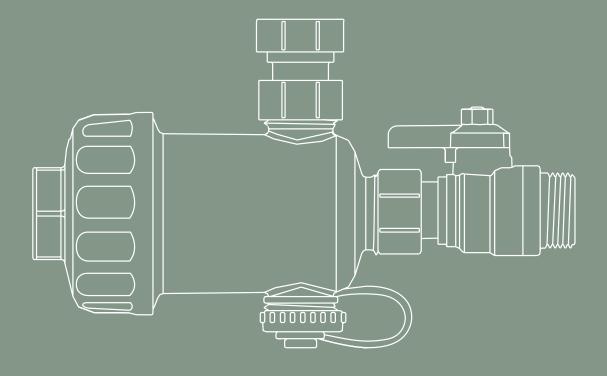
Series 3741.B

Insulation shell for Airterm Dirt Selfcleaning dirt separator/deaerator (flanged) consisting of half-casings made of expanded polyethylene with external antiscratch coating.

Fire behaviour class I Density 33 kg/m³ Max operating temperature -40 ÷ +90 °C

Code	Measure	Pack	Outer	Cat.
3741.09.02	DN50	1	1	20.02
3741.10.02	DN65	1	1	20.02
3741.11.02	DN80	1	1	20.02
3741.13.02	DN100	1	1	20.02
3741.14.02	DN125	1	1	20.02
3741.15.02	DN150	1	1	20.02





20. WATER TREATMENT

20.03 MAGNETIC TREATMENT

163

Compact magnetic sludge remover filters for boilers

Magnetic sludge remover filters for heat pumps

Magnetic sludge remover filters

Magnetic sludge remover/deareator filters

Magnetic sludge remover filters for boiler rooms

Magnetic anti-scale device

Magnetic dirt separator filters kit

H20 LAB water treatment

MAGNETIC FILTRATION

The most comprehensive range for all requirements

BOILERS > 35 KW



SafeCleaner2 Series 2405 - 2344 - 2319

Measures: 3/4" - 1" - 1"1/4







Dirterm Mag Series 3173

Measures: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"







Mag-nus 2 Series 3548

Measures: 3/4" - 1"







Line magnetic filter Series 4162

Measures: 1/2" - 3/4" - 1" - Ø 22 - Ø 28





BOILERS < 35 kW



MG1 Series 3070.A

Measures: 3/4"







MG2 Series 3715.A

Measures: 3/4"







MG1F Series 3701.A

Measures: 3/4"







MG2F Series 3816

Measures: 3/4"





HEAT PUMPS



MP1 Series 3699 Measures: 1" - 1"1/4







MP2 Series 3833 Measures:







MP2 BIG Series 3939 Measures:





BOILER ROOMS



MG Compact Series 3602

Measures: 1/2" - 3/4" - 1" - 1"1/4 1"1/2 - 2"







Dirterm Mag Flanged Series 3173.B

Measures: DN 50, DN 65, DN 80, DN 100, DN 125, DN 150







MG Plus Series 3541

Measures: 50 - 65 - 80 100 - 125 - 150





Series 3715.A



Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
3715.05.10	G 3/4"	4,65	1	6	20.03

Patented

MG2

Under-boiler magnetic sludge remover filter.

 $Plastic \, polymer \, cartridge \, holder \, body.$ $Stainless\,steel\,AISI\,304\,filtering\,cartridge.$ $Elastomer\,hydraulic\,seals.$ $. Threaded connections MF \,UNI\text{-}EN\text{-}ISO\,228.$

- Max operating pressure 3 Bar
- Operating temperature 0÷90° C
- Neodymium magnet
- Filtering grade 800 µm

Super compact. Shut-off system included. Triple filtration. High efficiency. Removes any impurity. Fights corrosion. Increases the lifespan of the boiler.

 $Maintains\ optimum\ system\ efficiency.$

Features:



Se	ries	381	6



MG2F MG2F triple-action under-boiler magnetic filter, supplied with an idle nut fitting, ball valve and extendable flexible

Special filter for wall-mounted boiler

Body in plastic polymer. $Stainless\,steel\,AISI\,304\,filtering\,cartridge.$ Elastomer hydraulic seals. Threaded connection F UNI-EN-ISO 228. 3/4" flat seat valve.

- Max operating pressure 3 Bar
- Operating temperature $0 \div +90\,^{\circ}\text{C}$
- Neodymium magnet B = 11000 gauss
- B(T max) / B(T amb)* < 1%
- *Tmax = 130 °C Tamb = 21 °C
- Filtering grade $800\,\mu m$

Code	Pack	Outer	Cat.
3816.05.20	1	6	20.03



H20 LAB water treatment



MG2

Under boiler magnetic sludge remover filter

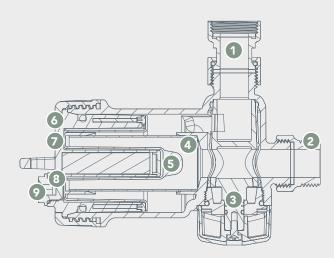
OPERATING PRINCIPLE

Through its effective and constant action, the magnetic filter collects all the impurities, preventing them from circulating, thus avoiding wear and damage of the rest of the components making up the system, circulators and heat exchangers in particular. **RBM MG2** performs a continuous protective action on the boiler.

USE

It is advised to install **RBM MG2** on the return circuit, at the inlet of the boiler, in order to protect it from any impurities in the system, especially during the start-up phase.

Thanks to its compact dimensions, it can be installed under the boiler, in systems for domestic use, where installation spaces are very limited and there is no room for a traditional dirt separator.



THE SYSTEM WATER IS FILTERED THROUGH THREE ACTIONS:

- **1.** The dirty water is conveyed around the central magnet which attracts the magnetic residues (first magnetic filtration)
- 2. The water passes through the metal mesh (mechanical filtration of non magnetic impurities)
- **3.** The water touches the external walls of the filter where it meets an 8-magnet crown (second magnetic filtration)

MAXIMUM INSTALLATION VERSATILITY

RBM MG2 can be installed horizontally or vertically, the shank with rotary nut included in the pack is used to connect the boiler and the connection on the circuit can be made with a flexible fitting (accessory 3174.05.30).







- 1 Swivel connection
 It enables to easily connect the filter to connection G 3/4"M of the boiler
- 2 Threaded connections G 3/4" Only one type of threaded connections: maximum installation versatility
- 3 Shut-off system

 During maintenance, it allows to isolate the filter from the delivery and return circuit. This minimises the leakage of already treated water present in the closed circuit
- 4 Filtering mesh in stainless steel
- 5 Magnet protection conduit, removable
- 6 Closure
- 7 Tightening ring nut
- 8 OR di tenuta
- Safety drain plug Enables to drain the fluid from the main body of the filter and, therefore, to perform programmed cleaning operations

Super compact

Shut-off system included

Triplefiltration

High efficiency

Removes any impurity

Fights corrosion

Increases the lifespan of the boiler

Ensures system efficiency



Series 3070.A

MG1

Under-boiler magnetic sludge remover filter. Supplied complete with swivel filter/boiler connection fitting and ball valve.

Plastic polymer cartridge holder body. Stainless steel AISI 304 filtering cartridge. Elastomer hydraulic seals. Threaded connections MF UNI-EN-ISO 228.

- Max operating pressure 3 Bar
- Operating temperature 0 ÷ +90 °C
- Neodymium magnet B = 11000 gauss
- B(T max) / B(T amb)* < 1%
- *T max = 130 °C T amb = 21 °C
- Filtering grade 800 µm

Certifications:



Features:



Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
3070.05.00	G 3/4"	5,49	1	6	20.03

Patent nr. 202015000064159



 $800\,\mu m$ and $400\,\mu m$ filtering cartridges available in the Service division.



Series 3070.B

MG1

Under-boiler magnetic sludge remover filter. Supplied complete with swivel filter/boiler connection fitting and ball valve.

Plastic polymer cartridge holder body. Stainless steel AISI 304 filtering cartridge. Elastomer hydraulic seals. Threaded connections MF UNI-EN-ISO 228.

- Max operating pressure 3 Bar
- Operating temperature 0 ÷ +90 °C
- Neodymium magnet B = 11000 gauss
- B(T max) / B(T amb)* < 1%
- *T max = 130 °C T amb = 21 °C
- Filtering grade 800 μm

Certifications:



Features:



Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
3070.05.50	G 3/4"	5,49	1	6	20.03

Patent nr. 202015000064159



 $800\,\mu m$ and $400\,\mu m$ filtering cartridges available in the Service division.





Series 3701.A

MG1F

Under-boiler magnetic sludge remover filter. Supplied complete with swivel filter/boiler connection fitting and ball valve.

Plastic polymer cartridge holder body. Stainless steel AISI 304 filtering cartridge. Elastomer hydraulic seals. Threaded connections MF UNI-EN-ISO 228.

- Max operating pressure 3 Bar
- Operating temperature 0 ÷ +90 °C
- Neodymium magnet B = 11000 gauss
- B(T max) / B(T amb)* < 1%
- *T max = 130 °C T amb = 21 °C
- Filtering grade 800 μm

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
3701.05.80	G 3/4"	5,49	1	6	20.03

Patent nr 202015000064159



 $800\,\mu m$ and $400\,\mu m$ filtering cartridges available in the Spare parts section.

Certifications:



Features:





Series 3701.B

MG1F

Under-boiler magnetic sludge remover filter. Supplied complete with swivel filter/boiler connection fitting and ball valve.

Plastic polymer cartridge holder body. Stainless steel AISI 304 filtering cartridge. Elastomer hydraulic seals. Threaded connections MF UNI-EN-ISO 228.

- Max operating pressure 3 Bar
- Operating temperature 0 ÷ +90 °C
- Neodymium magnet B = 11000 gauss
- B(T max) / B(T amb)* < 1%
- *T max = 130 °C -T amb = 21 °C
- Filtering grade $800\,\mu m$

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
3701.05.90	G 3/4"	5,49	1	6	20.03

Patent nr 202015000064159



The 800 μm and 400 μm TZB filtering cartridges are available in the Spare Parts section.

Certifications:



Features:





Series 3174.A

$Straight\,rotary\,fitting.$

Threaded connections FF UNI-EN-ISO 228.

Code	Measure	Pack	Outer	Cat.
3174.05.00	3/4"	1	6	20.03



Fitting for filter/boiler connection



Series 3174.B

Curved rotary fitting.

Threaded connections FF UNI-EN-ISO 228.

Code	Measure	Pack	Outer	Cat.
3174.05.10	3/4"	1	6	20.03



Specific fitting for connection of MG1 to boilers with front connection (e.g. Vaillant model).





Series 3174.C

Flexible extendible fitting.

Threaded connections MF UNI-EN-ISO 228. $L80 \div 120 \, mm$

Code	Measure	Pack	Outer	Cat.
3174.05.30	3/4"	1	6	20.03



Fitting for filter connection



Series 3174.D

$Ball\,valve\,with\,rotary\,connection.$

Threaded connections MF UNI-EN-ISO 228.

Code	Measure	Pack	Outer	Cat.
3174.05.20	3/4"	1	6	20.03



Series 943.A

MG1 filter cap removal spanner.

Code	Pack	Cat.
943.30.05	1	60.01



Series 4162

In-line magnetic filter

Diverter body made of high mechanical performance plastic polymer.
Plastic polymer cartridge holder body.
Stainless steel 131 304 filtering cartridge. ${\it Elastomer\, hydraulic\, seals.}$ $Threaded \, connections \, FF \, UNI-EN-ISO \, 228.$

- $\bullet \ \ \mathsf{Max}\,\mathsf{operating}\,\mathsf{pressure}\,\mathsf{4}\,\mathsf{Bar}$
- Operating temperature 0 90 °C
 Neodymium magnet REN 35B = 11000 gauss

Features:



Code	Measure	Kv (m³/h)	Cat.
4162.04.00	G 1/2"	6,83	20.03
4162.05.00	G 3/4"	6,83	20.03
4162.06.00	G 1"	6,83	20.03
4162.22.00	ø 22 mm	6,83	20.03
4162.28.00	ø 28 mm	6,83	20.03



H20 LAB water treatment

MG1

Compact magnetic system filter

RBM MG1 represents the best solution to solve plant problems due to particle pollution, especially rust and sand that are formed due to corrosion and scale during the normal operation of a system. Thanks to its compact dimensions, it is perfect when the boiler to be protected is installed in a kitchen cabinet or where installation spaces are very limited and there is no room for other dirt separators. Through its effective and constant action, the magnetic filter collects all the impurities present in the system, preventing them from circulating within it, thus avoiding wear and damage of the circulator and the heat ex changer.

By going through a set course, the fluid is forced to cross the many areas that modify its motion and filter its content:

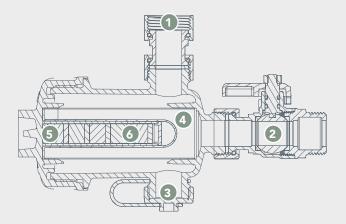




PATENT: N° 202015000064159

- 1 The sudden cross section variation slows down the fluid and the particles suspended in it
- 2 The magnet inside the cylinder attracts all the ferrous impurities
- 3 Non-magnetic particles are retained by the mesh of the filtering cartridge

Continuous protection of the boiler



1 Swivel connection

It enables to easily connect the filter to connection G 3/4 $^{\prime\prime}$ M of the boiler.

2 Ball valve

It enables to intercept the return circuit.

- 3 Drain cap
- 4 Filtration chamber
- 5 Neodymium magnet
- 6 Stainless steel filtering cartridge

MAXIMUM INSTALLATION VERSATILITY

It is advised to install **RBM MG1** on the return circuit, at the inlet of the boiler, in order to protect it from any impurities in the system, especially during the start-up phase. Thanks to its extreme installation versatility, **RBM MG1** can be mounted either with the cartridge/filter body facing the front and downwards.





Super compact

Retains all impurities

Fightscorrosion

Increases the lifespan of the boiler

Maintains optimum system efficiency



1

Cat.

20.03

20.03

Code

3699.06.00

3699.07.00

US11826679B2

Measure Kv (m³/h)

G 1"

G 1"1/4

17.3

17.3



Series 3699

MP1Self-cleaning magnetic sludge remover filter for heating pump.

Complete with integrated shut-off device and discharge ball cock.

Body in plastic polymer. AISI 304 stainless steel reinforced filtering cartridge. Elastomer hydraulic seals. Threaded connections MM UNI-EN-ISO 228.

- Max operating pressure 6 Bar
- Operating temperature 0 +70 °C
- Neodymium magnet B = 11000 gauss
- Filtering grade $800\,\mu m$

Certifications:



Features:



Series 3815

Insulation casing for MP1 self-cleaning magnetic dirt separator consisting of expanded polyethylene half-casings with external antiscratch coating.

Fire behaviour class I Density 33 kg/m³ Max operating temperature -40 ÷ +90 °C

Code	Measure	Pack	Outer	Cat.
3815.00.00	1" F	1	1	20.03



Series 3773.A

Double swivel straight fitting 1"1/4F x

Code	Size A	Size B	Pack	Outer	Cat.
3773.07.00	G 1"1/4 F	1"1/4 F	1	1	20.03
3773.07.10	G 1"1/4 F	1" F	1	1	20.03



Series 3773.B

Curved spherical fitting 1"1/4F x 1"1/4M

Code	Measure	Pack	Outer	Cat.
3773.07.20	G 1"1/4 F	1	1	20.03



H20 LAB water treatment

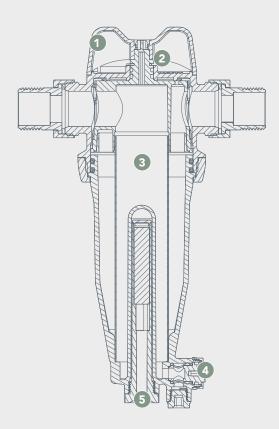
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MP1

Magnetic dirt separator filter for heat exchangers

MP1 RBM is a magnetic sludge remover filter for heat pumps, complete with an integrated shut-off device and a discharge ball cock

- High performance technopolymer body.
- AISI 304 stainless steel reinforced filtering cartridge.
- Elastomer hydraulic seals.
- Union threaded connections MM UNI-EN-ISO 228.
- Max. operating pressure 6 bar.
- Operating temperature 0 to +90°C
- Neodymium magnet B = 11000 gauss
- Filtering grade 800 µm





- 1 Integrated shut-off device
- 2 Extra connection for temperature and/or pressure probes
- 3 Filtering mesh
- 4 Discharge ball cock
- 5 Removable magnet

FEATURES:

- Very low pressure drops;
- Direct filtration with an 800 micron mesh, with other degrees of filtration available (up to 100 micron);
- Extra connections for temperature and/or pressure probes;
- Insulation (optional).

Removes any impurity

Self-cleaning

Excellent hydraulic properties

 ${\sf Extends} \ {\sf the} \ {\sf lifespan} \ {\sf of} \ {\sf heat} \ {\sf pumps}$

Fights corrosion

Maintains optimum system efficiency

Complete with integrated shut-off device and discharge ball cock.



Series 3833

MP2 Self-cleaning magnetic sludge remover filter for heating pump.

Brass diverter valve body. Plastic polymer cartridge holder body. Stainless steel AISI 304 filtering cartridge. Elastomer hydraulic seals. Threaded connections FF UNI-EN-ISO 228.

- Max operating pressure 6 Bar
- Operating temperature 0-70 °C
 Neodymium magnet B = 11000 gauss
- Filtering grade $800\,\mu m$

Features:



Code	Measure	Kv (m³/h)	Pack	Cat.
3833.06.00	G 1"	10,73	1	20.03

Patented



Series 3967

Insulation shell for MP2 self-cleaning magnetic dirt separator consisting of expanded polyethylene half-casings with external antiscratch coating.

Fire behaviour class I Density 33 kg/m³ Max operating temperature -40 \div +90 $^{\circ}$ C

Code	Measure	Pack	Outer	Cat.
3967.00.02	1" F	1	1	20.03



Series 3939

MP2 BIG

Self-cleaning magnetic sludge remover filter for heating pump.

Body in plastic polymer. AISI 304 stainless steel reinforced filtering cartridge. Elastomer hydraulic seals.

Threaded connections MM UNI-EN-ISO 228.

- $\bullet \ \ \mathsf{Max}\,\mathsf{operating}\,\mathsf{pressure}\,\mathsf{6}\,\mathsf{Bar}$
- Operating temperature 0-70 °C
- Neodymium magnet B = 11000 gauss
- Filtering grade 800 µm

Features:



Code	Measure	Kv (m³/h)	Pack	Cat.
3939.06.00	1" F	10,73	1	20.03

Patent pending



H20 LAB water treatment

MP2

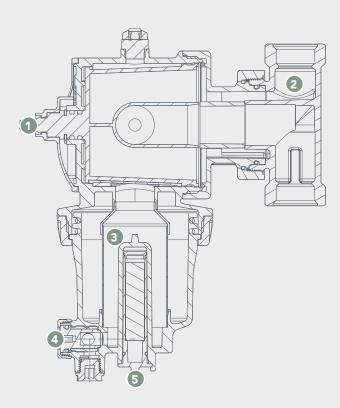
Compact magnetic sludge remover filter for heat pumps

RBM MP2 is a compact magnetic sludge remover filter for heat pumps, complete with removable magnet and discharge ball cock

RBM MP2 is particularly suitable for protecting the heat pumps used in domestic systems. The built in total passage shut-off system makes the installation overall dimension very small.

- High performance technopolymer body.
- AISI 304 stainless steel reinforced filtering cartridge.
- Elastomer hydraulic seals.
- Max operating pressure 6 Bar.
- Operating temperature 0 +90 °C.
- Neodymium magnet B = 11000 gauss.
- Filtering grade 800 m.





FEATURES

- Very **low pressure** drops;
- Direct filtration with an 800 micron mesh, with other degrees of filtration available (up to 100 micron);
- Extra connections for temperature and/or pressure probes;
- Insulation (optional).
- Built-in total passage shut- off system
- 2 360° adjustable diverter
- 3 Filter mesh
- 4 Built-in purge cock
- 5 Removable neodymium magnet

Removes any impurity

Excellent hydraulic properties

Can be mounted on vertical, horizontal and diagonal piping

Extends the life span of heat pumps

Fights corrosion

Ensures system efficiency

Easy dosing of the treatment fluids with 0.3 L doses

Built-in total passage shut-off system.





Series 2405

SafeCleaner2 Multifunction polymer magnetic dirt separator, diverter in brass, FF connection.

Plastic polymer cartridge holder body. Nickel plated brass diverter valve. Stainless steel AISI 304 filtering cartridge. Elastomer hydraulic seals. Threaded connections FF UNI-EN-ISO 228.

- Max operating pressure 4 Bar
- Operating temperature 0 ÷ +90 °C
- Neodymium magnet B = 11000 gauss
- B(T max) / B(T amb)* < 1%
- *T max = 130 °C -T amb = 21 °C

Certifications:



Features:



Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
2405.05.00	G 3/4"	6,81	1	6	20.03
2405.06.00	G 1"	7,51	1	4	20.03

(i)

Possibility of mounting series 2343. A accessory connector (see page 179) for system washing.



Series 2344

SafeCleaner2 Multifunction polymer magnetic dirt separator, diverter in brass, with FF ball valves connection.

Plastic polymer cartridge holder body. Nickel plated brass diverter valve. Stainless steel AISI 304 filtering cartridge. Elastomer hydraulic seals. Threaded connections FF UNI-EN-ISO 228.

- Max operating pressure 4 bar
- Operating temperature 0 ÷ +90 °C
- Neodymium magnet B = 11000 gauss
- B(T max) / B(T amb)* < 1%
- *T max = 130 °C -T amb = 21 °C

Certifications:



Features:



Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
2344.05.50	G 3/4"	6,81	1	6	20.03
2344.06.50	G 1"	7,51	1	4	20.03
2344.07.50	G 1"1/4	7,51	1	4	20.03



Possibility of mounting series 2343. A accessory connector (see page 179) for system washing.





Series 2319

SafeCleaner2 Multifunction polymer magnetic dirt separator, with FF ball valves connection.

Plastic polymer cartridge holder body. Plastic polymer diverter valve. Stainless steel AISI 304 filtering cartridge. Elastomer hydraulic seals. Threaded connections FF UNI-EN-ISO 228.

- Max operating pressure 4 Bar
 Operating temperature 0 ÷ +90 °C
 Neodymium magnet B = 11000 gauss
- B(T max) / B(T amb)* < 1%
 *T max = 130 °C T amb = 21 °C

Certifications:



Features:



Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
2319.05.50	G 3/4"	6,81	1	6	20.03
2319.06.50	G 1"	7,51	1	4	20.03
2319.07.50	G 1"1/4	7,51	1	4	20.03

Possibility of mounting series 2343. A accessory connector (see page179) for system washing.



Series 3746

Insulation shell for SafeCleaner2 $multi-function\, magnetic\, dirt\, separator$ $consisting \, of \, expanded \, polyethylene \,$ half-casings with external antiscratch coating.

Fire behaviour class I Density 33 kg/m³ Max operating temperature -40 \div +90 °C

Code	Size A	Pack	Outer	Cat.
3746.05.12	3/4" 1" 1"1/4 F	1	1	20.03



Series 943.B

 ${\bf Safe Cleaner 2\,filter\,cap\,removal\,spanner.}$

Code	Pack	Cat.
943.30.05	1	60.01



H20 LAB water treatment



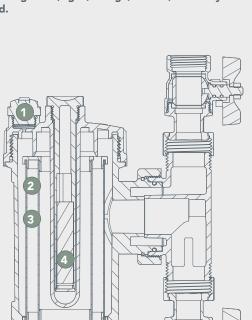
SAFECLEANER 2

Multifunction magnetic dirt separator filter for hydraulic circuits

RBM SafeCleaner2 represents the best solution to solve plant problems due to particle pollution, especially rust and sand, that are formed due to corrosion and scale during the normal operation of a system. Through its effective and constant action, the magnetic filter collects all the impurities present in the circuit, preventing them from circulating within it, thus avoiding wear and damage of all the components making up the system.

The impurities caught by the filter build up on the bottom of it and are eliminated by simply opening the drain plug.

This way all the magnetic contaminants (ferrous residues) and non-magnetic (algae, sludge, sand...) in the system are removed.







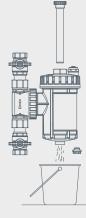
- 1 Manual air vent valve
- 2 Stainless steel filtering
- 3 Filtration chamber
- 4 Neodymium removable magnet
- 5 Drain cap
- 6 Shut-off ball valve

SIMPLE CLEANING OPERATIONS

- 1. Shut off the ball valves
- 2. Remove the magnet from the upper cap
- 3. Open the drain plug and let water flow out

For a more thorough cleaning of the sludge remover, the filter cap can be completely removed so as toextractthefilteringmesh and allow for cleaning and replacement operations.





Retains all impurities

Self-cleaning

 ${\sf Excellent\, hydraulic\, properties}$

Can be mounted on vertical, horizontal and diagonal piping

Increases the lifespan of the boiler

Fightscorrosion

Maintains optimum system efficiency

Easy dosing of the treatment fluids with 0.5I doses



Series 3548

Mag-nus2 Self-cleaning magnetic sludge remover filter for hydraulic systems. Provided with drain ball cock with hose end connector.

Brass body. Stainless steel AISI 304 filtering cartridge. Elastomer hydraulic seals. Threaded connections FF UNI-EN-ISO 228.

- Max operating pressure 10 Bar
- Operating temperature 0 ÷ +100 °C
- Max operating temperature 130 °C
 Neodymium magnet B = 11000 gauss
- B(T max) / B(T amb)* < 1%
- *T max = 130 °C T amb = 21 °C

Certifications:



Features:



Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
3548.05.00	G 3/4"	9,50	1	4	20.03
3548.06.00	G 1"	10,30	1	4	20.03

Possibility of mounting series 2343. A accessory connector (see page 179) for system washing.





Insulation shell for Mag-Nus2 self $cleaning\,magnetic\,dirt\,separator$ consisting of expanded polyethylene half-casings with external antiscratch coating.

Fire behaviour class I Density 33 kg/m³ Max operating temperature -40 \div +90 °C

Code	Measure	Pack	Outer	Cat.
3747.05.12	3/4" 1" F	1	1	20.03



Series 2343.A

 $Connector for cleaning/washing \, system. \\$

I	Code	Measure	Pack	Outer	Cat.
	2343.05.00	U	1	20	20.03

U = Universal



Accessory to be fitted on sludge remover filters model "Dirterm UP" series 3491, "SafeCleaner2" series 2319 - 2344 - 2405, "Mag-Nus2" series 3548 and deaerators model "Airterm UP" series 2649, for system washing.



H20 LAB

water treatment

MAG-NUS 2

Self-cleaning dirt separator with magnet for hydraulic circuits

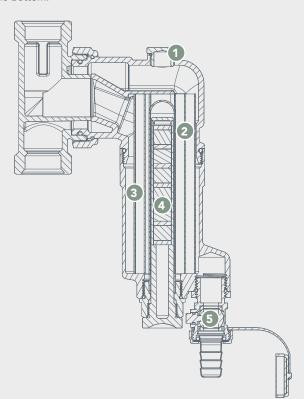
RBM Mag-nus2 is a self-cleaning dirt separator with magnet suitable for hydraulic systems. It is an extremely innovative product created to remove any type of impurity from heating systems.

RBM Mag-nus2 is the best solution to solve problems caused by particle pollution, especially rust and sand, formed by corrosion. This device helps maintaining the high efficiency of the system, preventing pipe obstruction and boiler failures.

Through its effective action, the magnet attracts iron particles avoiding damages caused by free movements of these into the

Impurities (iron, rust, sand, seaweeds) collected in the filter can be removed through the drain valve.

RBM Mag-nus2 must be installed with the drain valve pointing to the bottom.



Thanks to the telescopic mounting ring nut, it is easy fast install **RBM** Mag-nus2 in any position:

STRAIGHT

VERTICAL

DIAGONAL

In the upper part there is a female connection G 3/8" that can be used to connect also an automatic air vent valve RBM code 37.03.60.







- 1 G 3/8"connection (for air vent valve)
- 2 Filtering cartridge: Stainless steel
- 3 Filtering chamber
- 4 Neodymium magnet
- 5 Drain valve

Removes any impurity

Self-cleaning

Excellent hydraulic properties

Can be mounted on vertical, horizontal and diagonal piping

Extends boiler lifespan

Fights corrosion

Ensures system efficiency

Limited overall dimensions









H20 LAB



CONNECTOR TO WASH THE SYSTEMS

RBM provide a connection tool easy to use and makes it easier and quicker to wash a heating system (as required by law).

The RBM connector to wash systems is compatible with all components fitted with an adjustable diverter: SafeCleaner2 (2405 - 2344 - 2319 series) and Mag-Nus2 (3548 series) dirt separator filters and Airterm UP (2649 series) deaerators.

Thanks to the **RBM connector**, there is no need to take down the circulator or look for other points to access the system: simply unscrew the filter or deaerator body, screw the connector to the previously installed diverter and carry out flushing operations



OPERATING INSTRUCTIONS*



Shut off the device by closing the ball valves and remove the main body of the filter from the diver-



Screw the connector onto the diverter body.



3. Connect the inlet and drain pipes to the two outlet connectors of the connector itself, open the ball valves and carry out the flushing.



After washing the system, shut it off, remove the connector and place the main body of the device back on the diverter.

* For further information, please see the product data sheet available at www.rbm.eu.

Strong: made entirely of brass

Quick and easy to install

With outlet connectors

Universal: compatible with the whole range of SafeCleaner2 and Mag-Nus2 filters, and Airterm UP deaerators



Series 3173.A

Dirterm MagSelf-cleaning magnetic dirt separator. Complete with drain ball cock with hose connection.

Brass body. Stainless steel AISI 304 2 Layers filtering cartridge.

Elastomer hydraulic seals.
Threaded connections FF UNI-EN-ISO 228.

- Max operating pressure 10 Bar
- Operating temperature 0 ÷ +110 °C
- Neodymium magnet B = 11000 gauss

Certifications:



Features:



	7	CSC2
1		-8
-	ır	V

Series 3173.B

Dirterm Mag FlangedSelf-cleaning magnetic sludge remover filter / flanged deaerator. With drain ball cock.

Main body and flanges in electrostatically powder-coated steel on the outside. Stainless steel filtering cartridge. Elastomer seals.

PN16 flanged couplings.

- Max operating pressure 10 Bar
- Max operating pressure 110 $^{\circ}$ C

Features:



Code	Measure	Pack	Outer	Cat.
3173.09.72*	DN 50	1	1	20.03
3173.10.72*	DN 65	1	1	20.03
3173.11.72*	DN 80	1	1	20.03
3173.13.72*	DN 100	1	1	20.03
3173.14.72	DN 125	1	1	20.03
3173.15.72	DN 150	1	1	20.03

Measure Kv (m³/h)

7.40

12,66

20,44

28,14

44,45

65,58

G 1/2"

G 3/4"

G 1"

G 1"1/4

G 1"1/2

G 2"

Code

3173.04.00

3173.05.00

3173.06.00

3173.07.00

3173.08.00

3173.09.00

Pack

1

1

1

1

1

Outer

8

8

8

8

8

8

Cat.

20.03

20.03

20.03

20.03

20.03

20.03

Series 3744



Insulation shell for Dirterm self-cleaning dirt separator (threaded) consisting of half-casings made of expanded polyethylene with external antiscratch coating.

Fire behaviour class I Density 33 kg/m³ Max operating temperature -40 ÷ +90 °C

Code	Measure	Pack	Outer	Cat.
3744.04.12	1/2" F	1	1	20.03
3744.05.12	3/4" F	1	1	20.03
3744.06.12	1" F	1	1	20.03
3744.07.12	1"1/4 F	1	1	20.03
3744.08.12	1"1/2 F	1	1	20.03
3744.09.12	2" F	1	1	20.03



H20 LAB

water treatment

DIRTERM MAG

Self-cleaning dirt separator

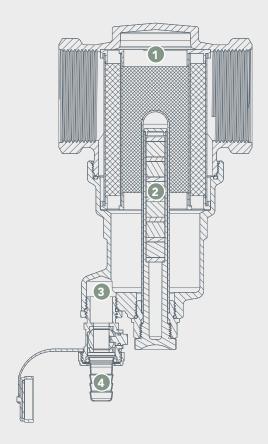
RBM Dirterm Mag represents the best solution to solve plant problems due to particle pollution formed due to corrosion and scale during the normal operation of a system. Through its effective and constant action, RBM Dirterm Mag collects all the impurities present in the system (even very small which traditional mesh filters are not able to eliminate), preventing them from circulating within it, thus avoiding wear and damage of all the components making up the system. The impurities stopped by RBM Dirterm Mag are accumulated on its bottom as long as the opening of the specific discharge valve allows the expulsion thereof.

In addition, **RBM Dirterm Mag**, is equipped with a powerful magnet to capture rust particles that are formed due to corrosion and scale during the normal operation of a system.









1 Innovative Cartridge

Made up of stainless steel sheets with different filtering grades. Stainless steel is an exceptional guarantee of long service life, maximum reliability in variable pressure, temperature, greater resistance to corrosion and wear conditions, generated by impurities (as it is increasingly less possible to predict what they are comprised of).

The cartridge contributes to minimising the possibility of impurities running through and offers little resistance to the flow passage, characterised by very low head loss. The special cartridge does not obstruct the descent of the dirt into the accumulation zone in any way, therefore there is no danger of the particles being recovered by the flow running towards the outlet of the dirt separator.



2 Magnet (11.000 gauss)

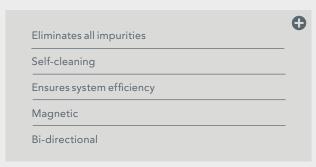
Powerful magnet to capture particles magnetic that are formed due to corrosion during the normal operation of a

3 Accumulation area

Large and very far from the flow passage, resulting in less frequent maintenance work.

4 Purge valve

Adjustable, with hose connector and safety cap.





Series 2863

Airterm Mag Self-cleaning dirt separator / deaerator. Float operated deaerator. Provided with drain ball valve with hose end connector.

Stainless steel AISI 304 2 Layers filtering cartridge. Elastomer hydraulic seals. Threaded connections FF UNI-EN-ISO 228.

- Max operating pressure 10 Bar
 Max operating discharge pressure 10 Bar
 Operating temperature 0 ÷ +110 °C
 Neodymium magnet B = 11000 gauss

Certifications:



Features:





Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
2863.04.00	G 1/2"	7,40	1	6	20.03
2863.05.00	G 3/4"	12,66	1	6	20.03
2863.06.00	G 1"	20,44	1	6	20.03
2863.07.00	G 1"1/4	28,14	1	6	20.03



 $Magnetic\,dirt\,separator+embedded\,deaerator.$



Series 3745

Insulation shell for Airterm Mag self-cleaning dirt separator consisting of $half\text{-} casings\, made\, of\, expanded$ $polyethylene\,with\,external\,ant is cratch$ coating.

Fire behaviour class I Density 33 kg/m³ Max operating temperature -40 ÷ +90 °C

Code	Measure	Pack	Outer	Cat.
3745.04.12	1/2" F	1	1	20.03
3745.05.12	3/4" F	1	1	20.03
3745.06.12	1" F	1	1	20.03
3745.07.12	1"1/4 F	1	1	20.03



H₂O L_AB

water treatment

AIRTERM MAG

Combined self-cleaning Dirt separator / deaerator

RBM Airterm Mag combines the functions of common dirt separators and deaerators in a single solution. They are used to remove air and impurities from hydraulic circuits. In addition, is equipped with a powerful magnet to capture particles such as rust and sand that are formed due to corrosion and scale during the normal operation of a system.

ADVANTAGES

Merging two different components into one solution has allowed us to significantly reduce overall dimensions with respect to the installation of two separate products: dirt separator + deaerator.







High performance (max. discharge pressure 10 bar) Multifunction: Built-in dirt separator and deaerator

Magnetic

Bi-directional

Eliminates all impurities

Self-cleaning

Ensures system efficiency

Large capacity discharge





High-performance air vent valve (discharge guaranteed up to 10 bar)

Innovative cartridge

Made up of stainless steel sheets with different filtering grades. Stainless steel is an exceptional guarantee of long service life, maximum reliability in variable pressure, temperature, greater resistance to corrosion and wear conditions, generated by impurities (as it is increasingly less possible to predict what they are comprised of). The flow goes directly through the cartridge and the continuous changes in sections lead to the creation of swirling movements which promote the release of micro bubbles. The micro bubbles settle on the internal

metal cage and, after reaching an adequate size, they move upwards and are ejected by the passive part of the device. At the same time, this contributes to minimising the possibility of impurities running through and offers little resistance to the flow passage, characterised by very low head loss. The special cartridge does not obstruct the descent of the dirt into the ac-

cumulation zone in any way, therefore there is no danger of the particles being recovered by the flow running towards the outlet of the dirt separator

Magnet

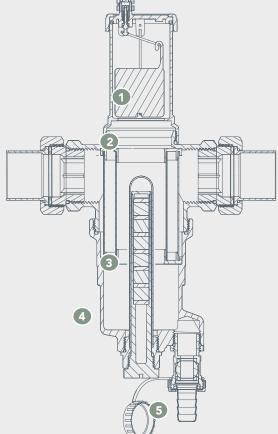
(Only available in the RBM Airtem Mag device) Powerful magnet to capture particles magnetic that are formed due to corrosion during the normal operation of a system



Accumulation area

Large and very far from the flow passage, resulting in less frequent maintenance work

Purge valve Adjustable, with hose connector and safety cap





Series 3602

MG Compact

Compact self-cleaning magnetic sludge remover filter hydraulic systems. With drain ball cock. Suitable for boiler room.

Main body in painted steel on the outside. Steel cover. Elastomer seals. AISI stainless steel filter cartridge

- Max operating pressure 10 Bar
- Max operating temperature 95 °C
- Neodymium magnet
- Filtering grade 100 μm

Features:



Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
3602.04.00	G 1/2"	5,50	1	1	20.03
3602.05.00	G 3/4"	9,87	1	1	20.03
3602.06.00	G 1"	16,59	1	1	20.03
3602.07.00	G 1"1/4	31,10	1	1	20.03
3602.08.00	G 1"1/2	50,60	1	1	20.03
3602.09.00	G 2"	81,00	1	1	20.03



Series 3611

Insulation casing consisting of semicasings and expanded polyethylene cover with external antiscratch coating.

Half-bearings fixed with double-sided adhesive tape already applied.

- Fire behaviour class I
- Density 33 kg/m³
- Max operating temperature -40 ÷ +90 °C

Code	Measure	Pack	Outer	Cat.
3611.00.02	1/2" ÷ 2"	1	1	20.03



Thermal insulation suitable for 3602 series MG Compact magnetic dirt separator filter insulation.



H20 LAB

water treatment

MG COMPACT

Self-cleaning dirt separator with magnets for boiler rooms

RBM MG Compact, a self-cleaning multifunction dirt separator filter with magnets for boiler rooms, represents the best solution to solve plant problems due to pollution resulting from particles of sand and rust that form due to corrosion and incrustations during the normal operation of a system. Thanks to its powerful magnetic capacity, its size and the flanged connections, MG Compact is used in industrial, commercial and medium and large scale civil systems. Through its effective and constant action, the filter collects all the impurities present in the system, preventing them from circulating within it, thus avoiding wear and damage of all the components making up the system.

The impurities blocked by the filter accumulate inside the basket. Cleaning starts by opening the designated discharge valve. In this way all the magnetic contaminants (ferrous residues) and **non-magnetic** (algae, sludge, sand...) in the system are removed.



Removes any impurity

Self-cleaning

Maintains optimum system efficiency

Application in industrial, commercial and medium and large-scale civil systems

Reinforced stainless steel filtering mesh with 100 micron filtering degree

Fitted with a dosage point to add treatment fluids, easily accessible

Limited overall dimensions (in relation to the product category)

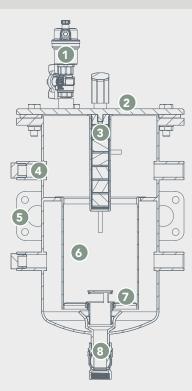
Reversible couplings

Option of in-line installation on a heating system



Reduced maintenance costs:

- > Magnets protected from contact with water, easy to clean
- > The large removable basket with check valve prevents impurities from falling into the filter
- > The large water content extends maintenance
- > The possibility of cleaning the filter without emptying completely reduces the amount of chemical additives to be replenished after each maintenance operation



Automatic air vent valve

to eliminate air at the filling stage, complete with the ball shut-off valve.

Dosage point

to add treatment fluids. Aesily accessible. Plugged when supplied. G 1/2" plug.

Magnetic filtering unit

powerful neodymium magnets to capture ferrous particles such as rust that form due to corrosion during the normal operation of a system, metal debris, processing residues, etc. The magnet assembly is protected from direct contact with water by a removable conduit that makes filter cleaning operations easier.

Sudden section increase

It causes the fluid to slow down. The settling of particles due to the effect of gravity is favoured.

- Wall mounting bracket
- Filtering mesh

stainless steel stretched mesh (100 micron filtration degree) contained in a basket that can be easily pulled out from above. This is equipped with an automatic closing shutter, located at the bottom, to prevent leakage of impurities during maintenance.

Accumulation zone

Large and very far from the flow passage, resulting in less frequent maintenance work

Drain ball valve Size 3/4"



Series 3541

MG Plus

Self-cleaning magnetic sludge remover filter for hydraulic systems. With drain ball cock. Suitable for boiler room.

Main body and flanges in painted steel on the outside Steel cover Elastomer seals AISI stainless steel filter basket Pair of pressure gauges, 0-10 bar scale PN16 flanged couplings

- Max operating pressure 10 Bar
- Max operating temperature 95 $^{\circ}$ C
- Neodymium magnets
- Filtering grade 100 µm

Features:



Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
3541.09.10	DN 50	14* - 23**	1	1	20.03
3541.10.10	DN 65	35* - 46**	1	1	20.03
3541.11.10	DN 80	42* - 57**	1	1	20.03
3541.13.10	DN 100	55* - 73**	1	1	20.03
3541.14.10	DN 125	100* - 131**	1	1	20.03
3541.15.10	DN 150	141* - 173**	1	1	20.03

 $[*]Flow \, rate \, with \, 20 \, kPa \, pressure \, drop$

^{**} Flow rate with 30 kPa pressure drop



Flange suitable for coupling with counter-flange UNI EN 1092-1.



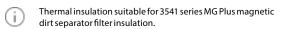
Series 3601

Insulation casing consisting of semicasings and expanded polyethylene cover with external antiscratch coating.

Half-bearings fixed with double-sided adhesive tape already applied.

- Fire behaviour class I
- Density 33 kg/m³
- Max operating temperature -40 ÷ +90 °C

Code	Measure	Pack	Outer	Cat.
3601.09.02	DN 50	1	1	20.03
3601.10.02	DN 65	1	1	20.03
3601.11.02	DN 80	1	1	20.03
3601.13.02	DN 100	1	1	20.03
3601.14.02	DN 125	1	1	20.03
3601.15.02	DN 150	1	1	20.03





H20 LAB water treatment

MG PLUS

Self-cleaning dirt separator with magnets for boiler rooms

RBM MG Plus, a self-cleaning multifunction dirt separator filter with magnets for boiler rooms, represents the best solution to solve plant problems due to pollution resulting from particles of sand and rust that form due to corrosion and incrustations during the normal operation of a system. Thanks to its powerful magnetic capacity, its size and the flanged connections, MG Plus is used in industrial, commercial and large-scale civil systems. Through its effective and constant action, the filter collects all the impurities present in the system, preventing them from circulating within it, thus avoiding wear and damage of all the components making up the system. The impurities blocked by the filter accumulate inside the basket. Cleaning starts by opening the designated discharge valve. In this way all the magnetic contaminants (ferrous residues) and non-magnetic (algae, sludge, sand...) in the system are removed.



Removes any impurity

Self-cleaning

Maintains optimum system efficiency

Application in industrial, commercial and large-scale civil systems

Reinforced stainless steel filtering mesh with 100 micron filtering degree

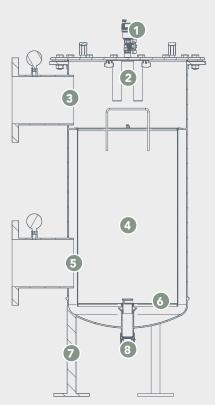
Fitted with a dosage point to add treatment fluids, easily accessible

Limited overall dimensions (in relation to the product category)

Reduced maintenance costs:



- > The large removable basket with check valve prevents impurities from falling into the filter
- >The large water content extends maintenance intervals
- > The possibility of cleaning the filter without emptying completely reduces the amount of chemical additives to be replenished after each maintenance operation



Automatic air vent valve

to eliminate air at the filling stage, complete with the ball shut-off valve

2 Magnetic filtering unit

powerful neodymium magnets to capture ferrous particles such as rust that form due to corrosion during the normal operation of a system, metal debris, processing residues, etc. The magnet assembly is protected by direct contact with water by a removable conduit that makes filter cleaning operations easier

3 Sudden section increase

it causes the fluid to slow down. Average incoming speed: 2.5 m/s Average speed after the filter inlet: 0.2 m/s.

The settling of particles due to the effect of gravity is favoured

4 Filtering mesh

stainless steel stretched mesh (100 micron filtration degree) contained in a basket that can be easily pulled out from above. This is equipped with an automatic closing shutter, located at the bottom, to prevent leakage of impurities during maintenance

5 Pair of pressure gauges

through the display of the differential pressure, it is possible to assess the degree of clogging of the filter

6 Accumulation zone

Large and very far from the flow passage, resulting in less frequent maintenance work

7 Base

adjustable height

8 Drain ball valve Size 1" 1/4



Series 304.A

Magnetic anti-scale device for physical $treatment\,of\,water.\,Permanent\,annular$ $magnets\,enca psulated\,in\,food\text{-}grade$ plastic polymer.

External nickel plated brass body. Sintered ring magnet. Elastomer seals. Union threaded connections MM UNI-EN-ISO 228 up to 2". 2"1/2 threaded connections (UNI-EN-ISO 228).

- Magnetic field 700 GAUS
 Residual induction from 2300 to 3700 GAUS
 Max operating pressure 16 Bar
- Max operating temperature 80 °C

Certifications:



Features:



Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
304.04.00	G 1/2"	10,20	1	6	20.03
304.05.00	G 3/4"	14,80	1	6	20.03
304.06.00	G 1"	26,00	1	6	20.03
304.07.00	G 1"1/4	30,40	1	1	20.03
304.08.00	G 1"1/2	63,00	1	1	20.03
304.09.00	G 2"	74,00	1	1	20.03
304.10.00	G 2"1/2	125,00	1	1	20.03
304.11.00	G 3"	160,00	1	1	20.03
304.13.00	G 4"	252,00	1	1	20.03





4029.B

Chemical water treatment kit with MG1 dirt separator filter

MG1, with its effective and constant action, collects all impurities in the system, preventing them from circulating within it. This prevents wear and damage to the rest of the system components, in particular circulators and heat exchangers. $Spray\, Protect\, 1\, is\, a\, professional\, multifunctional$ neutral product useful for inhibiting corrosion, . lime deposits, noise in heating systems (and $boilers), hydrogen formation in side\ radiators,$ $microbial \, and \, algal \, growth \, in \, heating \, and \, cooling$ systems.

 $Spray\,Clean\,4\,is\,a\,neutral\,product\,for\,cleaning\,new$ and old systems from limestone and iron deposits, $sludge, oily \, substances, grease, iron \, deposits, \\$ $microbial \, and \, algal \, growth.$

- The kit consists of:
- MG1, under-boiler magnetic sludge remover
- Spray Protect 1, protective spray for cooling and heating systems
- Spray Clean 4, spray can cleaner for heating and cooling systems

Code	Pack	Outer	Cat.
4029.05.00	1	4	20.03



4030.B

Chemical water treatment kit with MG2 dirt separator filter

MG2, with its effective and constant action, $collects\,all\,impurities\,in\,the\,system, preventing$ $them\,from\,circulating\,within\,it.\,This\,prevents\,we ar$ and damage to the rest of the system components, in particular circulators and heat exchangers. $Spray\,Protect\,1\,is\,a\,professional\,multifunctional$ $neutral\ product\ useful\ for\ inhibiting\ corrosion,$ $lime\,deposits, noise\,in\,heating\,systems\,(and$ $boilers), hydrogen formation inside\ radiators,$ microbial and algal growth in heating and cooling

 $Spray\,Clean\,4\,is\,a\,neutral\,product\,for\,cleaning\,new$ and old systems from limestone and iron deposits, sludge, oily substances, grease, iron deposits, microbial and algal growth.

- · The kit consists of:
- MG2, under-boiler magnetic sludge remover filter
- Spray Protect 1, protective spray for cooling and heating systems
- Spray Clean 4, spray can cleaner for heating and cooling systems

Code	Pack	Outer	Cat.
4030.05.00	1	6	20.03





4031.B

Chemical water treatment kit with filter for MP1 heat pumps

MP1, with its effective and constant action, collects all impurities in the system, preventing them from circulating within it. This prevents wear and damage to the rest of the system components, in particular circulators and heat exchangers. The impurities stopped by the filter are accumulated on its bottom as long as the opening of the specific discharge cock allows the expulsion thereof. Protective 100 is a professional multifunctional neutral product for inhibiting corrosion, lime deposits, noise in heating systems as well as boilers, hydrogen formation inside radiators, microbial and algal growth in heating and cooling systems.

Wash Clean 400 is a neutral product for cleaning new and old systems from limestone and iron deposits, sludge, oily substances, grease, iron deposits, microbial and algal growth.

- The kit consists of:
- MP1, under-boiler magnetic sludge remover filter
- Protective 100, protective agent for cooling and heating systems in 1 kg can
- Wash Clean 400, cleaner for heating and cooling systems in 1 kg can

Code	Pack	Outer	Cat.
4031.06.00	1	6	20.03



4032.B

Chemical water treatment kit with filter for super-compact heat pump MP2

MP2, with its effective and constant action, collects all impurities in the system, preventing them from circulating within it. This prevents wear and damage to the rest of the system components, in particular circulators and heat exchangers. The impurities stopped by the filter are accumulated on its bottom as long as the opening of the specific discharge cock allows the expulsion thereof. Protective 100 is a professional multifunctional neutral product for inhibiting corrosion, lime deposits, noise in heating systems as well as boilers, hydrogen formation inside radiators, microbial and algal growth in heating and cooling systems.

Wash Clean 400 is a neutral product for cleaning new and old systems from limestone and iron deposits, sludge, oily substances, grease, iron deposits, microbial and algal growth.

- The kit consists of:
- MP2, super-compact magnetic sludge remover filter
- Protective 100, protective agent for cooling and heating systems in 1 kg can
- Wash Clean 400, cleaner for heating and cooling systems in 1 kg can

Code	Pack	Outer	Cat.
4032.06.00	1	6	20.03



02. ENERGY EFFICIENCY

20. WATER TREATMENT

20.04 CHEMICAL TREATMENT

194

Condensation neutraliser filter

Domestic polyphosphate dosers

Chemical conditioners for air-conditioning circuits



NT1 Acid condensation neutralising filter.

Transparent PA polyamide cartridge body. PA polyamide caps and hose connection fittings. Polymer fastening collar.

 $\label{lem:algorithm} AISI\,304\,stainless\,steel\,neutralising\,mesh\,door.$ Elastomer hydraulic seals.

 $MgO-based\ neutralising\ bioceramic\ compound.$

Kit inclusive of:

- Acid condensation neutralising filter;
- · Fastening collar;
- Pair of elbow hose connection fittings;
- 2 MgO-based neutralising bioceramic compound loads.

Code	Size A	Size B	Pack	Outer	Cat.
3286.05.00	G 3/4"	DN 20	1	6	20.04

A

Warnings: RBM recommends replacing the residual load annually, at the end or beginning of the season, after the filter has been cleaned.

 $Use RBM\ original\ parts\ exclusively\ (code\ 3290.00.00).$



Series 3287

Pair of straight hose connection fittings complete with flat seat seal.

PA polyamide fittings.

Code	Size A	Size B	Pack	Outer	Cat.
3287.05.16	3/4"	DN 16	6	60	20.04
3287.05.20	3/4"	DN 20	6	60	20.04



Series 3288

Pair of elbow hose connection fittings complete with flat seat seal.

PA polyamide fittings.

Code	Size A	Size B	Pack	Outer	Cat.
3288.05.16	3/4"	DN 16	6	60	20.04
3288.05.20	3/4"	DN 20	6	60	20.04



Series 3289

Insulation shell for NT1 anticondensation filter made of expanded polyethylene half-bearings with external antiscratch coating.

 $Half-bearings fixed with velcro\,already\,applied.$

- Fire behaviour class1
- Density 33 kg/m³
- Max operating temperature -40 ÷ +90 °C

Code	Measure	Pack	Outer	Cat.
3289.00.00	3/4"	1	5	20.04



Required with the installation of NT1 on outdoor boilers, with condensation discharge into the eaves.



Series 3290

MgO-based neutralising bioceramic compound.

Code	Pack	Outer	Cat.
3290.00.00	10	40	20.04



H20 LAB water treatment

NT1

Acid condensation neutralising filter for condensing boilers

Protects your discharge system against corrosion by neutralising the ph of condensation

The installation of condensing boilers is spreading rapidly thanks to new regulatory requirements. However, these heat generators produce acid condensation which must be neutralised before disposal so that it cannot cause damage to the system piping and to the environment. By installing **RBM NT1** downstream of the boiler, condensation passes inside the neutralising cartridge which neutralises the pH causing to fall within the limits provided, to allow free draining without damaging pipes or gutters.

From acid pH to alkaline pH thanks to a heart made of calcium carbonate granules.





Fights corrosion by acid condensation

0

Resistant to chemicals dissolved in the steam which condenses in the boiler

Quick & easy maintenance

- 1 Hose connection fittings
 They allow quick and easy assembly
- 2 Atmospheric vent cap
 As required by the UNI 7129-05 standard. When removed, allows refilling of the neutralising medium
- Transparent body
 Thanks to the transparent plastic body, the neutralizing medium level can be constantly monitored
- 4 Neutralising medium

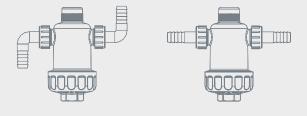
 Contained in a stainless steel mesh, the neutralising medium has an operating time that varies according to the acidity, the amount of condensation to process and hours of operation of the boiler. Therefore, it must be refilled periodically and replaced in full every year.
- 5 Closure cap
 It facilitates cleaning operations of the stainless steel mesh.

PH ALWAYS UNDER CONTROL

NT1 allows the pH of the water discharged to be always maintained within an optimal range, even if the condensation liquid should remain in the filter for a long time (for example, in the case of switch-off due to inactivity, during the night, etc.).



Install RBM NT1 always in a vertical position





DP1 Polyphosphate doser.

Technopolymer body with high mechanical performance EPDM PEROX hydraulic seals Product charge: brilliant blue crystals of food grade polyphosphate in a glassy state (70 g) Brass connection fitting can

- Max operating pressure 6 bar
- Operating temperature 0-30°C
- T°max for antiscale actions 100°C
- T°max for anti-corrosive actions: 180°C
- Product dosage: max. 5mg/l of P2O5
- Charge duration: 35,000 l (approx. 6 months)

Polyphosphate doser

Code	Measure	Pack	Outer	Cat.
3928.04.00	1/2"	1	9	20.04

Reload

Code	Measure	Pack	Cat.
4051.00.00	1/2"	1	20.04



Protects systems against limescale and corrosion. Supplied with nr. 1 refill of sodium polyphosphate.



Serie 4161

$In-line\ polyphosphate\ dispenser.$

Technopolymer body with high mechanical performance

EPDM PEROX hydraulic seals Product charge: brilliant blue crystals of food grade polyphosphate in a glassy state (70 g) Brass connection fitting can

- $\bullet \ \ Max\, operating\, pressure\, 6\, bar$
- Operating temperature 0-30°C
- $\bullet \ \ T^{\circ}max\,for\,antiscale\,actions\,100^{\circ}C$
- $\,$ T° max for anti-corrosive actions: 180°C
- $\bullet \ \mathsf{Product}\,\mathsf{dosage:}\,\mathsf{max.}\,\mathsf{5mg/l}\,\mathsf{of}\,\mathsf{P2O5}$
- Charge duration: 35,000 l (approx. 6 months)

Code	Measure	Kv (m³/h)	Cat.
4161.04.00	1/2"	6,03	20.04
4161.05.00	3/4"	6,03	20.04
4161.06.00	1"	6,03	20.04
4161.22.00	ø 22 mm	6,03	20.04
4161.28.00	ø 28 mm	6,03	20.04



H20 LAB

water treatment

DP1

Polyphosphate Doser

The **DP1** polyphosphate doser provides the water with a suitable antiscale and anti-corrosive treatment, leaving its potability characteristics unchanged.

It is mainly applied upstream of domestic hot water supply systems, directly at the cold domestic water inlet to the boiler.

The DP1 polyphosphate doser has a small footprint, simple and quick installation, low product consumption and low maintenance costs. Equipped with a ½" swivel brass shank, it adapts to all types of boilers; the built-in shut-off system allows maintenance without the need for other shut-off devices. A polyphosphate charge is included in the package.

The use of polyphosphate silicates guarantees:

- Scaling inhibition. Helps reduce the formation of adherent deposits of insoluble carbonates on heat exchange surfaces.
- Attenuation of previous scaling (restorative effect). Progressive reduction of the layer of deposits formed in the installations in the absence of suitable chemical conditioning.
- Corrosion inhibition. Hinders corrosive phenomena by facilitating the formation of a protective film on parts in contact with water.

OPEN BYPASS MODE

- Input flow
- Passage through the filter cartridge
- Passage through the polyphosphate doser
- Treated water passage and subsequent entry into the system
- Flow entry into the system

CLOSED BYPASS MODE

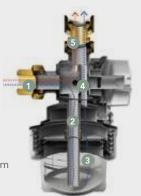
Closed filtering chamber

Flow entry into the system

Input flow

Open by-pass

Fights corrosion







Scaling is the result of calcium and magnesium deposits on pipe walls, exchange surfaces and control and regulating parts. The amount of deposit depends on:

- the temperature of the water;
- water hardness;
- the volume of water used.

The sodium and potassium **polyphosphates** inside the container combine with calcium and magnesium ions to form a chemical compound similar to limescale but which cannot adhere to pipe surfaces. The precipitation of calcium and magnesium and the consequent formation of lime deposits is prevented.

In addition, polyphosphates are deposited on the surface of the pipes, forming a **protective film to protect them from fouling** and remove already deposited limescale.

INSTALLATION

The polyphosphate doser is to be installed on the domestic cold water line at the boiler inlet. It can be installed vertically or horizontally.

Do not install the DP1 in conditions of direct exposure to the weather, and installation in environments where the temperature may fall below 5°C (frost danger) is not recommended.







VERTICAL INSTALLATION

HORIZONTAL INSTALLATION

Supercompact	
High efficiency	
Eliminates impurities	

Increases the lifespan of	the boiler

Maintains optimum system efficiency

Quick and easy to install

Limited overall dimensions







Protective 100 Protection for heating and cooling systems.

Protective 100 is a neutral inhibitor of corrosion, limescale formation and even microbial growth and is suitable for both heating and air conditioning circuits, including those containing

- · Anticorrosive, anti-scaling and antifouling
- Inhibits corrosion, lime scale, microbial and algal growth
- Prevents the formation of hydrogen gas
- Effectively protects new and old systems
- · Compatible with all metals, including aluminium
- Neutral, non-corrosive product that is easy to handle
- Insensitive to overdoses
- · Helps prevent noise in the boiler
- · Long-lasting product

Code	Pack	Outer	Cat.
3917.00.02	1	9	20.04

The dose of 1 litre of Protective 100 can treat:

- up to 200 l hydraulic content; - up to 200 m² of radiant system;

- up to 20 radiators.

For best results, it is recommended to rinse the system well before applying the protective agent.

Avoid contact with eyes and skin. Use goggles and rubber

The solution of PROTECTIVE 100 in water at the recommended dosages complies with Italian Legislative Decree 152/06 and is discharged into the public sewage system. The product is compatible with most plastics.



Series 3918.A

Wash Clean 400 Cleaner for heating and cooling systems.

Wash Clean 400 is a neutral product for cleaning new and existing heating and air conditioning systems. It cleans systems from limescale, microbial and algal growth, sludge, oily substances, grease and iron deposits. The action of Wash Clean 400 restores the full efficiency of systems, boilers and heat pumps over

- · Compatible with all metals, including aluminium
- Neutral, non-corrosive product that is easy to handle
- · Insensitive to overdoses
- Restores normal system performance

Code	Pack	Outer	Cat.
3918.00.02	1	9	20.04

The dose of 1 litre of Wash Clean 400 can treat:

- up to 200 l hydraulic content;
- up to 200 m² of radiant system;
- up to 20 radiators.

It is possible to leave the system running during the cleaning action of Wash Clean 400.

RECOMMENDED ACTION TIME: 2 weeks of continuous circulation in hot and 4 weeks in cold.



Avoid contact with eyes and skin. Use goggles and rubber gloves. The solution of WASH CLEAN 400 in water at the recommended dosages complies with Italian Legislative Decree 152/06 and is discharged into the public sewage system. The product is compatible with most plastics.



Series 3918.B

Wash Clean 400H Fast universal cleaner.

Wash Clean 400 is a fast sequestering neutral product for cleaning new or existing heating and air conditioning systems.

 $Product\,with\,a\,broad\,spectrum\,of\,action; removes$ $deposits of lime scale, iron \, oxides, sludge \, and \,$ bacterial filaments.

The action of Wash Clean 400H restores the full $efficiency of \, systems, boilers \, and \, heat \, pumps.$

- Suitable for boilers and heat pumps, both in heating and air conditioning
- · Product for use in multi-material systems containing aluminium

Code	Pack	Outer	Cat.
3918.00.12	1	9	20.04

The dose of 1 litre of Wash Clean 400H can treat:

- $-up to 100 \, l \, hydraulic \, content;$
- up to 100 m² of radiant system;
- up to 10 radiators.



It is possible to leave the system running during the cleaning action of Wash Clean 400H.

RECOMMENDED ACTION TIME: maximum 3 days or maximum one day if aluminium is present.

To be used as an alternative to Wash Clean 400 in the case of particularly compromised systems and/or clogged terminals, or when it is necessary to reduce the cleaning time.



Avoid contact with eyes and skin. Use goggles and rubber gloves. The solution of WASH CLEAN 400H in water at the recommended dosages complies with Italian Legislative Decree 152/06 and is discharged into the public sewage system. The product is compatible with most plastics.





Eco PumpLoading pump.

Portable, manually pressurised container for loading chemicals into closed circuit air conditioning systems.

Complete with safety valve.

- Maximum capacity: 3 litres
- Maximum pressure: 3 bar
- Loading hose: Ø8 mm
- Supplied:
- adjustable shoulder strap
- dispensing gun with Ø 8 mm quick coupling
- 1.5 metres of Ø 8x6 mm rilsan pipe
- system connection fittings, Ø 8 mm quick coupling with male swivel connection with o-ring seal M 1/8", M 1/4" and M 3/4".

Code	Pack	Outer	Cat.
3919.00.02	1	48	20.04

Suitable for loading conditioning chemicals; the supplied fittings allow injection through all RBM physical and magnetic treatment devices.



Environmentally sustainable and cost-effective, it avoids the need for expensive spray cans, reduces waste management, is reusable, injects the right amount of product and overcomes the capacity limits of spray cans.



Accessory for MG1 filter.

Ball valve for injecting the conditioning agent through the magnetic filter under the boiler.

Brass body. Rotary F 3/4" filter connection. Connection to RBM Eco Pump F 1/4".

Code	Pack	Outer	Cat.
3907.02.00	1	60	20.04



Can be combined with the swivel quick-coupling fitting supplied with the RBM Eco Pump.



Series 3907.B

Accessory for MG2 filter.

Ball valve for injecting the conditioning agent through the magnetic filter under the boiler.

Brass body. MF 1/4" couplings

Code	Pack	Outer	Cat.
3907.02.10	1	150	20.04



Can be combined with the swivel quick-coupling fitting supplied with the RBM Eco Pump.





Spray Protect 1 Protection for heating and cooling systems

Spray Protect 1 is a professional multifunctional neutral product for the protection of new or existing heating and cooling systems. Inhibits corrosion, lime scale, microbial and algal growth.

Prevents the formation of hydrogen gas.

- · Compatible with all metals, including aluminium.
- · Neutral, non-corrosive product that is easy to handle
- · Insensitive to overdoses.
- · Long-lasting product.

Code	Pack	Cat.
4027.00.02	4	20.04

per 150 litres of system water. Spray Protect 1 can be introduced directly into the full system either in a radiator through the vent valve, through the under-boiler dirt separator filter or anywhere where proper product dilution can take place. Avoid low points in the system.

The dosage of Spray Protect 1 for optimal protection is 400 ml $\,$



Spray Protect 1 is intended for professional use in the treatment of heating and cooling systems only. The chemical treatment of domestic systems is regulated by UNI-CTI 8065/19.



Serie 4028

Spray Clean 4 Cleaner for heating and cooling systems

 $Spray\,Clean\,4\,is\,a\,neutral\,product\,for\,cleaning\,new$ and existing heating and air conditioning systems. The Spray Clean 4 action restores full efficiency to the boiler and the devices within the circuits.

- · Compatibility with METALS and ALLOYS at recommended dosages: steel, black iron, galvanised iron, stainless steel, copper, bronze, brass, aluminium.
- Compatibility with PLASTICS and RUBBERS at recommended dosages: generally compatible with most plastics.
- Compatible with propylene and ethylene glycols.



The dosage of Spray Clean 4 for optimal cleaning is 400 litre per 150 litres of system water (0.26%).



Spray Clean 4 can be introduced directly into the full system $either in a \, radiator \, through \, the \, vent \, valve, through \, the$ under-boiler dirt separator filter or anywhere where proper product dilution can take place. Avoid low points in the system.



 $Spray\,Clean\,4\,is\,intended\,for\,professional\,use\,in\,the\,treatment$ of heating and cooling systems only. The chemical treatment of domestic systems is regulated by UNI-CTI 8065/19.



Series 304.B

Test kit to control water hardness.

Easy-to-use supplied with case.

Code	Pack	Outer	Cat.
304.00.02	1	1	20.04





From the combination of the many years of experience of those who manufacture equipment and components and those who take care of their operation and maintenance comes the answer to caring for and reducing the risk of degeneration of air conditioning systems from damage caused by limescale deposits, sludge and bacterial filaments.

The maintenance and management experience gained on plants and heat generators has enabled the ${\bf continuous\,improvement}$ and adaptation of the formulations of the chemicals selected here, even against the risk of imperfect dosing or prolonged stationing within the circuits.



Protective 100 Series 3917

Neutral protective

1 litre of Protective 100 can treat:

- up to 200 litres of hydraulic content
- up to 200 m² of radiant system
 up to 20 radiators

Pack: 1 Kg



Wash Clean 400 Series 3918.A

Neutral universal cleaner

1 litre of Wash Clean 400 can treat:

- up to 200 litres of hydraulic content
- up to $200\,m^2$ of radiant system
- up to 20 radiators

Pack: 1 Kg



Wash Clean 400H Series 3918.B

Fast universal cleaner

1 litre of Wash Clean 400H can treat:

- up to 100 litres of hydraulic content
- up to 100 m² of radiant system up to 10 radiators

Pack: 1 Kg



Spray protect 1 Series 4027

Multi-purpose protective

The dosage of Spray protect 1 for optimal protection is 400 ml per 150 litres of system water.

Pack: 400 ml



Spray clean 4 Series 4028

Multi-purpose cleaner

The dosage of the cleaner Spray clean 4 for optimal cleaning is 400 ml per 150 litres of system water.

Pack: 400 ml



Protect Dosing test kit

Outer Cat. Code Pack 4066.00.02 20.04

 ${\sf Rapid}\, colorimetric\, test\, to\, verify\, the\, correct$ $presence \, of \, Spray \, Protect \, 1 \, or \, Protective \, 100 \, liquid$ in the water of the air conditioning circuit. $\label{eq:Suitable} Suitable for the correct compilation of the plant$ $logbook\,when\,the\,plant\,is\,started\,up\,for\,the\,first$ $time \, and \, for \, subsequent \, periodic \, control \, checks.$ $Complete with box, instruction sheet, 20\,ml\,tube, 2\,$ 15 ml bottles of reagent product and one 25 ml bottle of control liquid. One pack allows about 25 tests to be performed.

- The pack includes:
- box
- instruction sheet
- 20 ml tube
- No. 2 x 15 ml bottles of reagent product
 No. 1 25 ml bottle of control liquid



02. ENERGY EFFICIENCY

21. VALVES FOR RADIATOR AND TERMINAL CONTROL

21.01 VALVES FOR RADIATOR AND TERMINAL CONTROL

204

Thermostatic controls

 ${\sf Electronic\,programmable\,thermostats}$

Wireless programmable thermostats

Valves with thermostatic option

PICV valves with thermostatic option

Accessories

Manual valves

Lockshield regulating valves





The first thermostatic head of Design.

TL1 is an innovative thermostatic head for radiators and decorative radiators designed by Piero Lissoni. Defined by an ergonomic, refined and gentle shape, it is an element that combines aesthetics and functionality.

The valve has been cleansed of any superstructure to enhance the purity of the cylinder: the essential becomes invisible. Experience the perfect balance of style and functionality.

Plus.

- $\cdot \, \mathsf{Exclusive} \, \mathsf{design} \, \mathsf{by} \, \mathsf{Piero} \, \mathsf{Lissoni}$
- \cdot Comfort
- · Easy installation
- $\cdot \, \mathsf{High} \, \mathsf{energy} \, \mathsf{efficiency} \,$
- $\cdot \, \text{Invisible adjustment} \\$
- $\cdot \, \mathsf{Eco}\text{-}\mathsf{sustainability}$
- \cdot 100% plastic free packaging

Certified EN 215

Production range



THERMOSTATIC

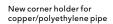


VALVES WITH THER-MOSTATIC OPTION





TWO TYPES OF REGLATION LOCKSHIELDS



Corner holder for copper/



Piero Lissoni is an architect, designer and art director and is recognised as one of the masters of contemporary design. For more than thirty years, he has been developing international projects in architecture, interior, product design and graphic design. Lissoni has received numerous awards, including the Good Design Award, the Red Dot Award and the ADI Compasso d'Oro.





205

Series 3937

TL1 by Piero Lissoni Thermostatic head. Internal sensitive element with liquid expansion.

 $Prearranged for temperature \ limitation \ and$ anti-tampering blockage.

- Max storage temperature 50 °C
- Anti-freeze triggering (*) 7 °C
- Setting field (1 ÷ 5) +10 ÷ +30 °C
- Hysteresis 0.3 °C
- Max differential pressure (in flow direction) 1 bar
- Max differential pressure (in return direction) 0.6 bar
- Thermostatic ethyl-acetate bulb liquid

Certifications:



Code	Model	Pack	Outer	Cat.
3937.00.00*	TL1	10	100	21.01

^{*}Licensed use of trademark no. 43

Series 4196

Pair of temperature limiting inserts for TL1 thermostatic head.

For example to block the knob at position 3 (T=20 $\,$ °C), insert the specific inserts in the two slots close to number 20 on the fixed knob.

Code	Pack	Outer	Cat.
4196.00.00	1	10	21.01



Pair of inserts already included in the supply of the TL1 $\,$ thermostatic head. $Inserts\,compatible\,with\,TL1\,thermostatic\,head.$

To limit the adjustment to a greater value, move the inserts to the desired positions.







Series 590.A

Thermostatic control for thermostatically-controlled valves. Internal sensitive element with liquid expansion.

 $Prearranged for temperature \ limitation \ and$ anti-tampering blockage.

- Max storage temperature 50 °C
- Anti-freeze triggering (*) 7 °C
- Setting field (1 ÷ 5) +10 ÷ +30 °C
- Hysteresis 0.3 °C
- Max differential pressure (head mounted on valve) 1 Bar
- · Thermostatic ethyl-acetate bulb liquid
- Distance sensor cable length 2m (series TL 20)

Certifications:



Features:



Thermostatic head with liquid expansion sensor

Code	Model	Pack	Outer	Cat.
590.00.00*	TL10	10	100	21.01
720.00.30*	TL30	10	100	21.01
2633.00.00*	TL70	10	100	21.01
3087.00.00**	TL10W	1	50	21.01

^{*}Licensed use of trademark no. 43

Thermostatic head with distance sensor

Code	Model	Pack	Outer	Cat.
590.00.10*	TL20	1	25	21.01
2633.00.00*	TL70	10	100	21.01

^{*}Licensed use of trademark nr. 43



Liquid expansion sensor (TL10 - TL30 - TL70 - TL10W). High energy efficiency. Approved in Class I.



^{**}Reduced W value

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Series 209

$\label{lem:perature} \textbf{Pair of temperature limiting inserts for RBM thermostatic head.}$

For example to block the knob at position 3 (T=20 $^{\circ}$ C), insert the specific inserts in the two slots close to number 20 on the fixed knob.

To limit the adjustment to a wider value, move the inserts to the desired positions.

Code	Pack	Outer	Cat.
209.00.00	1	50	21.01

Pair of inserts already included in the supply of the RBM thermostatic head.

Inserts compatible with RBM thermostatic head model TL10-TL30-TL10W-TL20.



Series 2274

Vandal proof and anti-tampering knob for thermostatic heads TL10, TL30, TL70, TL10W, TL20 (Figure 1).

Specific tool for mounting vandal proof knob (Figure 2).

Code	Figure	Pack	Outer	Cat.
227.40.05*	1+2	6	6	21.01
227.30.05**	2	1	1	21.01

^{*}A 6-knob package includes a mounting tool code 2273.005

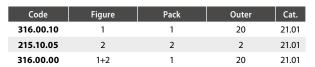




Series 316

Vandal proof clamp for RBM thermostatic heads.

The RBM thermostatic heads can be equipped with a vandal proof clamp allowing it to be removed by just using the specific tool (code 2151.005).







^{**}Tool supplied together with 12 fixing screws

207



Series 2835

Thermostatic control for thermostatically-controlled valves. The remote control makes programming easier in any installation situation.

- Anti freezing protection: 8 °C
- Calibration field: $(1 \div 5)$ 12 ÷ +28 °C
- Remote control cable length: 2m

Code	Pack	Outer	Cat.
2835.00.02	1	1	21.01

Liquid expansion sensor. Remote command It makes installation procedures easier.

P
-





Series 3400

Digital electronic wireless chronothermostatic control with weekly $programme, for valves \, with \, thermostatic \,$ option.

 $Designed \ to \ receive \ the \ wireless \ signal \ from \ the$ $RBM\, range\, of\, central\, heating\, timers.$

- Power supply: 21,5V AA type batteries
- Autonomy: 2 years (low battery signal)
- Functioning: Automatic with two temperature levels (comfort and economy) or manual by means of the select dial
- $\bullet \ \, \mathsf{Daily}\,\mathsf{switchings:} 4\,\mathsf{in}\,\mathsf{comfort}\,\mathsf{mode}\,\mathsf{and}\,4\,\mathsf{in}$ economy mode
- Functioning temperature: 0 ÷ +50 °C
 Anti-freeze protection temperature: 6 °C
- IP30 degree of protection
- Size (lxhxp): 52x83x65 mm

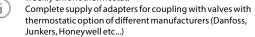
Certifications:





Code	Model	Pack	Outer	Cat.
3400.00.02	wireless	1	1	21.01

Provide for combination with the 3406 or 3405 series wireless $weekly\,chronothermostat.$





Flush-mounted remote actuator with wireless receiver, for thermostats and chronothermostats.

- Power supply 230Vac (-15% \div +10%) 50/60 Hz
- $\bullet \ \ Output: bistable \, relay \, with \, breaking \, capacity \, of \,$ 16(8)A/250Vac
- $\bullet \ \ Maximum \ distance from the transmitter: 30$ $metres\,in\,a\,residential\,home\,environment$
- Antenna tuned to 433.92 MHz
- Operating temperature: 0 40° C
- Storage temperature: -10°C ÷ +70°C
- Container: suitable for flush-mounted box (takes up the space of a module)
- · Protection rating: IP20

Certifications:



Features:



Code	Model	Pack	Outer	Cat.
3401.00.12	RX.16A	1	1	21.01

To be combined with 3405 and 3406 series RBM chronothermostats.

Series 3404.A

Remote actuator for chronothermostats, with wireless receiver.

- Outputs 6 relay with 5A/250V AC normally open $contact for zone \, valve \, actuation \,$
- Outputs 1 relay with 5A/250V AC normally open $contact for \, system \, circulator \, actuation$
- 230V AC 50/60Hz power supply
- connection of an external antenna (included)
- Operating frequency: 433.92 Mhz
- DIN bar installation
- Dimensions mm (lxhxd) 72x87x65

Features:



Code	Model	Pack	Outer	Cat.
3404.00.02	RX7	1	1	21.01

Actuator provided with antenna. To be combined with 3405 and 3406 series RBM $\,$ chronothermostats.



Series 3463

Antenna for remote actuator.

- Cable length: 4.5 m
- Frequency range: 433.92 ±10 MHz
- Input impedance: 50 ohm

Code	Pack	Outer	Cat.
3463.00.02	1	1	21.01





Wireless digital weekly chronothermostat.

Combined with RBM remote actuators, it controls the ambient temperature. 3 operating modes: automatic (on 3 temperature values), manual (with manual temperature), off (with anti-freeze temperature). Programming: 7 programs for winter operation (editable) and 7 programs for summer operation (editable).

- Power supply: 1 1.5V AA battery (included)
- Autonomy: 2 years
- Charge backup: 1 minute (to change batteries)
- Differential: settable between 0.1 $^{\circ}\text{C}$ and 1 $^{\circ}\text{C}$
- Temperature adjustment range: +2°C ÷ +35°
- Precision: ±0.5°C
- Operating temperature 0 \div +50°C
- Size (lxhxd): 132x95x26 mm

Certifications:



Features:







Installation on wall or box 503



Series 3405

Wireless digital weekly chronothermostat with built-in GSM module.

Combined with RBM remote actuators, it controls the ambient temperature. The wireless module is used to control, regardless of the temperature reading, up to 7 other remote actuators connected to the same number of electrical loads. With the built-in GSM module, the central heating timer can be remotely controlled by sending an SMS from your smartphone or using a specifically developed APP.

3 operating modes: automatic (on 3 temperature values), manual (with manual temperature), off (with anti-freeze temperature). Programming: 7 programs for winter operation (editable) and 7 programs for summer operation (editable).

- Power supply: 230V ac 50/60 Hz
- 11.5V AA backup battery (included)
- Display: LCD without backlighting
- Programming: weekly
- Programming resolution: 1 hour
- Measurement resolution: 0.1 $^{\circ}\text{C}$
- Temperature adjustment range: +2°C ÷ +50°
- · Colour: White
- Size (lxhxd): 132x95x36 mm

Certifications:



Features



Code	Model	Pack	Outer	Cat.
3405.00.00	wireless GSM	1	1	21.01

Installation on wall or box 503.
GSM board not included in supply



RBM THERMOSTATIC VALVE WITH LOW THERMAL INERTIA

The RBM thermostatic valves and the thermostatic heads are certified in accordance with European Standard UNI EN 215 (ED. 2007) "Thermostatic valves for radiators. Requirements and test methods".

The Standard conformity certifications are guaranteed by the certificates granting use of trademark no. 43, issued by the certifying body.

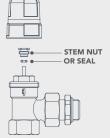






Valvola termostatica

- 1 Liquid expansion thermostatic sensor Higher Sensitivity.
- Pole with vulcanized elastomer disc Elastomer directly vulcanized on the pole disc:
 - Avoids noise
 - Disc does not stick on the valve seat.
- 3 RFS radiator sealing made in PTFE
 Water sealing vs leakage is assured for a long lasting time.
- "Heavy" Lockshield valve Micrometric setting! Perfect for balancing. KVS values (min. 9 values) can be set through the hand wheel on the top.





Possibility of maintenance service while system is in operation.



Termostatic Valve RBM High Energy Efficiency: Class I approved!





The valves' certification in accordance with Standard UNI EN 215, is the RBM thermostatic valve and head combination.



Angle valve with thermostatic option for iron pipe, complying with standard UNI-EN 215.

Nickel brass body. Double seal obturator. Elastomer seals. Shockproof ABS handwheel. Threaded angled connection FUNI-EN-ISO 228 for

iron pipe. Connection to terminal through threaded MRFS

(UNI-EN-ISO 228) with PTFE pre-gasket ogive (only for 3/8" and 1/2" diameters).

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
31.03.00	G 3/8"	2,45	10	100	21.01
31.04.00	G 1/2"	2,45	10	100	21.01
31.05.00	G 3/4"	-	10	60	21.01

Licensed use of trademark no. 43 (3/8" - 1/2")

VALVES WITH THERMOSTATIC OPTION

Use only series 9 lockshield valve with 3/4" and 1" valves (see page 232).



Series 32

Straight valve with thermostatic option for iron pipe, complying with standard UNI-EN 215.

Nickel brass body. Double seal obturator. Elastomer seals.

Shockproof ABS handwheel. Threaded straight connection F UNI-EN-ISO 228

for iron pipe.

Connection to terminal through threaded MRFS (UNI-EN-ISO 228) with PTFE pre-gasket ogive (only for 3/8" and 1/2" diameters).

- Max operating temperature 110 $^{\circ}$ C
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
32.03.00*	G 3/8"	1,60	10	100	21.01
32.04.00*	G 1/2"	1,60	10	100	21.01
32.05.00	G 3/4"	-	10	50	21.01
2641.06.90	G 1"	-	5	20	21.01

*with RFS

Licensed use of trademark no. 43 (3/8" - 1/2")



Use only series 10 lockshield valve with 3/4" and 1" valves (see page 232).



Angle valve with thermostatic option forcopper or polyethylene pipe, complying with standard UNI-EN 215.

Nickel brass body. Double seal obturator. Elastomer seals. Shockproof ABS handwheel. RBM standard threaded angled M connection, for copper, polyethylene and multilayer pipe fittings. Connection to terminal through threaded M RFS

(UNI-EN-ISO 228) with PTFE pre-gasket ogive.

- Max operating temperature 110 $^{\circ}$ C
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
48.03.00*	G 3/8"	2,45	10	100	21.01
48.04.00*	G 1/2"	2,45	10	100	21.01

*with RFS

Licensed use of trademark no. 43



Use fittings with RBM Standard thread for pipe connection.





Nickel brass body.

Thermostatic straight valve for copper or polyethylene pipe, complying with standard UNI-EN 215.

Double seal obturator. Elastomer seals. Shockproof ABS handwheel. $RBM\, standard\, threaded\, straight\, M\, connection\, for$ $copper, polyethylene \, and \, multilayer \, pipe \, fittings.$ $Connection \,to\,terminal\,through\,threaded\,M\,RFS$ (UNI-EN-ISO 228) with PTFE pre-gasket ogive.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
49.03.00*	G 3/8"	1,60	10	100	21.01
49.04.00*	G 1/2"	1,60	10	100	21.01

*with RFS

Licensed use of trademark no. 43



 $Use fittings with RBM\,Standard\,thread\,for\,pipe\,connection.$



Series 179

Inverse angle valve with thermostatic option for iron pipe.

Nickel brass body. Double seal obturator. Elastomer seals. Shockproof ABS handwheel. $Threaded\, angled\, connection\, F\, UNI-EN-ISO\, 228\, for$ iron pipe. $Connection \,to\,terminal\,through\,threaded\,M\,RFS$

(UNI-EN-ISO 228) with PTFE pre-gasket ogive.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
179.03.00*	G 3/8"	0,99	10	100	21.01
179.04.00*	G 1/2"	0,99	10	100	21.01

*with RFS

Series 180

Inverse angle valve with thermostatic option for copper or polyethylene pipe

Nickel brass body. Double seal obturator. Elastomer seals.

Shockproof ABS handwheel. RBM standard threaded straight M connection for

copper, polyethylene and multilayer pipe fittings. Connection to terminal through threaded M RFS (UNI-EN-ISO 228) with PTFE pre-gasket ogive.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
180.03.00*	G 3/8"	0,99	10	100	21.01
180.04.00*	G 1/2"	0,99	10	100	21.01

*with RFS



 $Use fittings \, with \, RBM \, Standard \, thread \, for \, pipe \, connection.$





Angle valve with thermostatic option for iron tube with reversible connections and orthogonal command.

Nickel brass body. Double seal obturator. Elastomer seals. Shockproof ABS handwheel. $Straight\,threaded\,connections\,F\,UNI\text{-}EN\text{-}ISO\,228$ for iron pipe, reversible. $Connection \,to\,terminal\,through\,threaded\,M\,RFS$

(UNI-EN-ISO 228) with PTFE pre-gasket ogive.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
395.03.00*	G 3/8"	1,55	10	100	21.01
395.04.00*	G 1/2"	1,60	10	100	21.01



 $System\, side\, reversible\, connections\, with\, closing\, cap\, of\, unused$ way.



To turn the valves for iron pipes into valves for copper or $polyethylene\ pipes, provide\ for\ the\ adapter\ fitting\ code$ 83.0X.00 (see page 102).



Series 2078

Jet-Line Series: thermostatic kit with thermostatic angle valve for iron pipe, compliant with standard UNI-EN 215 and

angle lockshield valve for iron pipe. Nickel brass body. $Double\,seal\,obturator.$

Elastomer seals. Shockproof ABS handwheel.

 $Liquid\,expansion\,thermostatic\,command\,TL30$ with built-in sensor.

Threaded angled connection FUNI-EN-ISO 228 for iron pipe.

Connection to threaded terminal M UNI-EN-ISO 228.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar



Certifications:



Code	Measure	Pack	Outer	Cat.
2078.03.00	3/8"	10	100	21.01
2078.04.00	1/2"	10	100	21.01

*Licensed use of trademark no. 43

Supplied with:

valve with thermostatic option; liquid expansion thermostatic head;

lockshield valve.

Kit components supplied in separate packages.



Series 2079

Jet-Line Series: thermostatic kit with thermostatic straight valve for iron pipe, compliant with standard UNI-EN 215 and straight lockshield valve for iron pipe.

Nickel brass body. Double seal obturator. Elastomer seals.

Shockproof ABS handwheel.

Liquid expansion thermostatic command TL30 with built-in sensor. Threaded straight connection F UNI-EN-ISO 228

for iron pipe. Connection to threaded terminal M UNI-EN-ISO

- Max operating temperature 110 $^{\circ}$ C
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Pack	Outer	Cat.
2079.03.00	3/8"	10	100	21.01
2079.04.00	1/2"	10	100	21.01

 $* \textit{Licensed use of trademark no.} \, 43$

Supplied with:

valve with thermostatic option;

liquid expansion thermostatic head;

lockshield valve.

 $Kit \, components \, supplied \, in \, separate \, packages.$







Jet-Line Series: thermostatic option kit with thermostatic option angle valve for iron pipe, compliant with standard UNI-EN 215 and angle lockshield valve for iron pipe.

Nickel brass body. Double seal obturator. Elastomer seals.

Shockproof ABS handwheel.

Threaded angled connection FUNI-EN-ISO 228 for iron pipe.

Connection to threaded terminal M UNI-EN-ISO

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Pack	Outer	Cat.
2080.03.00	3/8"	10	100	21.01
2080.04.00	1/2"	10	100	21.01

*Licensed use of trademark no. 43

Supplied with:

valve with thermostatic option; lockshield valve.

 $Kit\,components\,supplied\,in\,separate\,packages.$





Series 2081

Jet-Line Series: thermostatic option kit with thermostatic option straight valve for iron pipe, compliant with standard UNI-EN 215 and straight lockshield valve for iron pipe.

Nickel brass body. Double seal obturator. Elastomer seals.

Shockproof ABS handwheel.

Threaded straight connection F UNI-EN-ISO 228 for iron pipe.

Connection to threaded terminal M UNI-EN-ISO 228.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Pack	Outer	Cat.
2081.03.00	3/8"	10	100	21.01
2081.04.00	1/2"	10	100	21.01

*Licensed use of trademark no. 43

Supplied with:

valve with thermostatic option;

lockshield valve.

Kit components supplied in separate packages.



Series 1342

Jet-Line Series: thermostatic kit with thermostatic angle valve for copper or polyethylene pipe, compliant with standard UNI-EN 215 and angle lockshield valve for copper or polyethylene pipe.

Nickel brass body. Double seal obturator. Shockproof ABS handwheel. Elastomer seals.

Liquid expansion thermostatic command TL30 with built-in sensor.

Threaded angled M standard RBM connection for copper, polyethylene, multilayer pipe fittings. Connection to threaded terminal M UNI-EN-ISO

- Max operating temperature 110 °C
- · Max operating pressure 10 Bar

Certifications:



Code	Measure	Pack	Outer	Cat.
1342.03.00	RBM 3/8"	10	100	21.01
1342.04.00	RBM 1/2"	10	100	21.01

*Licensed use of trademark no. 43 System side standard RBM thread W 24.5x19F

Supplied with:

valve with thermostatic option;

liquid expansion thermostatic head;

lockshield valve.

 $Use fittings with RBM\,Standard\,thread\,for\,pipe\,connection.$

Kit components supplied in separate packages.





Nickel brass body.

Jet-Line Series: thermostatic kit with thermostatic straight valve for copper or polyethylene pipe, compliant with standard UNI-EN 215 and straight lockshield valve for copper or polyethylene pipe.

Double seal obturator. Shockproof ABS handwheel. Elastomer seals. Liquid expansion thermostatic command TL30 with built-in sensor.

Threaded straight M standard RBM connection for copper, polyethylene, multi-layer pipe fittings. Connection to threaded terminal M UNI-EN-ISO 228

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Pack	Outer	Cat.
1343.03.00	RBM 3/8"	10	100	21.01
1343.04.00	RBM 1/2"	10	100	21.01

*Licensed use of trademark no. 43 System side standard RBM thread W 24.5x19F

Supplied with:

valve with thermostatic option; liquid expansion thermostatic head;

lockshield valve.

Use fittings with RBM Standard thread for pipe connection.

Kit components supplied in separate packages.



Series 1344

Nickel brass body.

Double seal obturator.

Jet-Line Series: thermostatic option kit with thermostatic option angle valve for copper or polyethylene pipe, compliant with standard UNI-EN 215 and angle lockshield valve for copper or polyethylene pipe.

Shockproof ABS handwheel. Elastomer seals. Threaded angled M standard RBM connection for copper, polyethylene, multilayer pipe fittings. Connection to threaded terminal M UNI-EN-ISO

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Pack	Outer	Cat.
1344.03.00	RBM 3/8"	10	100	21.01
1344.04.00	RBM 1/2"	10	100	21.01

*Licensed use of trademark no. 43 System side standard RBM thread W 24.5x19F



valve with thermostatic option; lockshield valve.

Use fittings with RBM Standard thread for pipe connection. Kit components supplied in separate packages.







Series 1345

Jet-Line Series: thermostatic option kit with thermostatic option straight valve for copper or polyethylene pipe, compliant with standard UNI-EN 215 and straight lockshield valve for copper or polyethylene pipe.

Nickel brass body. Double seal obturator. Shockproof ABS handwheel.

Elastomer seals. RBM standard threaded straight M connection for copper, polyethylene and multilayer pipe fittings. Connection to threaded terminal M UNI-EN-ISO

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Pack	Outer	Cat.
1345.03.00	RBM 3/8"	10	100	21.01
1345.04.00	RBM 1/2"	10	100	21.01

*Licensed use of trademark no. 43 System side standard RBM thread W 24.5x19F

Supplied with:

valve with thermostatic option;

lockshield valve.

Use fittings with RBM Standard thread for pipe connection. Kit components supplied in separate packages.







Angle radiator valve for iron pipe with thermostatic option and pre-setting.

Nickel brass body. Double seal obturator. Elastomer seals. Shockproof ABS handwheel.

Threaded angled connection F UNI-EN-ISO 228 for iron pipe.

Connection to threaded terminal M UNI-EN-ISO 228.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Pack	Outer	Cat.
2640.03.90	G 3/8"	10	100	21.01
2640.04.90	G 1/2"	10	100	21.01
2640.05.90	G 3/4"	10	60	21.01
2640.06.90	G 1"	5	20	21.01

Licensed use of trademark no. 43 (3/8" - 1/2")

Valve with thermostatic option and pre-setting. Use spanner code 2878.00.00 (see page 132) to adjust Kvs values.

Use only series 9 lockshield valve with 3/4" and 1" valves (see page 232).





Series 2641

Straight radiator valve for iron pipe with thermostatic option and pre-setting.

Nickel brass body.
Double seal obturator.
Elastomer seals.
Shockproof ABS handwheel.
Threaded straight connection F UNI-EN-ISO 228
for iron pipe.
Connection to threaded terminal M UNI-EN-ISO

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Certifications:



228.

Code	Measure	Pack	Outer	Cat.
2641.03.90	G 3/8"	10	100	21.01
2641.04.90	G 1/2"	10	100	21.01
2641.05.90	G 3/4"	10	50	21.01
2641.06.90	G 1"	5	20	21.01

Licensed use of trademark no. 43 (3/8" - 1/2")

Valve with thermostatic option and pre-setting. Use spanner code 2878.00.00 (see page 132) to adjust Kvs values.

Use only series 10 lockshield valve with 3/4" and 1" valves (see page 232).





Series 2642

Angle radiator valve for copper and polyethylene pipe with thermostatic option and pre-setting.

Nickel brass body.
Double seal obturator.
Elastomer seals.
Shockproof ABS handwheel.
Threaded angled M standard RBM connection for copper, polyethylene, multilayer pipe fittings.
Connection to threaded terminal M UNI-EN-ISO 228.

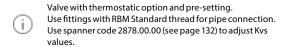
- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Pack	Outer	Cat.
2642.03.90	G 3/8"	10	100	21.01
2642.04.90	G 1/2"	10	100	21.01

Licensed use of trademark no. 43









Straight radiator valve for copper and polyethylene pipe with thermostatic option and pre-setting.

Nickel brass body. Double seal obturator. Elastomer seals. Shockproof ABS handwheel. $Threaded\,straight\,M\,standard\,RBM\,connection\,for$ copper, polyethylene, multi-layer pipe fittings.Connection to threaded terminal M UNI-EN-ISO

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Pack	Outer	Cat.
2643.03.90	G 3/8"	10	100	21.01
2643.04.90	G 1/2"	10	100	21.01

Licensed use of trademark no. 43

Valve with thermostatic option and pre-setting. $Use fittings with RBM \, Standard \, thread \, for \, pipe \, connection.$ Use spanner code 2878.00.00 (see page 132) to adjust Kvs





Series 2720

Radiator reversible valve for iron pipe with thermostatic option and presetting.

Nickel brass body. $Double\,seal\,obturator.$ Elastomer seals. Shockproof ABS handwheel. Straight threaded connections F UNI-EN-ISO 228 for iron pipe, reversible. Connection to threaded terminal M UNI-EN-ISO 228.

- Max operating temperature 110 °C
- · Max operating pressure 10 Bar

Code	Measure	Pack	Outer	Cat.
2720.03.90	G 3/8"	10	10	21.01
2720.04.90	G 1/2"	10	10	21.01

Valve with thermostatic option and pre-setting. System side reversible connections with closing cap of unused way.

Use spanner code 2878.00.00 (see page 132) to adjust Kvs values. $To turn the \, valves \, for \, iron \, pipes \, into \, valves \, for \, copper \, or \,$

 $polyethylene\,pipes, provide\,for\,the\,adapter\,fitting\,code$ 83.0X.00 (see page 102)



Series 1028

"Termoflux" 4-way thermostatically controlled valve for single pipe circuits.

Nickel brass body. Built-in micrometric lockshield valve. Elastomer seals.

Shockproof ABS cap and handwheel. Polymer probe.

In-line connections, centre distance 37 mm M $\,$ $standard\,RBM\,thread\,for\,copper, polyethylene\,and$ multilayer pipe fittings.

Threaded radiator connection M UNI-EN-ISO 228.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar
- Probe length 295 mm
- 1/2" probe outside diameter 10 mm
- 3/4" probe outside diameter 13 mm

Code	Measure	Model	Pack	Outer	Cat.
1028.04.00	G 1/2"	Termoflux	4	16	21.01
1028.05.00	G 3/4"	Termoflux	4	16	21.01



 $Use fittings \, with \, RBM \, Standard \, thread \, for \, pipe \, connection.$



THERMOSTATIC VALVE WITH PRE-SETTING



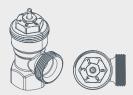
Thanks to a special internal device they allow the pre-setting of the head loss quickly and effectively.

The use in combination with thermostatic heads makes it possible to keep the ambient temperature constant, thus guaranteeing an effective energy saving.









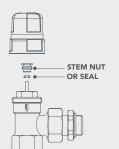
- Pole with vulcanized elastomer disc
 Elastomer directly vulcanized on the pole disc:
 Avoids noise
 - Disc does not stick on the valve seat





- 3 Adjustment tool
- 4 Cap unit for pre-setting

LIQUID EXPANSION THERMOSTATIC SENSOR. HIGHER SENSITIVITY!





Possibility of maintenance service while system is in operation.



Polymer probe.

4-way valve with thermostatic option with variable centre distance and pre-setting, for single pipe and dual pipe circuits.

Nickel brass body. Built-in micrometric lockshield valve. Elastomer seals. Shockproof ABS cap and handwheel.

In-line connections, variable centre distance 35 ÷ 40 mm M standard RBM thread for copper, polyethylene and multilayer pipe fittings.
Threaded radiator connection M UNI-EN-ISO 228.

- Max operating temperature 110 $^{\circ}$ C
- Max operating pressure 10 Bar
- Probe length 110/300 mm
- Probe outside diameter 11 mm

Code	Measure	Pack	Outer	Cat.
3101.04.00	G 1/2"	4	16	21.01
3101.05.00	G 3/4"	4	16	21.01
3101.06.00	G 1"	4	16	21.01



Valve with thermostatic option and pre-setting.



Use fittings with RBM Standard thread for pipe connection. Use spanner code 2878.00.00 (see page 132) to adjust Kvs values.



Series 754

4-way single pipe/dual pipe valve with thermostatic option for bathroom terminals.

Nickel brass body. Elastomer seals. Shockproof ABS cap and handwheel. Brass probe.

Built-in micrometric lockshield valve. Suitable for single pipe and dual pipe systems. In-line connections, centre distance 37 mm M standard RBM thread for copper, polyethylene and multilayer pipe fittings.

Threaded connections to radiator M UNI-EN-ISO 228 with pre-gasket ogive in PTFE.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar
- Kv mod. with thermostatic option 1.80 $m^3\!/h$
- Kv mod. thermostatic 1.44 m³/h
- Probe length 300 mm
- Probe outside diameter. 10 mm
- Flow rate at radiator Adjustable bypass

Code	Measure	Pack	Outer	Cat.
754.04.00	G 1/2"	4	16	21.01



For connection to radiators. Use fittings with RBM Standard thread for pipe connection.



Series 223

Kit for heating units fed by single pipe and double pipe circuits.

Nickel brass body. Elastomer seals. Shockproof ABS cap and handwheel. Built-in micrometric lockshield valve. Internal bypass with 50% bore only for single pipe applications.

In-line connections, centre distance 37 mm M standard RBM thread for copper, polyethylene and multilayer pipe fittings.

Connections for external probe Ø 15 mm. Threaded connections to terminal M UNI-EN-ISO 228 with pre-gasket ogive in PTFE.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar
- Probe not included.

Code	Measure	Model	Pack	Outer	Cat.
223.04.50*	G 1/2"	Kit 50%	1	10	21.01
223.04.00*	G 1/2"	Kit 100%	1	10	21.01

*with RFS



Floor or baseboard distribution in-line power supply connections.

Use fittings with RBM Standard thread for pipe connection.





Kit for heating units fed by single pipe and double pipe circuits.

Nickel brass body. Elastomer seals. Shockproof ABS cap and handwheel. Built-in micrometric lockshield valve. Internal bypass with 50% bore only for single pipe applications.

In-line connections, centre distance 37 mm M $standard\,RBM\,thread\,for\,copper, polyethylene\,and$ multilayer pipe fittings.

Connections for external probe Ø 15 mm. $Threaded \, connections \, to \, \overline{terminal \, M \, UNI\text{-}EN\text{-}ISO}$ 228 with pre-gasket ogive in PTFE.

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar
- · Probe not included.

Code	Measure	Model	Pack	Outer	Cat.
225.04.50*	G 1/2"	Kit 50%	1	10	21.01
225.04.00*	G 1/2"	Kit 100%	1	10	21.01

^{*}Single pipe circuits

^{**}Double pipe circuits



Floor or baseboard distribution in-line power supply

Use fittings with RBM Standard thread for pipe connection.



Series 211

Kit for heating units fed by single pipe and double pipe circuits.

Nickel brass body. Elastomer seals. Shockproof ABS cap and handwheel. Built-in micrometric lockshield valve. Internal bypass with 50% bore only for single pipe applications.

Angle connections, centre distance 37 mm M standard RBM thread for copper, polyethylene and multilayer pipe fittings.

Connections for external probe Ø 15 mm. Threaded connections to terminal M UNI-EN-ISO 228 with pre-gasket ogive in PTFE.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar
- Probe not included.

Code	Measure	Model	Pack	Outer	Cat.
211.04.50*	G 1/2"	Kit 50%	1	10	21.01
211.04.00*	G 1/2"	Kit 100%	1	10	21.01

*with RFS



 $Angle\,connections\,fed\,from\,wall.$ Use fittings with RBM Standard thread for pipe connection.



Series 213

Kit for heating units fed by single pipe and double pipe circuits.

Nickel brass body. Elastomer seals. $Shock proof\,ABS\,cap\,and\,hand wheel.$ Built-in micrometric lockshield valve. Internal bypass with 50% bore only for single pipe

Angle connections, centre distance 37 mm M standard RBM thread for copper, polyethylene and multilayer pipe fittings.

Connections for external probe Ø 15 mm. Threaded connections to terminal MUNI-EN-ISO 228 with pre-gasket ogive in PTFE.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar
- Probe not included.

Code	Measure	Model	Pack	Outer	Cat.
213.04.50*	G 1/2"	Kit 50%	1	10	21.01
213.04.00*	G 1/2"	Kit 100%	1	10	21.01

*with RFS



Angle connections fed from wall. $\label{thm:connection} \textbf{Use fittings with RBM Standard thread for pipe connection.}$



221



Series 3563

Angle valve with thermostatic option with pre-setting independent from pressure for iron pipe.

Nickel brass body. Double seal obturator. Elastomer seals. Shockproof ABS handwheel. Threaded angled connection FUNI-EN-ISO 228 for iron pipe. Connection to threaded terminal M UNI-EN-ISO

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Code	Measure	Pack	Outer	Cat.
3563.03.90	G 3/8"	7	28	21.01
3563.04.90	G 1/2"	7	28	21.01

Valve with thermostatic option and pre-setting. Use spanner code 2878.00.00 (see page 132) to adjust Kvs values.



Series 3564

Nickel brass body.

228.

Straight valve with thermostatic option with pre-setting independent from pressure for iron pipe.

Double seal obturator. Elastomer seals. Shockproof ABS handwheel. Threaded straight connection F UNI-EN-ISO 228 for iron pipe. Connection to threaded terminal M UNI-EN-ISO

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Code	Measure	Pack	Outer	Cat.
3564.03.90	G 3/8"	7	28	21.01
3564.04.90	G 1/2"	7	28	21.01

 $Valve\,with\,thermostatic\,option\,and\,pre-setting.$ Use spanner code 2878.00.00 (see page 132) to adjust Kvs values.



Series 3924

Nickel brass body.

Thermostatically controlled corner valve with pre-setting independent from pressure for copper pipe.

Double seal obturator. Elastomer seals. Shockproof ABS handwheel. Threaded angled connection F UNI-EN-ISO 228 for Connection to threaded terminal M UNI-EN-ISO

- Max operating temperature 110 °C
- · Max operating pressure 10 Bar

Code	Measure	Pack	Outer	Cat.
3924.03.90	G 3/8"	7	28	21.01
3924.04.90	G 1/2"	7	28	21.01

Valve with thermostatic option and pre-setting. Use spanner code 2878.00.00 (see page 132) to adjust Kvs values.



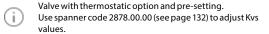
Series 3925

Thermostatically controlled straight valve with pre-setting independent from pressure for copper pipe.

Nickel brass body. Double seal obturator. Elastomer seals. Shockproof ABS handwheel. Threaded angled connection F UNI-EN-ISO 228 for iron pipe. Connection to threaded terminal M UNI-EN-ISO

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Code	Measure	Pack	Outer	Cat.
3925.03.90	G 3/8"	7	28	21.01
3925.04.90	G 1/2"	7	28	21.01





THERMOSTATIC VALVE WITH PRE-SETTING INDEPENDENT FROM PRESSURE

The **thermostatic valve with pre-setting independent** from pressure is a radiator valve that performs the functions of a thermostatic valve and a differential pressure regulator. Designed for temperature control and hydraulic balancing in a single product, it is applied in double-pipe heating systems.

The ring nut for the flow rate pre-setting limits the maximum flow passing through the radiator and thereby ensures quick and effective circuit balancing. The differential pressure regulator – the nerve centre of the valve – resets pressure variations in a heating system, thus ensuring the preset flow rate.

When used in conjunction with the **RBM thermostatic head**, it maintains a constant temperature in the environment, ensuring energy savings.





1 Micrometric setting

KVS values can be set through the pole on the top of the cap unit, simply using the adjustment tool.

6 Kvs values for pre-setting!





2 Pole with vulcanized elastomer disc.

Elastomer directly vulcanized on the pole disc:

- Avoids noise
- Disc does not stick on the valve seat



3 Differential pressure regulator (ΔP) Resets pressure variations in systems.









Possibility of maintenance service while system is in operation.





Elbow fitting for valve-pipe connection.

Nickel brass body. ${\it Elastomer seals.}$

 $Threaded\,pipe\,connection\,M\,standard\,RBM\,for$ $copper, polyethylene \, and \, multilayer \, pipe \, fittings.$ $Connection \,to\,valve\,with\,RBM\,standard\,F\,threaded$

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Code	Figure	Centre distance (mm)	Pack	Outer	Cat.
177.00.00	2	32	20	20	21.01
177.00.10	1	60	20	20	21.01

For distribution outside of baseboard.

Valve-pipe connection.

Use fittings with RBM Standard thread for pipe connection.



Series 308.A

$Single\,hole\,plastic\,openable\,washer.$

Application flush with the wall for aesthetic $closure\ of\ pipe\ passage\ hole.$

• Washer outside diameter 60 mm

Code	Measure	Pack	Outer	Cat.
308.10.02	Ø 10	100	100	21.01
308.12.02	Ø 12	100	100	21.01
308.14.02	Ø 14	100	100	21.01
308.16.02	Ø 16	100	100	21.01
308.18.02	Ø 18	100	100	21.01
308.00.12	U	100	100	21.01

U = Universal



Series 308.B

Double hole plastic openable washer.

 $Application \, flush \, with \, the \, wall \, for \, aesthetic \,$ closure of pipe passage hole.

- External dimensions 98x48 mm
- Hole centre distance 37 mm

Code	Measure	Pack	Outer	Cat.
308.00.02	U	50	50	21.01

U = Universal



Suitable for all Single flow and Double flow centre distance 37mm valves.



Series 175

Nickel plated brass elbow fitting.

- Threaded F standard RBM connection for RBM valves.
- Threaded M connection (UNI-EN-ISO 228) with PTFE pre-gasket ogive.

Code	Measure	Pack	Outer	Cat.
175.04.00	RFS 1/2"	20	20	21.01



Chrome plated steel probe with end not countersunk.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Code	ØxL (mm)	Suitable for valve	Pack	Outer	Cat.
310.10.60	Ø10x600	Uniflux E.P.	1	10	21.01
310.10.90	Ø 10 x 900	Uniflux E.P.	1	10	21.01
310.10.10	Ø 10 x 1000	Uniflux E.P.	1	10	21.01

Series 348

Chrome plated steel probe with end not countersunk.

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Code	ØxL (mm)	Suitable for valve	Pack	Outer	Cat.
348.15.60	Ø 15 x 600	Uniflux E.P. kit	35	35	21.01
348.15.90	Ø 15 x 900	Uniflux E.P. kit	35	35	21.01
348.15.10	Ø 15 x 1000	Uniflux E.P. kit	35	35	21.01

Series 312

Brass steel probe with countersunk end.

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Code	ØxL (mm)	Suitable for valve	Pack	Outer	Cat.
03121560*	Ø 15 x 600	Single flow	1	10	21.01
03121590**	Ø 15 x 900	Single flow	1	10	21.01

^{*}non-chrome-plated brass probe

^{**}chrome-plated brass probe



Suitable for 25 series valve.



Series 1138

Insulation shell made of expanded polyethylene half-bearings with external antiscratch coating.

 $\label{lem:half-bearings} Half-bearings fixed with double-sided adhesive tape already applied.$

- Fire behaviour class1
- Density 33 kg/m³
- Max operating temperature -40 ÷ +90 °C

Angle valve thermal shell

Code	Measure	Pack	Outer	Cat.
1138.00.20	3/4"	10	10	21.01

Insulation shell for angle lockshields

Code	Measure	Pack	Outer	Cat.
1138.00.30	3/4"	10	10	21.01



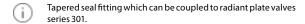
Series 349

Pair of brass reducing couplings for connecting to radiant plates with F 1/2" connections. Accessories for double- and single-pipe valves.

Brass body.
Elastomer seals.
Euroconus M G3/4" x M 1/2" threaded connections
UNI EN ISO228
Valve-connection centre distance 50mm.

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 bar

Code	Size A	Size B	Pack	Outer	Cat.
349.00.00	3/4"	1/2"	1	125	21.01





225



Series 7

Manual single adjustment angle valve for iron pipe.

Nickel brass body. Elastomer seals. Shockproof ABS handwheel. Threaded angled connection F UNI-EN-ISO 228 for iron pipe.

Connection to terminal through threaded M RFS (UNI-EN-ISO 228) with PTFE pre-gasket ogive (only for 3/8" and 1/2" diameters).

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
7.03.00	G 3/8"	3,2	10	100	21.01
7.04.00	G 1/2"	4,0	10	100	21.01
7.05.00	G 3/4"	10,8	10	60	21.01
7.06.00	G 1"	17,1	6	6	21.01
7.07.00	G 1"1/4	22,5	4	4	21.01



Series 8

Manual single adjustment straight valve for iron pipe.

Nickel brass body. Elastomer seals. Shockproof ABS handwheel. Threaded straight connection F UNI-EN-ISO 228 for iron pipe.

Connection to terminal through threaded M RFS (UNI-EN-ISO 228) with PTFE pre-gasket ogive (only for 3/8" and 1/2" diameters).

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
8.03.00	G 3/8"	1,4	10	100	21.01
8.04.00	G 1/2"	1,8	10	100	21.01
8.05.00	G 3/4"	5,2	10	50	21.01
8.06.00	G 1"	8,2	6	6	21.01
8.07.00	G 1"1/4	22.5	4	4	21.01



Series 27

Manual single adjustment angle valve for copper or polyethylene pipe.

Nickel brass body.
Elastomer seals.
Shockproof ABS handwheel.
Threaded angled M standard RBM connection for copper, polyethylene, multilayer pipe fittings.
Connection to threaded terminal M UNI-EN-ISO 228 with pre-gasket ogive in PTFE.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
27.03.00	G 3/8"	3,2	10	100	21.01
27.03.10	G 3/8" Ø 18 (*)	3,2	10	10	21.01
27.04.00	G 1/2"	4,0	10	100	21.01
27.04.10	G 1/2"Ø 18 (*)	4,0	10	10	21.01

(*): Can be fed by Ø18 copper pipes (kit valve + reduction code 57.18.00)



 $Use \, fittings \, with \, Standard \, RBM \, thread \, for \, pipe \, connection.$





Manual single adjustment straight valve for copper or polyethylene pipe.

Nickel brass body. Elastomer seals. Shockproof ABS handwheel. Threaded straight M standard RBM connection for copper, polyethylene, multi-layer pipe fittings. Connection to threaded terminal M UNI-EN-ISO 228 with pre-gasket ogive in PTFE.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
28.03.00	G 3/8"	1,4	10	100	21.01
28.03.10	G 3/8" Ø 18 (*)	1,4	10	10	21.01
28.04.00	G 1/2"	1,8	10	100	21.01
28.04.10	G 1/2" Ø 18 (*)	1,8	10	10	21.01

(*): Can be fed by Ø18 copper pipes (kit valve + reduction code 57.18.00)



Use fittings with Standard RBM thread for pipe connection.



Series 151

Jet-Line Series: angle lockshield valve with double seal O-ring for iron pipe.

Nickel brass body. Elastomer seals. Shockproof ABS handwheel. Threaded angled connection F UNI-EN-ISO 228 for iron pipe fittings. Connection to threaded terminal M UNI-EN-ISO



228 (with pre-gasket ogive in PTFE series *).

Max operating temperature 176
 Max operating pressure 10 Bar

Certifications:



Double seal O.R. angle valve for iron pipe - RFS seal on radiator*

Code	Measure	Pack	Outer	Cat.
151.03.00	RFS 3/8"	10	100	21.01
151.04.00	RFS 1/2"	10	100	21.01

Angle valve with double seal o-ring for iron pipe

Code	Measure	Pack	Outer	Cat.
151.03.40	3/8"	10	100	21.01
151.04.40	1/2"	10	100	21.01
151.05.40	3/4"	10	100	21.01

Thread MF UNI-EN-ISO 228



Series 152

Jet-Line Series: straight lockshield valve with double seal O-ring for iron pipe.

Nickel brass body. Elastomer seals. Shockproof ABS handwheel. Threaded straight connection F UNI-EN-ISO 228 for iron pipe fittings.

Connection to threaded terminal M UNI-EN-ISO 228 (with pre-gasket ogive in PTFE series *).

- Max operating temperature 110 $^{\circ}$ C
- Max operating pressure 10 Bar

Certifications:



$\label{lem:condition} \mbox{Double seal O.R. straight valve for iron pipe-RFS seal on radiator*}$

Code	Measure	Pack	Outer	Cat.
152.03.00	RFS 3/8"	10	100	21.01
152.04.00	RFS 1/2"	10	100	21.01

Straight valve with double seal o-ring for iron pipe

Code	Measure	Pack	Outer	Cat.
152.03.40	3/8"	10	100	21.01
152.04.40	1/2"	10	100	21.01
152.05.40	3/4"	10	100	21.01

Thread MF UNI-EN-ISO 228







587

Angle valve with double seal O-ring for copper or polyethylene pipe, standard rbm connection, "jet-line" series.

Nickel brass body. Elastomer seals. Shockproof ABS handwheel. $Threaded\, angled\, standard\, RBM\, connection\, for$ copper, polyethylene, multi-layer pipe fittings.Connection to threaded terminal M UNI-EN-ISO 228 (with pre-gasket ogive in PTFE series *).

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Angle valve with double O.R. seal for copper or polyethylene pipe, RFS seal on radiator*

Code	Measure	Pack	Outer	Cat.
587.03.00	RFS 3/8"	10	100	21.01
587.04.00	RFS 1/2"	10	100	21.01

Angle valve with double O.R. seal for copper or polyethylene

Code	Measure	Pack	Outer	Cat.
587.03.40	RBM 3/8"	10	100	21.01
587.04.40	RBM 1/2"	10	100	21.01

System side standard RBM thread W 24.5x19F



Use fittings with Standard RBM thread for pipe connection.



588

Straight valve with double seal O-ring for copper or polyethylene pipe, standard rbm connection, "jet-line" series.

Elastomer seals. Shockproof ABS handwheel.

Nickel brass body.

Threaded straight standard RBM connection for copper, polyethylene, multi-layer pipe fittings. Connection to threaded terminal M UNI-EN-ISO 228 (with pre-gasket ogive in PTFE series *).

- · Max operating temperature 110 °C
- Max operating pressure 10 Bar

Straight valve with double O.R. seal for copper or polyethylene pipe - RFS seal on radiator*

Code	Measure	Pack	Outer	Cat.
588.03.00	RFS 3/8"	10	100	21.01
588.04.00	RFS 1/2"	10	100	21.01



Code	Measure	Pack	Outer	Cat.
588.03.40	RBM 3/8"	10	100	21.01
588.04.40	RBM 1/2"	10	100	21.01

System side standard RBM thread W 24.5x19F



Use fittings with Standard RBM thread for pipe connection.



Series 25

"Single flow" 4-way valve for single pipe circuits.

 $Nickel-plated\ brass\ body.\ Elastomer\ seals.$ Shockproof ABS hand wheel. Internal by-pass with fixed leakage. Polymer probe.

Line connections, centre distance 37 mm threaded M standard RBM for copper, polyethylene and multilayer pipe fittings. Connection to the radiator threaded M UNI-EN-ISO 228.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar
- Probe length 300 mm
- Probe outside diameter 15 mm

Code	Measure	Model	Pack	Outer	Cat.
25.05.00	G 3/4"	Single flow	5	20	21.01
25.05.10	G 3/4" Ø 18 (*)	Single flow	5	20	21.01
25.05.50	G 3/4" SX (**)	Single flow	5	20	21.01
25.06.00	G 1"	Single flow	5	20	21.01
25.06.10	G 1" Ø 18 (*)	Single flow	5	20	21.01
25.06.50	G 1" SX (**)	Single flow	5	20	21.01

(*): Can be fed by Ø18 copper pipes (kit valve + reduction code 57.18.00) (**): Left thread radiator connection



Use fittings with Standard RBM thread for pipe connection.





"Uniflux" 4-way valve for single pipe circuits.

Nickel-plated brass body. Elastomer seals. Shockproof ABS hand wheel. Internal by-pass with fixed leakage. Polymer probe.

Line connections, centre distance 37 mm threaded M standard RBM for copper, polyethylene and multilayer pipe fittings. Connection to the radiator threaded M UNI-EN-ISO 228.

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar
- Probe length 300 mm
- 1/2" probe outside diameter 10 mm
- 3/4" probe outside diameter 13 mm

Code	Measure	Model	Pack	Outer	Cat.
22.04.00	G 1/2"	Uniflux	5	20	21.01
22.04.20	G 1/2"	Uniflux s.c.	5	20	21.01
22.05.00	G 3/4"	Uniflux	5	20	21.01
22.05.30	G 3/4" Ø 18 (*)	Uniflux	5	20	21.01

Line connections, centre distance 37 mm threaded (*): Can be fed by Ø18 copper pipes (kit valve + reduction code 57.18.00)



 $Use fittings\ with\ RBM\ Standard\ thread\ for\ pipe\ connection.$



Series 585

"Biflux" 4-way valve for single pipe circuits.

Nickel brass body. Elastomer seals. Shockproof ABS handwheel. Internal bypass with fixed leakage. Polymer probe. In-line connections, centre distance 37 mm M

In-line connections, centre distance 37 mm M standard RBM thread for copper, polyethylene and multilayer pipe fittings.

Threaded radiator connection M UNI-EN-ISO 228.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar
- Probe length 100 mm
- Probe outside diameter 11 mm

Code	Measure	Model	Pack	Outer	Cat.
585.04.00	G 1/2"	Biflux	5	20	21.01
585.04.10	G 1/2" Ø 18 (*)	Biflux	5	20	21.01
585.05.00	G 3/4"	Biflux	5	20	21.01
585.05.10	G 3/4" Ø 18 (*)	Biflux	5	20	21.01

(*): Can be fed by Ø18 copper pipes (kit valve + reduction code 57.18.00)



 $Use fittings \, with \, RBM \, Standard \, thread \, for \, pipe \, connection.$



Series 424

"Uniflux" 4-way valve for single pipe circuits with external probe.

Nickel brass body.
Elastomer seals.
Shockproof ABS handwheel.
Internal bypass with fixed leakage.
In-line connections, centre distance 37 mm M standard RBM thread for copper, polyethylene and multilayer pipe fittings.
Threaded radiator connection M UNI-EN-ISO 228.

• Max operating temperature 110 °C

Connections for external probe Ø 10 or Ø 15.

- Max operating pressure 10 Bar
- Probe not included.

Code	Measure	Model	Pack	Outer	Cat.
424.04.70	G 1/2"	Uniflux E.P.Ø 10	4	16	21.01
424.04.90	G 1/2"	Uniflux E.P. Ø 15	4	16	21.01



Radiator side hot fluid inlet.

Use fittings with RBM Standard thread for pipe connection.





Kit for heating units fed by single pipe and double pipe circuits.

Nickel brass body. Elastomer seals. Shockproof ABS cap and handwheel. Built-in micrometric lockshield valve. Internal bypass with 50% bore only for single pipe applications.

In-line connections, centre distance 37 mm M standard RBM thread for copper, polyethylene and multilayer pipe fittings.

Connections for external probe Ø 15 mm. Threaded connections to terminal M UNI-EN-ISO 228 with pre-gasket ogive in PTFE.

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar
- · Probe not included.

Code	Measure	Model	Pack	Outer	Cat.
249.04.50	G 1/2"	Kit 50%*	1	10	21.01
249.04.00	G 1/2"	Kit 100%**	1	10	21.01

^{*}Single pipe circuits

^{**}Double pipe circuits



Floor or baseboard distribution in-line power supply connections.

Use fittings with RBM Standard thread for pipe connection.



Series 212

Kit for heating units fed by single pipe and double pipe circuits.

Nickel brass body.
Elastomer seals.
Shockproof ABS cap and handwheel.
Built-in micrometric lockshield valve.
Internal bypass with 50% bore only for single pipe applications.

Angle connections, centre distance 37 mm M standard RBM thread for copper, polyethylene and multilayer pipe fittings.

Connections for external probe Ø 15 mm. Threaded connections to terminal M UNI-EN-ISO 228 with pre-gasket ogive in PTFE.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar
- Probe not included.

Code	Measure	Model	Pack	Outer	Cat.
212.04.50	G 1/2"	Kit 50%*	1	10	21.01
212.04.00	G 1/2"	Kit 100%**	1	10	21.01

^{*} Single pipe circuits

^{**}Double pipe circuits



Angle connections fed from wall.
Use fittings with RBM Standard thread for pipe connection.



Series 165

Straight 4-way diverter valve for single pipe and the double pipe circuits.

Nickel brass body.
Elastomer seals.
Shockproof ABS cap.
Built-in micrometric lockshield valve.
Internal bypass with 50% bore only for single pipe

In-line connections, centre distance 37 mm M standard RBM thread for copper, polyethylene and multilayer pipe fittings.

Threaded connections to radiator M UNI-EN-ISO 228 with pre-gasket ogive in PTFE.
Connection for external probe Ø 15 mm.

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Code	Measure	Model	Pack	Outer	Cat.
165.04.50*	G 1/2"	50%	10	10	21.01
160.04.00*	G 1/2"	100%	10	10	21.01

*with RFS



 $Use fittings with RBM \, Standard \, thread \, for \, pipe \, connection.$





Angle 4-way diverter valve for single pipe and the double pipe circuits.

Nickel brass body. Elastomer seals. Shockproof ABS cap. Built-in micrometric lockshield valve. Internal bypass with 50% bore only for single pipe applications.

 $Angle connections, centre \, distance \, 37 \, mm \, M \\ standard \, RBM \, thread \, for \, copper, \, polyethylene \, and \, multilayer \, pipe \, fittings.$

Threaded connections to radiator M UNI-EN-ISO 228 with pre-gasket ogive in PTFE.
Connection for external probe Ø 15 mm.

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Code	Measure	Model	Pack	Outer	Cat.
214.04.50*	G 1/2"	50%	10	10	21.01
214.04.00*	G 1/2"	100%	10	10	21.01

*with RFS

(i)

 $Use fittings with RBM\,Standard\,thread\,for\,pipe\,connection.$



Series 301.A

Coupled valves, only for shut-off of radiant plates, equipped with adjustable bypass, for single pipe circuits.

Nickel brass body. Elastomer seals. Euroconus F G3/4" plate side swivel connections. M G3/4" Euroconus system side connections. Connections centre distance 50 mm.

- Max operating temperature 110 $^{\circ}$ C
- Max operating pressure 10 Bar

Coupled valve with straight bypass

Code	Measure	Pack	Outer	Cat.
301.05.10	3/4"x3/4"	5	5	21.01

Coupled valve with angle bypass

Code	Measure	Pack	Outer	Cat.
302.05.10	3/4"x3/4"	5	5	21.01



Use fittings with Euroconus G3/4" thread for pipe connection.



Series 301.B

Coupled double pipe valves, only for shut-off of radiant plates, for dual pipe circuits.

Nickel brass body. Elastomer seals. Euroconus F G3/4"plate side swivel connections. MG3/4" Euroconus system side connections. Connections centre distance 50 mm.

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Coupled valve without straight bypass

Code	Measure	Pack	Outer	Cat.
301.05.80	3/4"	1	50	21.01

Coupled valve without angle bypass

Code	Measure	Pack	Outer	Cat.
302.05.80	3/4"	1	50	21.01



Use fittings with Euroconus G3/4" thread for pipe connection.



231



Series 4036

New angle lockshield shut-off and regulating valve for iron pipe.

Nickel brass body. Elastomer seals. Shockproof ABS cap. Threaded angled connection F UNI-EN-ISO 228 for iron pipe. $Connection \,to\,terminal\,through\,threaded\,M\,RFS$ (UNI-EN-ISO 228) with PTFE pre-gasket ogive.

- Max operating temperature 110 $^{\circ}$ C
- Max operating pressure 10 Bar

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
4036.03.00	G 3/8"	2,8	10	100	21.01
4036.04.00	G 1/2"	3	10	100	21.01



Series 4038

New straight lockshield shut-off and regulating valve for iron pipe.

Nickel brass body. Elastomer seals. Shockproof ABS cap. Threaded straight connection F UNI-EN-ISO 228 Connection to terminal through threaded MRFS (UNI-EN-ISO 228) with PTFE pre-gasket ogive.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
4038.03.00	G 3/8"	1,9	10	100	21.01
4038.04.00	G 1/2"	2,1	10	100	21.01



Series 4039

New straight lockshield shut-off and regulating valve for copper or polyethylene pipe.

Nickel brass body. Elastomer seals. Shockproof ABS cap. Threaded straight M standard RBM connection for copper, polyethylene, multi-layer pipe fittings. Connection to threaded terminal M UNI-EN-ISO 228 with pre-gasket ogive in PTFE.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
4039.03.00	G 3/8"	1,4	10	100	21.01
4039.04.00	G 1/2"	1,4	10	100	21.01

(*): Can be fed by Ø18 copper pipes (kit lockshield + reduction code 57.18.00)



Use fittings with RBM Standard thread for pipe connection.



Series 4037

New angle lockshield shut-off and regulating valve for copper or polyethylene pipe.

Nickel brass body. Elastomer seals. Shockproof ABS cap. Threaded angled M standard RBM connection for copper, polyethylene, multilayer pipe fittings. Connection to threaded terminal M UNI-EN-ISO $228\,with\,pre-gasket\,ogive\,in\,PTFE.$

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
4037.03.00	G 3/8"	2,8	10	100	21.01
4037.04.00	G 1/2"	3	10	100	21.01

(*): Can be fed by Ø18 copper pipes (kit lockshield + reduction code 57.18.00)



 $Use fittings \, with \, RBM \, Standard \, thread \, for \, pipe \, connection.$





Nickel brass body.

Angle lockshield shut-off and regulating valve for iron pipe

Elastomer seals. Shockproof ABS cap. Threaded angled connection F UNI-EN-ISO 228 for

iron pipe.
Connection to terminal through threaded M RFS
(UNI-EN-ISO 228) with PTFE pre-gasket ogive (only for 3/8" and 1/2" diameters).

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
9.03.00	G 3/8"	3,2	10	100	21.01
9.04.00	G 1/2"	4,0	10	100	21.01
9.05.00	G 3/4"	10,8	10	60	21.01
9.06.00	G 1"	17,1	6	6	21.01
9.07.00	G 1"1/4	22,5	4	4	21.01



Series 10

Straight lockshield shut-off and regulating valve for iron pipe.

Nickel brass body. Elastomer seals. Shockproof ABS cap.

Threaded straight connection F UNI-EN-ISO 228 for iron pipe.

Connection to terminal through threaded M RFS (UNI-EN-ISO 228) with PTFE pre-gasket ogive (only for 3/8" and 1/2" diameters).

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
10.03.00	G 3/8"	1,4	10	100	21.01
10.04.00	G 1/2"	1,8	10	100	21.01
10.05.00	G 3/4"	4,9	10	60	21.01
10.06.00	G 1"	8,2	6	6	21.01
10.07.00	G 1"1/4	22.5	4	4	21.01



Series 29

Angle lockshield shut-off and regulating valve for copper or polyethylene pipe.

Nickel brass body.
Elastomer seals.
Shockproof ABS cap.
Threaded angled M standard RBM connection for copper, polyethylene, multilayer pipe fittings.
Connection to threaded terminal M UNI-EN-ISO 228 with pre-gasket ogive in PTFE.

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Certifications:



Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
29.03.00	G 3/8"	3,2	10	100	21.01
29.03.10	G 3/8" Ø 18 (*)	3,2	10	10	21.01
29.04.00	G 1/2"	4,0	10	100	21.01
29.04.10	G 1/2"Ø 18 (*)	4,0	10	10	21.01

(*): Can be fed by Ø18 copper pipes (kit lockshield + reduction code 57.18.00)



 $Use fittings with RBM\,Standard\,thread\,for\,pipe\,connection.$





Straight lockshield shut-off and regulating valve for copper or polyethylene pipe.

Nickel brass body. Elastomer seals. Shockproof ABS cap.

 $Threaded\, straight\, M\, standard\, RBM\, connection\, for$ copper, polyethylene, multi-layer pipe fittings.Connection to threaded terminal M UNI-EN-ISO 228 with pre-gasket ogive in PTFE.

- Max operating temperature 110 $^{\circ}$ C
- Max operating pressure 10 Bar

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
30.03.00	G 3/8"	1,4	10	100	21.01
30.03.10	G 3/8" Ø 18 (*)	1,4	10	10	21.01
30.04.00	G 1/2"	1,8	10	100	21.01
30.04.10	G 1/2" Ø 18 (*)	1,8	10	10	21.01

(*): Can be fed by Ø18 copper pipes (kit lockshield + reduction code 57.18.00)



Use fittings with RBM Standard thread for pipe connection.



Series 153

Jet-Line Series: angle lockshield regulating valve for iron pipe.

Nickel brass body. Elastomer seals. Shockproof ABS handwheel.

Threaded angled connection F UNI-EN-ISO 228 for Angle lockshield regulating valve for iron pipe iron pipe fittings.

Connection to threaded terminal M UNI-EN-ISO $228 \, (with \, pre\text{-}gasket \, ogive \, in \, PTFE \, series \, ^*).$

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Certifications:



Angle lockshield regulating valve for iron pipe - RFS seal on radiator*

Code	Measure	Pack	Outer	Cat.
153.03.00	RFS 3/8"	10	100	21.01
153.04.00	RFS 1/2"	10	100	21.01

Code	Measure	Pack	Outer	Cat.
153.03.40	3/8"	10	100	21.01
153.04.40	1/2"	10	100	21.01
153.05.40	3/4"	10	100	21.01

Thread MF UNI-EN-ISO 228



Series 154

Jet-Line Series: straight lockshield regulating valve for iron pipe.

Nickel brass body. Elastomer seals.

 $Shock proof ABS\, hand wheel.$

Threaded straight connection F UNI-EN-ISO 228 for iron pipe fittings.

Connection to threaded terminal M UNI-EN-ISO 228 (with pre-gasket ogive in PTFE series *).

- Max operating temperature 110 °C
- Max operating pressure 10 Bar

Certifications:



Straight lockshield regulating valve for iron pipe - RFS seal on radiator*

Code	Measure	Pack	Outer	Cat.
154.03.00	RFS 3/8"	10	100	21.01
154.04.00	RFS 1/2"	10	100	21.01

Straight lockshield regulating valve for iron pipe

Code	Measure	Pack	Outer	Cat.
154.03.40	3/8"	10	100	21.01
154.04.40	1/2"	10	100	21.01
154.05.40	3/4"	10	100	21.01

Thread MF UNI-FN-ISO 228







Jet-Line Series: angle lockshield regulating valve for copper or polyethylene pipe, standard RBM connection.



Nickel brass body. Elastomer seals. Shockproof ABS handwheel. Threaded angled standard RBM connection for

Threaded angled standard RBM connection for copper, polyethylene, multi-layer pipe fittings. Connection to threaded terminal M UNI-EN-ISO 228 (with pre-gasket ogive in PTFE series *).

- Max operating temperature 110 $^{\circ}\text{C}$
- Max operating pressure 10 Bar

 $\label{lockshield} Angle \ lockshield \ regulating \ valve for copper \ or polyethylene \ pipe-RFS \ seal \ on \ radiator^*$

Code	Measure	Pack	Outer	Cat.
564.03.00	RFS 3/8"	10	100	21.01
564.04.00	RFS 1/2"	10	100	21.01

 $\label{lockshield} \textbf{Angle lockshield regulating valve for copper or polyethylene pipe}$

Code	Measure	Pack	Outer	Cat.
564.03.40	RBM 3/8"	10	100	21.01
564.04.40	RBM 1/2"	10	100	21.01

System side standard RBM thread W 24.5x19F



Use fittings with RBM Standard thread for pipe connection.



Series 565

Jet-Line Series: straight lockshield regulating valve for copper or polyethylene pipe, standard RBM connection.



Nickel brass body. Elastomer seals. Shockproof ABS handwheel. Threaded straight standard RBM connection for copper, polyethylene, multi-layer pipe fittings.

- Connection to threaded terminal M UNI-EN-ISO 228 (with pre-gasket ogive in PTFE series *).
- Max operating temperature 110 °C
- Max operating pressure 10 Bar

 $Straight lockshield \, regulating \, valve \, for \, copper \, or \, polyethylene \, pipe-RFS \, seal \, on \, radiator^*$

Code	Measure	Pack	Outer	Cat.
565.03.00	RFS 3/8"	10	100	21.01
565.04.00	RFS 1/2"	10	100	21.01

 $Straight lockshield \, regulating \, valve for \, copper \, or \, polyethylene \, pipe$

Code	Measure	Pack	Outer	Cat.
565.03.40	RBM 3/8"	10	100	21.01
565.04.40	RBM 1/2"	10	100	21.01

System side standard RBM thread W 24.5x19F



 $Use fittings with RBM\,Standard\,thread\,for\,pipe\,connection.$



02. ENERGY EFFICIENCY

22. HYDRAULIC BALANCING

22.01 HYDRAULIC BALANCING

236

Balancing lockshield valves

Flow-rate measuring stub pipe

Flow control valves

PICV independent pressure adjustment valves

Tools and accessories



Series 619.A

Balanflow

Threaded balancing valve, complete with knob indicating the number of turns, and "memory stop" function.

Body and contact parts in brass.
Seals in FKM.
Threaded connections FF UNI-EN-ISO 228.

- Max operating pressure 20 Bar
- Allowed temperatures -30 \div +120 $^{\circ}$ C
- Equipercentage regulation
- Allowed fluid water and water+glycol 50 %
- Pressure gauge plugs connection G1/8"

Certifications:



Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
619.03.50	G 3/8"	2,35	1	6	22.01
619.04.50	G 1/2"	3,35	1	6	22.01
619.05.50	G 3/4"	4,00	1	6	22.01
619.06.50	G 1"	11,20	1	6	22.01
619.07.50	G 1"1/4	13,40	1	6	22.01
619.08.50	G 1"1/2	19,00	1	6	22.01
619.09.50	G 2"	28,40	1	6	22.01

(i)

Designed for the insertion of pressure plugs for indirect flow rate reading.



To provide for a pair of pressure plugs accessories code. 621.01.50



Series 619.B

Balanflow

Flanged balancing valve, complete with knob indicating the number of turns, and "memory stop" function.

Cast-iron body. Elastomer seals. Flanged connections PN 16.

- Max operating pressure 16 Bar
- Allowed temperatures -10 \div +130 $^{\circ}\text{C}$
- $\bullet \ \ Equipercentage \ regulation$
- Allowed fluid water and water+glycol 50 %
- Pressure gauge plugs connection G1/8"

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
619.10.60	DN 65	93,40	1	1	22.01
619.11.60	DN 80	122,30	1	1	22.01
619.13.60	DN 100	200,00	1	1	22.01
619.14.60	DN 125	304,40	1	1	22.01
619.15.60	DN 150	400,80	1	1	22.01
619.17.60	DN 200	685,60	1	1	22.01
619.19.60	DN 250	952,30	1	1	22.01
619.21.60	DN 300	1380,20	1	1	22.01



 $Valve\ provided\ with\ two\ pressure\ plugs.$



Flange suitable for coupling to counter-flange UNI EN 1092-1.



Series 1147

Insulation shell for Balanflow valve made of expanded polyethylene half-bearings with external antiscratch coating.

 $\label{lem:half-bearings} Half-bearings fixed with double-sided adhesive tape already applied.$

- Fire behaviour class1
- Density 33 kg/m³
- Max operating temperature -40 ÷ +90 °C

Code	Measure	Pack	Outer	Cat.
1147.03.00	3/8"	10	10	22.01
1147.04.00	1/2"	10	10	22.01
1147.05.00	3/4"	10	10	22.01
1147.06.00	1"	10	10	22.01
1147.07.00	1"1/4	5	5	22.01
1147.08.00	1"1/2	5	5	22.01
1147.09.00	2"	5	5	22.01





Series 620.A

Threaded measuring stub pipe for indirect reading of transit flow rate, $complete\,with\,quick\,coupling\,pressure$ plugs.

Body and pressure plugs in brass. Elastomer pressure plugs internal seals. Threaded connections MF UNI-EN-ISO 228.

- Max operating pressure 20 Bar
- Allowed temperatures -30 ÷ +120 °C
 Allowed fluid water and water+glycol 50 %
 Pressure gauge plugs connection G 1/8"

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
620.04.50	G 1/2"	2,85	1	1	22.01
620.05.50	G 3/4"	5,80	1	1	22.01
620.06.50	G 1"	8,80	1	1	22.01
620.07.50	G 1"1/4	20,10	1	1	22.01
620.08.50	G 1"1/2	31,20	1	1	22.01
620.09.50	G 2"	69,90	1	1	22.01



Series 620.B

 $Flanged\,measuring\,stub\,pipe\,for\,indirect$ reading of transit flow rate, complete $with \, quick \, coupling \, pressure \, plugs. \\$

Grey cast-iron body. Brass pressure plugs. Elastomer pressure plugs internal seals. Wafer flanged connections PN 16.

- Max operating pressure 16 Bar
 Allowed temperatures -10 ÷ +120 °C
- Allowed fluid water and water+glycol 50 %
- Pressure gauge plugs connection G 1/4"

Code	Measure	Kv (m³/h)	Pack	Outer	Cat.
620.13.00	DN 100	244,00	1	1	22.01
620.17.00	DN 200	1010,00	1	1	22.01





Series 2873.A

Automatic flow control valve with externally adjustable cartridge.

It allows to adjust the rate to the desired value, by acting on the cartridge through suitable adjusting device.

 $Such operation does \, not \, involve \, the \, valve.$

Brass body.

Polymer cartridge with elastomer diaphragm. Indicator with graduated scale.

 $Threaded\,connections\,FF\,UNI\text{-}EN\text{-}ISO\,228.$

- Max operating pressure 16 Bar
- Allowed temperatures -20 \div +120 $^{\circ}\text{C}$
- Allowed fluid water and water+glycol 50%
- Pressure gauge plugs connection G1/8"

Code	Mea- sure	DP (kPa)	Flow rate (m³/h)	Car- trid- ge	Pack	Outer	Cat.
2873.04.10	1/2"	17-210	0,100 - 0,412	В	1	1	22.01
2873.04.20	1/2"	17 - 210	0,157 - 0,609	G	1	1	22.01
2873.04.30	1/2"	17 - 200	0,275 - 0,825	RW	1	1	22.01
2873.04.40	1/2"	30-400	0,406 - 1,270	RG	1	1	22.01
2873.05.10	3/4"	17 - 210	0,100 - 0,412	В	1	1	22.01
2873.05.20	3/4"	17 - 210	0,157 - 0,609	G	1	1	22.01
2873.05.30	3/4"	17 - 200	0,275 - 0,825	RW	1	1	22.01
2873.05.40	3/4"	30-400	0,406 - 1,270	RG	1	1	22.01
2873.06.10	1"	17 - 210	0,100 - 0,412	В	1	1	22.01
2873.06.20	1"	17 - 210	0,157 - 0,609	G	1	1	22.01
2873.06.30	1"	17 - 200	0,275 - 0,825	RW	1	1	22.01
2873.06.40	1"	30-400	0,406 - 1,270	RG	1	1	22.01

B = BlackG = Green

RW = Red - b. white RG = Red - b. grey

 $Replace able \, cartridge. \, See \, Service \, Division. \,$ Cartridges are available in different colours for both the pressure field and flow rate to be immediately identified.



 $For flow \, rate \, adjustment \, use \, accessory \, spanner \, code \, 2961.00.02$ (see page 243).



Series 2874.A

Automatic flow control valve with externally adjustable cartridge, provided with pressure plugs.

It allows to adjust the rate to the desired value, by $acting \, on \, the \, cartridge \, through \, suitable \, adjusting \,$ device.

Such operation does not involve the valve.

Brass body.

 $Polymer\, cartridge\, with\, elastomer\, diaphragm.$ Indicator with graduated scale.

Threaded connections FF UNI-EN-ISO 228.

- Max operating pressure 16 Bar
- Allowed temperatures -20 ÷ +120 °C
- Allowed fluid water and water+glycol 50%
- Pressure gauge plugs connection G1/8"

Code	Measure	DP (kPa)	Flow rate (m³/h)	Car- trid- ge	Pack	Ou- ter	Cat.
2874.04.10	G 1/2"	17 - 210	0,100 - 0,412	В	1	1	22.01
2874.04.20	G 1/2"	17 - 210	0,157 - 0,609	G	1	1	22.01
2874.04.30	G 1/2"	17 - 200	0,275 - 0,825	RW	1	1	22.01
2874.04.40	G 1/2"	30-400	0,406 - 1,270	RG	1	1	22.01
2874.05.10	G 3/4"	17 - 210	0,100 - 0,412	В	1	1	22.01
2874.05.20	G 3/4"	17 - 210	0,157 - 0,609	G	1	1	22.01
2874.05.30	G 3/4"	17 - 200	0,275 - 0,825	RW	1	1	22.01
2874.05.40	G 3/4"	30-400	0,406 - 1,270	RG	1	1	22.01
2874.06.10	G 1"	17 - 210	0,100 - 0,412	В	1	1	22.01
2874.06.20	G 1"	17 - 210	0,157 - 0,609	G	1	1	22.01
2874.06.30	G 1"	17 - 200	0,275 - 0,825	RW	1	1	22.01
2874.06.40	G 1"	30-400	0,406 - 1,270	RG	1	1	22.01

B = BlackG = GreenRW = Red - b. white

RG = Red - b. grey



Replaceable cartridge. See Service Division. $Cartridges\, are\, available\, in\, different\, colours\, for\, both\, the$ $pressure field \, and \, flow \, rate \, to \, be \, immediately \, identified.$ $Valve\ provided\ with\ two\ pressure\ plugs.$



For flow rate adjustment use accessory spanner code 2961.00.02 (see page 243).



AUTOMATIC FLOW CONTROL VALVE

Automatic flow control valve allow maintaining a constant flow rate at the desired value, within a wide differential pressure range between upstream and downstream.

The flow rate value is set through a cartridge adjustable from outside using a special accessory spanner. During this operation, the valve does not need to be shut off. Inserted in hydraulic circuits, the automatic balancing valve **ensures maintaining the design flow rate.**

USE

They are particularly indicated in the following cases:

- Adjustment for pumping stations in central thermal fluid systems.
- Customer junctions balancing.
- Rising pillars balancing.
- Third way adjustment and balancing on thermoregulation units



It is advisable to choose a automatic flow control valve whose adjustment degree corresponds to about half the cartridge flow rate range.

In this way, with the design nominal flow rate, a sufficient calibration margin is preserved so as to cope with any corrections due to inevitable route changes during work.

POSSIBLE APPLICATIONS

Automatic flow control valve are mainly used on the hydraulic circuit delivery pipe. Below are some typical application examples:

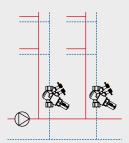


FIGURE 1

Automatic flow control valve with rising pillars balancing function.

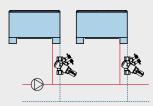


FIGURE 2

Automatic flow control valve with the function of serving in-line terminal elements (radiators, convectors, fan-coils, etc.).

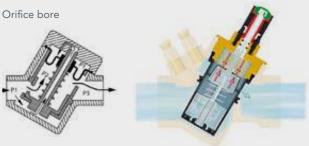




OPERATING PRINCIPLE

Pressure P2 is determined by the membrane reacting to pressure P1 acting on the membrane upper chamber.

Interacting with the spring, the difference (P1-P2) remains constant, while maintaining a steady ΔP through the orifice. As a result, a constant flow rate is obtained through the valve, regardless of the variations of the pressure difference between upstream and downstream.



KEY:

P1 and P3: Circuit pressure values
P2: Pressure determined by membrane
ΔP = (P1-P3) = Total pressure difference between upstream/downstream

Indicates pressure variationsIndicates the flow direction



Series 2873.B

Pressure independent control valve.

It allows to keep the flow rate to the desired level even when pressure conditions change in the circuit where it is inserted.

Brass body.

Polymer cartridge with elastomer diaphragm. Indicator with graduated scale. Threaded connections FF UNI-EN-ISO 228.

- Max operating pressure 16 Bar
- Allowed temperatures -20 ÷ +120 °C
- Allowed fluid water and water+glycol 50%
- Pressure gauge plugs connection G1/8"

Code	Mea- sure	DP (kPa)	Flow rate (m³/h)	Car- trid- ge	Pack	Outer	Cat.
2873.04.50	1/2"	16-200	0,037 - 0,575	G	1	1	22.01
2873.04.60	1/2"	30-400	0,064 - 1,110	В	1	1	22.01
2873.05.50	3/4"	16-200	0,037 - 0,575	G	1	1	22.01
2873.05.60	3/4"	30-400	0,064 - 1,110	В	1	1	22.01
2873.06.50	1"	16-200	0,037 - 0,575	G	1	1	22.01
2873.06.60	1"	30-400	0,064 - 1,110	В	1	1	22.01

G = O.R. Grey B = O.R. Black

(i)

Replaceable cartridge. See Service Division. Cartridges are available in different colours for both the pressure field and flow rate to be immediately identified.



For flow rate adjustment use accessory spanner code 2961.00.02 (see page 243).

Optional actuator series 2881 - 2882 to be ordered separately (see page 243).



Series 2874.B

Pressure independent control valve, provided with pressure plugs.

It allows to keep the flow rate to the desired level even when pressure conditions change in the circuit where it is inserted.

Brass body.

Polymer cartridge with elastomer diaphragm. Indicator with graduated scale. Threaded connections FF UNI-EN-ISO 228.

- Max operating pressure 16 Bar
- Allowed temperatures -20 ÷ +120 °C
- Allowed fluid water and water+glycol 50%
- Pressure gauge plugs connection G1/8"

Code	Mea- sure	DP (kPa)	Flow rate (m³/h)	Car- trid- ge	Pack	Outer	Cat.
2874.04.50	1/2"	16-200	0,037 - 0,575	G	1	1	22.01
2874.04.60	1/2"	30-400	0,064 - 1,110	В	1	1	22.01
2874.05.50	3/4"	16-200	0,037 - 0,575	G	1	1	22.01
2874.05.60	3/4"	30-400	0,064 - 1,110	В	1	1	22.01
2874.06.50	1"	16-200	0,037 - 0,575	G	1	1	22.01
2874.06.60	1"	30-400	0,064 - 1,110	В	1	1	22.01

G = O.R. Grey B = O.R. Black



Replaceable cartridge. See Service Division.

Cartridges are available in different colours for both the pressure field and flow rate to be immediately identified. Valve provided with two pressure plugs.



For flow rate adjustment use accessory spanner code 2961.00.02 (see page 243).

Optional actuator series 2881 - 2882 to be ordered separately (see page 243).



Series 3717

Valve system that combines the pressure independent control valve with isolation, flushing, draining and commissioning components into a prefabricated tested and ready to install terminal bypass unit.

It allows pressure independent control ensuring full stroke against pressure fluctuation. It can be used also for flushing and isolating operations at whatever of commissioning and maintenance stage.

The unit can be used for both heating and cooling.

 $\label{lem:all-components} All \, components \, made \, in \, DZR \, Brass. \\ Threaded \, connections \, FF \, UNI-EN-ISO \, 228. \\$

- Max operating pressure 25 Bar
- Allowed temperatures -10 \div +120 $^{\circ}\text{C}$
- Allowed fluid water and water+glycol 50%

Code	Measure	Flow rate (m³/h)	Pack	Outer	Cat.
3717.05.50	3/4"	0,4	1	2	22.01
3717.05.60	3/4"	0,7	1	2	22.01
3717.05.70	3/4"	1,3	1	2	22.01

Supplied with:
isolation valves
strainer
draining point
P/T plugs
integrated venturi metering station
PICV valve for flow, temperature and pressure control



PRESSURE INDEPENDENT CONTROL VALVE

The pressure independent control valve allows adjusting and keeping the flow rate constant to the desired value, within a wide differential pressure range upstream and downstream. Therefore, it encloses the functions of a automatic flow control valve and a control valve in a single product.

The flow rate value is adjusted in the following ways:

- Through a cartridge adjustable from outside (manual operation to be carried out using a special accessory spanner) so as to limit the maximum set value.
- Through an electrothermal or electrical motor (automatic operation) according to the thermal loads required by the system.

During these operations/adjustments the valve does not need to be shut off.



USE

It is particularly indicated in the following cases:

- Adjustment for pumping stations in central thermal fluid systems.
- Terminal balancing and adjustment on customer junctions.
- Third way adjustment and balancing on thermoregulation units.

OPERATING PRINCIPLE

Pressure P2 is determined by the membrane reacting to pressure P1 acting on the membrane upper chamber.

Interacting with the spring, the difference (P1-P2) remains constant, while maintaining a steady ΔP through the orifice. As a result, a constant flow rate through the valve is obtained regardless of variations in the pressure difference between upstream and downstream, which can be adjusted by the motor depending on the system thermal requirements.

CHOICE

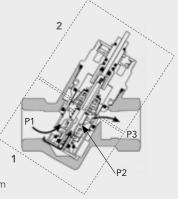
It is advisable to choose the pressure independent control valve, the pressure adjustment degree corresponding to about half the cartridge flow rate range.

In this way, with the design nominal flow rate, a sufficient calibration margin is preserved so as to cope with any corrections due to inevitable route changes during work.

KEY:

- 1 Control device △P
- 2 Flow rate adjustment device
- P1 and P3: Circuit pressure values
- **P2**: Pressure determined by membrane
- $\Delta P = (P1-P3) = Total$ pressure difference

between upstream/downstream



POSSIBLE APPLICATIONS

Pressure independent control valves are mainly used on the hydraulic circuit return pipe. Below are some typical application examples:

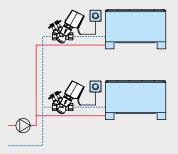


Figure 1

Pressure independent control valve with the function of serving in-line terminal elements (radiators, convectors, fancoils, etc.). Each valve provided with an thermoelectric motor is controlled by a thermostat/chronothermostat.

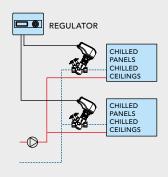


Figure 2

Pressure independent control valve with the function of serving terminal elements (chilled panels, chilled beams, etc.). Each valve provided with an electrical motor is managed by a controller (sig- nal 0÷10V / 230V / 24V).



Portable electronic differential pressure and flow rate measuring instrument. Suitable for detecting work parameters of balancing valves and of measuring stub pipes. Battery-operated.

Supplied complete with professional case and holes for connection to circuit. Pair of adapters code 932.01.00 not included.

- · Max allowable static pressure: 20 Bar
- Measurament range: 2 kPa ÷ 600 kPa
- Accuracy: +/-2% of reading or +/-0.2 kPa whichever is the greater

 $Instrument with the following \, accessories: \\$

- Pair of pressure plugs code 621.01.50
- Adapter kit code 1422.02.00
- · Cartridge adjustment spanner code 2961.00.02

Code	Pack	Outer	Cat.
3566.00.00	1	1	22.01

(i)

Option of using the instrumental rental service. Contact RBM's sales department for the terms, conditions and prices.



Series 932

Pair of needle adapters to measure pressure.

Connection of the electronic differential pressure measuring instrument to the pressure plugs on the measuring stub pipes and RBM balancing valves.

Brass body. Steel needle. Threaded connections F UNI-EN-ISO 228.

- Max operating pressure 16 Bar
- Max operating temperature 120 °C

Code	Measure	Pack	Outer	Cat.
932.01.00	1/8"	1	1	22.01



Used to connect pressure plugs code 621.01.50 to digital measuring instrument code 3566.00.00



Series 621

Pair of pressure plugs.

Body and plugs in brass. Elastomer pressure plugs internal seals. Threaded connections M UNI-EN-ISO 228.

- Max operating pressure 16 Bar
- Max operating temperature 120 °C

Code	Measure	Pack	Outer	Cat.
621.01.50*	1/8"	1	10	22.01

*Pressure plugs for balancing valves and threaded stub pipes.



Pressure plugs for needle adapters code 932.01.00 Accessory supplied with the digital meter code 3566.00.00



Series 1422

1/4"M X 1/8"F reducing coupling pair. To adapt 1/8" gauge plugs, code 621.01.50, to stub pipes and RBM flanged balancing valves with 1/4" connection.

Brass body. Elastomer seals. Threaded connections MF UNI-EN-ISO 228.

- Max operating pressure 16 Bar
- Max operating temperature 120 $^{\circ}\text{C}$

Code	Size A	Size B	Pack	Outer	Cat.
1422.02.00	1/4" M	1/8" F	1	10	22.01



For pressure gauge connections other than the G 1/4" F standard, contact RBM for more specifications about the accessory to be connected to the measuring instrument. Accessory supplied with the digital meter code 3566.00.00







Electromechanical actuator. Complete with ring nut clamping to valve body and power supply cable.

 $Normally\,closed\,valve\,position\,when\,power$ missing.

- Power supply 24/230 V
- Consumption 5 W
- Frequency 50Hz
- Electric protection IP54
- Cable length 1 m

Code	Power supply	Pack	Outer	Cat.
2882.00.02	24V AC 0÷10V	1	1	22.01
2882.00.12	110-230V AC 3 POINTS	1	1	22.01
2882.00.22	24V AC 3 POINTS	1	1	22.01

Specific accessory for independent pressure control valve series 2873 and 2874.



Series 2881

Thermo-electric actuator. Complete with ring nut clamping to valve body and power supply cable.

 $Normally \, closed \, valve \, position \, when \, power \,$ missing.

- Power supply 24/230 V
- Consumption 2,5 W
- Frequency 50Hz
- Electric protection IP54
- Cable length 1 m
- · Nominal thrust 170N

Code	Power supply	Pack	Outer	Cat.
2881.00.12	24V AC/DC	1	50	22.01
2881.00.22	230V AC	1	50	22.01

Version without auxiliary microswitch (2 wires)



 $Specific \, accessory \, for \, independent \, pressure \, control \, valve \, series \,$ 2873 and 2874.



Series 3537

Adapter for the series 3535 and 3536 differential pressure control and $balancing\,valve\,capillary\,pipe.$

Brass body. Threaded connection M UNI-EN-ISO 228.

- Max operating pressure 16 Bar
- Max operating temperature 120 °C

Code	Measure	Pack	Outer	Cat.
3537.01.00*	1/8"	1	1	22.01
3537.02.00**	1/4"	1	1	22.01

*Suitable for connection with series 619 Balanflow balancing valves

**Suitable for connection to ball valves with series 3465 water drain (refer to Sferika catalogue).



To be used to connect the capillary pipe of the series 3535 and 3536 differential pressure control and balancing valves to control wells with 1/8" or 1/4" connection.



Series 2961

Cap adjusting wrench.

It allows to adjust the flow rate to the desired value, by acting on the cartridge.

Such operation does not involve the valve.

Code	Pack	Outer	Cat.
2961.00.02	1	1	22.01



Specific accessory for automatic flow control valve and independent pressure control valve series 2873 and 2874.



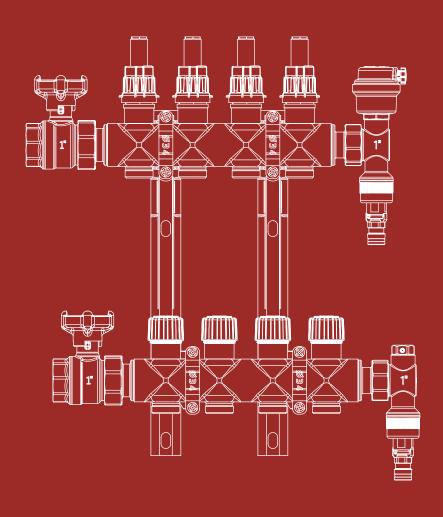
Accessory supplied with the digital meter code 3566.00.00



RBM03. CLIMATE COMFORT

GROUP		CATEGORY		LINE	
30.		30.01		Brass compact manifold kits	249
Radiant climate		Manifolds		Polymer compact manifold kits	253
control systems			248	1″1/4 manifold kits	256
			240	Manifold kits for large areas	257
				Manifold kits anticondensation	258
				Modular brass manifold kits	260
	30.02		Mixing and distribution units	267	
	Mixing and distribution units	266	Kilma Basic 2 mixing unit	278	
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	246	30.03 Housing boxes	283	Housing boxes	284
		30.04 Insulating panels	290	Insulating panels	291
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		30.06 Piping	303	Polyethylene pipes	304
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		Accessories for radiant systems	308	Distribution accessories	318
	30.08 Temperature control	322	Thermostats, programmable thermostats and room humidity regulator	323	

03. CLIMATE COMFORT



30. RADIANT CLIMATE CONTROL SYSTEMS 30.01 MANIFOLDS 248 Brass compact manifold kits Polymer compact manifold kits 1"1/4 manifold kits Manifold kits for large areas Manifold kits anticondensation Modular brass manifold kits 266 **30.02 MIXING AND DISTRIBUTION UNITS** Mixing and distribution units Kilma Basic 2 mixing uNIT Kilma Easy 2 mixing unit 283 **30.03 HOUSING BOXES** Housing boxes **30.04 INSULATING PANELS** 290 Insulating panels **30.05 DRY INSULATING PANEL** 293 Kilma Futura **30.06 PIPING** 303 Polyethylene pipes **30.07 ACCESSORIES FOR RADIANT SYSTEMS** 308 Accessories for radiant systems Distribution accessories 323 30.08 TEMPERATURE CONTROL

Thermostats, programmable thermostats and room humidity regulator

03. CLIMATE COMFORT

30. RADIANT CLIMATE CONTROL SYSTEMS

30.01 MANIFOLDS 249

Brass compact manifold kits

Polymer compact manifold kits

1"1/4 manifold kits

Manifold kits for large areas

Manifold kits anticondensation

Modular brass manifold kits



Brass compact manifold kit.

Each kit contains:

 $n^{\circ}\,1$ multi-way manifold unit complete with flow meters with lockshield and flow indicator function;

 $n^{\circ}\,1$ multi-way manifold unit complete with valves with thermostatic option with hand wheel;

1 pair of plastic brackets for fixing manifolds.

- Temperature range $0 \div 80 \, ^{\circ}\text{C}$
- Max operating pressure 10 Bar

Code	Measure	Ways	Pack	Outer	Cat.
608.26.10	1"	2+2	1	1	30.01
608.06.10	1"	3+3	1	1	30.01
609.06.10	1"	4+4	1	1	30.01
610.06.10	1"	5+5	1	1	30.01
611.06.10	1"	6+6	1	1	30.01
612.06.10	1"	7+7	1	1	30.01
613.06.10	1"	8+8	1	1	30.01
614.06.10	1"	9+9	1	1	30.01
615.06.10	1"	10+10	1	1	30.01
616.06.10	1"	11+11	1	1	30.01
616.12.10	1"	12+12	1	1	30.01
616.13.10	1"	13+13	1	1	30.01
616.14.10	1"	14+14	1	1	30.01

 $Centre \ distance \ connections \ through \ 50 mm \ distribution - EUROCONUS\ G3/4"UNI-EN-ISO\ 228\ threading$



 $\label{lem:main_section} Manifold\ kit\ can\ be\ inserted\ in\ walls\ constructed\ in\ 8\ cm\ box,\ plastered.$ $\ Made\ up\ of\ flow\ meter\ supply\ indicator\ on\ each\ supply\ way.\ Loose\ packaged\ components.$

Use Euroconus fittings with G3/4" thread (see page 103) for pipe connection.

Series 2028.A



Code	Measure	Ways	Pack	Outer	Cat.
2028.06.10	1"	2+2	1	1	30.01
2029.06.10	1"	3+3	1	1	30.01
2030.06.10	1"	4+4	1	1	30.01
2031.06.10	1"	5+5	1	1	30.01
2032.06.10	1"	6+6	1	1	30.01
2033.06.10	1"	7+7	1	1	30.01
2034.06.10	1"	8+8	1	1	30.01
2035.06.10	1"	9+9	1	1	30.01
2036.06.10	1"	10+10	1	1	30.01
2037.06.10	1"	11+11	1	1	30.01
2038.06.10	1"	12+12	1	1	30.01
2038.13.10	1"	13+13	1	1	30.01
2038.14.10	1"	14+14	1	1	30.01

 $\it Kit including \ distribution \ way connections \ centre \ distance \ 50mm, thread \ EUROCONUS \ G3/4"UNI-EN-ISO \ 228$

$Brass\,compact\,manifold\,kit.$

Each kit contains:

 $n^{\circ}\,1$ multi-way manifold unit complete with flow meters with lockshield and flow indicator function;

 $n^{\circ}\,1$ multi-way manifold unit complete with valves with thermostatic option with hand wheel;

1 pair of plastic brackets for fixing manifolds;

n° 2 thermometers 0 \div 80 °C;

n° 2 union fittings;

1 x 1" air/water automatic discharge terminal unit;

n° 1 manual 1" air/water discharge terminal unit.

- Temperature range $0\div80\,^{\circ}\text{C}$
- Max operating pressure 10 Bar



 $\label{lem:main_section} Manifold\ kit\ can\ be\ inserted\ in\ walls\ constructed\ in\ 8\ cm\ box,\ plastered.$ Made up of flow meter supply indicator on each supply way. Loose packaged components.

 $Use \ \dot{E}uro conus \ fittings \ with G3/4" \ thread \ (seepage 103) \ for pipe \ connection.$ Composition that can be used in combination with mixing units.



Series 2028.C



Brass compact manifold kit.

- Temperature range 0 $\div 80\,^{\circ}\text{C}$
- Max operating pressure 10 Bar
- Each kit contains:
- $\,$ n° 1 multi-way manifold unit complete with flow meters with lockshield and flow indicator function;
- n° 1 multi-way manifold unit complete with valves with thermostatic option with hand wheel;
- 1 pair of plastic brackets for fixing manifolds;
- n° 2 1" ball valves with built-in thermometer 0÷80 °C;
- n° 2 union fittings;
- 1 x 1" air/water automatic discharge terminal unit;
- n° 1 manual 1" air / water discharge terminal unit.

Code	Measure	Ways	Pack	Outer	Cat.
Code	Measure	Ways	Pack	Outer	Cat.
2028.06.20	1"	2+2	1	1	30.01
2029.06.20	1"	3+3	1	1	30.01
2030.06.20	1"	4+4	1	1	30.01
2031.06.20	1"	5+5	1	1	30.01
2032.06.20	1"	6+6	1	1	30.01
2033.06.20	1"	7+7	1	1	30.01
2034.06.20	1"	8+8	1	1	30.01
2035.06.20	1"	9+9	1	1	30.01
2036.06.20	1"	10+10	1	1	30.01
2037.06.20	1"	11+11	1	1	30.01
2038.06.20	1"	12+12	1	1	30.01
2038.13.20	1"	13+13	1	1	30.01
2038.14.20	1"	14+14	1	1	30.01

Centre distance connections through 50mm distribution -EUROCONUS G3/4" UNI-EN-ISO 228 threading



 $Manifold\,kit\,can\,be\,inserted\,in\,walls\,constructed\,in\,8\,cm\,box, plastered.$

 $Made \, up \, of flow \, meter \, supply \, indicator \, on \, each \, supply \, way. \, Loose \, packaged$ components. Use Euroconus fittings with G3/4" thread (see page 103) for pipe connection.





Series 3784.A

Insulation casing for single manifold, made of expanded polyethylene half-bearings with external antiscratch coating.

Fire behaviour class I Density 33 kg/m³ Max operating temperature -40 \div +90 $^{\circ}\text{C}$

Code	Measure	Pack	Outer	Cat.
3784.10.10*	1"	1	1	30.01
3784.14.10**	1"	1	1	30.01

^{*} for 2-10 way manifolds

(i)

Can be coupled to 2028 series brass manifolds.



Series 3784.B

Insulation shell for terminal unit with series 449 automatic vent valve made from expanded polyethylene half-bearings with external anti-scratch coating.

Fire behaviour class I Density 33 kg/m³ Max operating temperature -40 \div +90 °C

Code	Measure	Pack	Outer	Cat.
3784.00.10	1"1/4	1	1	30.01



Can be coupled to terminal unit code 449.06.053.



Series 3784.C

Insulation shell for terminal unit with series 450 manual vent valve made from expanded polyethylene half-bearings with external anti-scratch coating.

Fire behaviour class I Density 33 kg/m³ Max operating temperature -40 \div +90 °C

Code	Measure	Pack	Outer	Cat.
3784.00.20	1"	1	1	30.01



Can be coupled to terminal unit code 450.06.053.





Series 3785

Insulation shell for series 67.A ball valve, made of expanded polyethylene half-bearings with external antiscratch coating.

Fire behaviour class I Density 33 kg/m³ Max operating temperature -40 ÷ +90 °C

Code	Measure	Pack	Outer	Cat.
3785.00.00	1"	1	1	30.01



^{**} for 11-14 way manifolds

COMPACT MANIFOLDS KIT

Polymer and brass for radiant climate control systems



Nickel-plated brass compact manifold kits



Technopolymer compact manifold kits



Space-saving: insertion in 80 mm thick boxes

Shut-off ball valves with built-in thermometer

Manual or automatic shut-off on-off of individual circuits

Micrometric control of the passing flow to balance the circuits

Easier system supply/discharge:

thanks to terminal valves 1

Direct reading on flow meter of flow rate value in transit on individual circuit

Flow meter with adjustment memory function (memory stop)

Manifold with micro-corrosion retention chamber:

allows purging of accumulated residues through the tap $oldsymbol{1}$

Attention to materials: RBM offers manifolds made of externally nickel-plated brass and/or technopolymer; high quality materials for maximum reliability over time; not subject to corrosion that can impair the functioning of the system, unlike steel manifolds

Made in one piece: no possibility of leakage (unlike those made from bar stock)

Built-in automatic venting valve



253

Series 1410.A



Compact polymer manifolds kit.

Each kit contains:

 $n^{\circ}\,1\,multi-way\,manifold\,unit\,complete\,with\,flow\,meters\,with\,lockshield$ and flow indicator function;

n° 1 multi-way manifold unit complete with valves with thermostatic option with hand wheel;

1 pair of plastic brackets for fixing manifolds.

- Temperature range $5 \div 80\,^{\circ}\text{C}$
- Max. operating pressure 8 Bar

Code	Measure	Ways	Pack	Outer	Cat.
1410.06.10	1"	2+2	1	1	30.01
1411.06.10	1"	3+3	1	1	30.01
1412.06.10	1"	4+4	1	1	30.01
1413.06.10	1"	5+5	1	1	30.01
1414.06.10	1"	6+6	1	1	30.01
1415.06.10	1"	7+7	1	1	30.01
1416.06.10	1"	8+8	1	1	30.01
1417.06.10	1"	9+9	1	1	30.01
1418.06.10	1"	10+10	1	1	30.01
1419.06.10	1"	11+11	1	1	30.01
1420.06.10	1"	12+12	1	1	30.01
1420.13.10	1"	13+13	1	1	30.01
1420.14.10	1"	14+14	1	1	30.01

 $Centre\,distance\,connections\,through\,50mm\,distribution\,-EUROCONUS\,G3/4"\,UNI-EN-ISO\,228$ threading



 $Manifold\,kit\,can\,be\,inserted\,in\,walls\,constructed\,in\,8\,cm\,box, plastered.$ $Flow\,meter\,supply\,indicator\,on\,each\,supply\,way.$ Use Euroconus fittings with G3/4" thread (see page 103) for pipe connection.



Warning: branch pipe fittings tightened to max torque of 30Nm.

Series 1410.B



Compact polymer manifolds kit.

Each kit contains:

 $n^{\circ}\,1\,multi-way\,manifold\,unit\,complete\,with\,flow\,meters\,with\,lockshield$ and flow indicator function;

 $n^{\circ}\,1$ multi-way manifold unit complete with valves with thermostatic option with hand wheel;

1 pair of plastic brackets for fixing manifolds; 2 thermometers 0-80 $^{\circ}$ C; n° 2 union fittings;

 $1\,x\,1"\,air/\,water\,automatic\,discharge\,terminal\,unit;$

 n° 1 manual 1" air / water discharge terminal unit.

- Temperature range $5 \div 80\,^{\circ}\text{C}$
- Max. operating pressure 8 Bar

Code	Measure	Ways	Pack	Outer	Cat.
1410.06.40	1"	2+2	1	1	30.01
1411.06.40	1"	3+3	1	1	30.01
1412.06.40	1"	4+4	1	1	30.01
1413.06.40	1"	5+5	1	1	30.01
1414.06.40	1"	6+6	1	1	30.01
1415.06.40	1"	7+7	1	1	30.01
1416.06.40	1"	8+8	1	1	30.01
1417.06.40	1"	9+9	1	1	30.01
1418.06.40	1"	10+10	1	1	30.01
1419.06.40	1"	11+11	1	1	30.01
1420.06.40	1"	12+12	1	1	30.01
1420.13.40	1"	13+13	1	1	30.01
1420.14.40	1"	14+14	1	1	30.01

 $Centre\,distance\,connections\,through\,50mm\,distribution\,-EUROCONUS\,G3/4"\,UNI-EN-ISO\,228$ threading



Manifold kit can be inserted in walls constructed in 8 cm box, plastered. Flow meter supply indicator on each supply way.

Use Euroconus fittings with G3/4" thread (see page 103) for pipe connection. Composition that can be used in combination with mixing units.



Warning: branch pipe fittings tightened to max torque of 30Nm.



Series 1410.D



Compact polymer manifolds kit.

Each kit contains:

 $n^\circ\,1\,multi-way\,manifold\,unit\,complete\,with\,flow\,meters\,with\,lockshield$ and flow indicator function;

n° 1 multi-way manifold unit complete with valves with thermostatic option with hand wheel;

1 pair of plastic brackets for fixing manifolds;

n° 2 1" ball valves with built-in thermometer 0÷80 °C;

 $n^{\circ}\,2\,union\,fittings;$

1 x 1" air/water automatic discharge terminal unit; n° 1 manual 1" air/water discharge terminal unit.

- Temperature range 5÷80 °C
- $\bullet \ \ \mathsf{Max.operating} \ \mathsf{pressure} \ \mathsf{8} \ \mathsf{Bar}$

Code	Measure	Ways	Pack	Outer	Cat.
1410.06.20	1"	2+2	1	1	30.01
1411.06.20	1"	3+3	1	1	30.01
1412.06.20	1"	4+4	1	1	30.01
1413.06.20	1"	5+5	1	1	30.01
1414.06.20	1"	6+6	1	1	30.01
1415.06.20	1"	7+7	1	1	30.01
1416.06.20	1"	8+8	1	1	30.01
1417.06.20	1"	9+9	1	1	30.01
1418.06.20	1"	10+10	1	1	30.01
1419.06.20	1"	11+11	1	1	30.01
1420.06.20	1"	12+12	1	1	30.01
1420.13.20	1"	13+13	1	1	30.01
1420.14.20	1"	14+14	1	1	30.01

Centre distance connections through 50mm distribution -EUROCONUS G3/4" UNI-EN-ISO 228 threading



 $Manifold\,kit\,can\,be\,inserted\,in\,walls\,constructed\,in\,8\,cm\,box, plastered.$ $Flow \, rate \, indicator \, flow \, meters \, on \, each \, supply \, way, \, air \, vent \, valves. \, Loose \,$ $packaged\,components.$

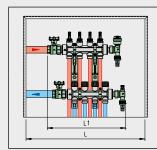
Use Euroconus fittings with G3/4" thread (see page 103) for pipe connection.



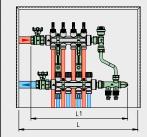
 $Warning: branch\ pipe\ fittings\ tightened\ to\ max\ torque\ of\ 30Nm.$



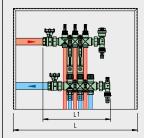
MANIFOLDS COUPLING 1" / HOUSING BOXES



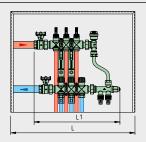
	POLYMER ANTI CONDENSATION MANIFOLDS WITH RELIEF VALVE 1410 series											
2	3	4	5	6	7	8	9	10	11	12	13	14
L1 (mm) 285	L1 (mm) 335	L1 (mm) 385	L1 (mm) 435	L1 (mm) 485	L1 (mm) 535	L1 (mm) 585	L1 (mm) 635	L1 (mm) 685	L1 (mm) 795	L1 (mm) 845	L1 (mm) 895	L1 (mm) 945
_	L=400 Cod. 2606.40.02					L=800 Cod. 2606.80.02				L=1 Cod. 26 0	000 06.10.02	
	L=550 Cod. 1972.55.00 *					L=700 . 1972.7 0	.00*		350 2.85.00 *		NAVAILA QUICKBC	



	POLYMER ANTI CONDENSATION MANIFOLDS WITH BY-PASS 1410 series												
2	3	4	5	6	7	8	9	10) 11 12 13				
L1 (mm) 370	L1 (mm) 420	L1 (mm) 470	L1 (mm) 520	L1 (mm) 570	L1 (mm) 620	L1 (mm) 670	L1 (mm) 720	L1 (mm) 770	L1 (mm) 880	L1 (mm) 930	L1 (mm) 980		
						300 06.80.02			L=10 Cod. 26 0				
L=550 Cod. 1972.55.00 * Cod.			L=700 I. 1972.70	.00*	Cod	L=850 l. 1972.85	.00*	-	NAVAILAB QUICKBO)				



	BRASS MULTI-ZONE MODULAR MANIFOLDS WITH RELIEF VALVES 608 - 2028 series											
2	3	4	5	6	6 7 8 9 10 11 12 13 14							14
L1 (mm) 280	L1 (mm) 330	L1 (mm) 380	L1 (mm) 430	L1 (mm) 480	L1 (mm) 530	L1 (mm) 580	L1 (mm) 630	L1 (mm) 680	L1 (mm) 745	L1 (mm) 795	L1 (mm) 845	L1 (mm) 895
_	L=400 Cod. 2606.40.02					L=800 Cod. 2606.80.02					000 06.10.02	
	L=550 Cod. 1972.55.00 *					L=700 . 1972.7 0	.00*	L=8 Cod. 197	350 2.85.00 *		NAVAILA QUICKBO	



	BRASS MULTI-ZONE MODULAR MANIFOLDS WITH BY-PASS 608 - 2028 series												
2	3	4	5	6	7	8	9	10	11 12 13				
L1 (mm) 365	L1 (mm) 415	L1 (mm) 465	L1 (mm) 515	L1 (mm) 565	L1 (mm) 615	L1 (mm) 665	L1 (mm) 715	L1 (mm) 765	L1 (mm) 830	L1 (mm) 880	L1 (mm) 930		
						800 L=10 06.80.02 Cod. 260							
L=550 Cod. 1972.55.00* Cod.				L=700 l. 1972.70	.00*	Cod	L=850 I. 1972.85	.00*		IAVAILAB QUICKBOX			

 $[\]hbox{^* To house the manifolds in the Quickbox box it is necessary to use the dedicated brackets, supplied with the box}\\$



Code	Measure	Ways	Pack	Outer	Cat.
279.07.00	1"1/4	3+3	1	1	30.01
280.07.00	1"1/4	4+4	1	1	30.01
281.07.00	1"1/4	5+5	1	1	30.01
282.07.00	1"1/4	6+6	1	1	30.01
283.07.00	1"1/4	7+7	1	1	30.01
284.07.00	1"1/4	8+8	1	1	30.01
285.07.00	1"1/4	9+9	1	1	30.01
286.07.00	1"1/4	10+10	1	1	30.01
287.07.00	1"1/4	11+11	1	1	30.01
288.07.00	1"1/4	12+12	1	1	30.01

 $Centre \ distance \ connections \ through 50 mm \ distribution - EUROCONUS\ G3/4"UNI-EN-ISO\ 228\ threading$

1"1/4 manifolds kit

Each kit consists of: (loose pieces)

- n° 1 Manifold kit (depending on the required measurement)
- n° 1 Air vent valve with 1"1/4 side attachment code 216.07.60
- n° 1 manual discharge unit code. 450.07.00
- n° 2 Ball valves with 1"1/4 fitting code 67.07.02
- n° 1 pair of Ø 40 thermometers code 303.04.00
- n° 2 1"1/4 connection fittings code 96.07.00
- n° 3 or more 3/4" straight lockshields (EUROCONUS) code 215.05.50 (depending on the manifold outputs)
- n° 3 or more 3/4" straight valves with thermostatic option (EUROCONUS) code 267.05.50 (depending on the manifold outputs)



Use RBM fittings with Euroconus G3/4" thread for pipe connection.



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Series 1349



Kilma High Flow 2" manifolds kit.

Each kit consists of: (pre-assembled pieces) n° 2 Manifolds (composition based on request)

 $n^{\circ}\,2\,metal\,clamping\,brackets\,with\,relative\,clamping\,screws\,and$ vibration-damping supports.
Ball shut-off valves for each distribution way.

 $n^\circ\,1\,Air\,vent\,valve$

n° 1 Manual air discharge, system loading unit.

Code	Measure	Ways	Pack	Outer	Cat.
1348.09.02	2"	4+4	1	1	30.01
1349.09.02	2"	5+5	1	1	30.01
1350.09.02	2"	6+6	1	1	30.01
1351.09.02	2"	7+7	1	1	30.01
1352.09.02	2"	8+8	1	1	30.01
1353.09.02	2"	9+9	1	1	30.01
1354.09.02	2"	10+10	1	1	30.01
1355.09.02	2"	11+11	1	1	30.01
1356.09.02	2"	12+12	1	1	30.01
1357.09.02	2"	13+13	1	1	30.01
1358.09.02	2"	14+14	1	1	30.01

 $Distribution \, way \, connections, centre \, distance \, 70 \, mm - G \, 1"M \, thread$

Use RBM fittings with G1" thread for pipe connection.



Series 1002.A



Kit for modular manifolds in anti-condensation polymer

Each kit consists of: (pre-assembled components)

 $n^{\circ}\,1$ multi-way manifold unit complete with micrometric lockshield valves with graduated handwheel;

 $n^{\circ}\,1$ multi-way manifold unit complete with valves with thermostatic option with hand wheel;

1 pair of plastic brackets for fixing manifolds.

- Temperature range 5÷80 °C
- Max. operating pressure 8 Bar

Code	Measure	Ways	Pack	Outer	Cat.
1002.06.60	1"	2+2	1	1	30.01
1003.06.60	1"	3+3	1	1	30.01
1004.06.60	1"	4+4	1	1	30.01
1005.06.60	1"	5+5	1	1	30.01
1006.06.60	1"	6+6	1	1	30.01
1007.06.60	1"	7+7	1	1	30.01
1008.06.60	1"	8+8	1	1	30.01
1009.06.60	1"	9+9	1	1	30.01
1010.06.60	1"	10+10	1	1	30.01
1011.06.60	1"	11+11	1	1	30.01
1012.06.60	1"	12+12	1	1	30.01
1013.06.60	1"	13+13	1	1	30.01

 $Centre \ distance \ connections \ through 50 mm \ distribution - EUROCONUS\ G3/4"UNI-EN-ISO\ 228\ threading$

Patent nr. 262005



Adjustable lockshield valves with graduated hand wheel.
Manifolds with internal cavities with thermal insulation and anticondensation functions.
Use RBM fittings with Euroconus G3/4" thread for pipe connection.



Warning: branch pipe fittings tightened to max torque of 30Nm.

Series 1002.B



Kit for modular manifolds in anti-condensation polymer

Each kit consists of: (pre-assembled components)

 $n^{\circ}\,1$ multi-way manifold unit complete with flow meters with lockshield and flow indicator function;

 $n^{\circ}\,1$ multi-way manifold unit complete with valves with thermostatic option with hand wheel;

1 pair of plastic brackets for fixing manifolds.

- Temperature range 5÷80 °C
- Max. operating pressure 8 Bar

1002.06.10	4.11				Cat.
1002.00.10	1"	2+2	1	1	30.01
1003.06.10	1"	3+3	1	1	30.01
1004.06.10	1"	4+4	1	1	30.01
1005.06.10	1"	5+5	1	1	30.01
1006.06.10	1"	6+6	1	1	30.01
1007.06.10	1"	7+7	1	1	30.01
1008.06.10	1"	8+8	1	1	30.01
1009.06.10	1"	9+9	1	1	30.01
1010.06.10	1"	10+10	1	1	30.01
1011.06.10	1"	11+11	1	1	30.01
1012.06.10	1"	12+12	1	1	30.01
1013.06.10	1"	13+13	1	1	30.01

 $Centre \ distance \ connections \ through \ 50 mm \ distribution - EUROCONUS\ G3/4"UNI-EN-ISO\ 228\ threading$

Patent nr. 262005



 $Supply indicator flow \, meters \, on \, each \, supply \, way.$

 $\label{lem:mainsulation} Manifolds with internal cavities with thermal insulation and anti-condensation functions.$

Use Euroconus fittings with G3/4" thread (see page 103) for pipe connection.



 $Warning: branch\ pipe\ fittings\ tightened\ to\ max\ torque\ of\ 30Nm.$



Series 1002.C



Kit for modular m	anifolds in a	nti-condensa	tion nolymer

Each kit contains:

 $n^\circ\,1\,multi-way\,manifold\,unit\,complete\,with\,flow\,meters\,with\,lockshield$ and flow indicator function;

n° 1 multi-way manifold unit complete with valves with thermostatic option with hand wheel;

1 pair of plastic brackets for fixing manifolds;

n° 21" ball valves with built-in thermometer 0÷80°C;

n° 2 union fittings;

n° 1 automatic 1" air/water discharge terminal unit.

n° 1 manual 1" air/water discharge terminal unit.

- Temperature range 5÷80 °C
- Max. operating pressure 8 Bar

Code	Measure	Ways	Pack	Outer	Cat.
1002.06.40	1"	2+2	1	1	30.01
1003.06.40	1"	3+3	1	1	30.01
1004.06.40	1"	4+4	1	1	30.01
1005.06.40	1"	5+5	1	1	30.01
1006.06.40	1"	6+6	1	1	30.01
1007.06.40	1"	7+7	1	1	30.01
1008.06.40	1"	8+8	1	1	30.01
1009.06.40	1"	9+9	1	1	30.01
1010.06.40	1"	10+10	1	1	30.01
1011.06.40	1"	11+11	1	1	30.01
1012.06.40	1"	12+12	1	1	30.01
1013.06.40	1"	13+13	1	1	30.01

Centre distance connections through 50mm distribution -EUROCONUS G3/4" UNI-EN-ISO 228

Patent nr. 262005

Supply indicator flow meters on each supply way. Manifolds with internal cavities with thermal insulation and anti-

condensation functions.

Use RBM fittings with G3/4" Euroconus thread for pipe connection (217M.A and 224M.A series)



Warning: branch pipe fittings tightened to max torque of 30Nm.



Series 3202.B



$\label{lem:modular brass manifold kit with a 37 mm centre-to-centre distance$

Each kit contains:

 $n^{\circ}\,1$ multi-way manifold unit complete with flow meters with lockshield and flow indicator function;

 $n^{\circ}\,1$ multi-way manifold unit complete with valves with thermostatic option with hand wheel;

n° 1 pair of steel brackets for mounting manifolds;

n° 2 thermometers 0÷80°C;

 $1\,x\,1"\,air/\,water\,automatic\,discharge\,terminal\,unit;$

n° 1 manual 1" air / water discharge terminal unit.

- Temperature range 0÷80 °C
- Max operating pressure 10 Bar

Code	Manager	Wassa	Dools	Outon	Cat
Code	Measure	Ways	Pack	Outer	Cat.
3202.06.10	1"	2+2	1	1	30.01
3203.06.10	1"	3+3	1	1	30.01
3204.06.10	1"	4+4	1	1	30.01
3205.06.10	1"	5+5	1	1	30.01
3206.06.10	1"	6+6	1	1	30.01
3207.06.10	1"	7+7	1	1	30.01
3208.06.10	1"	8+8	1	1	30.01
3209.06.10	1"	9+9	1	1	30.01
3210.06.10	1"	10+10	1	1	30.01
3211.06.10	1"	11+11	1	1	30.01
3212.06.10	1"	12+12	1	1	30.01
3213.06.10	1"	13+13	1	1	30.01
3214.06.10	1"	14+14	1	1	30.01

 $Centre distance \ between \ connections \ via \ distribution \ manifolds \ 37 \ mm-threading \ Standard \ RBM \ W24,5x19F$



Manifold kit can be inserted in walls constructed in 8 cm box, plastered. Made up of flow meter supply indicator on each supply way. Use fittings with RBM Standard thread for pipe connection. Set up RBM Series 3189 thermo-electric actuators to automatically shut off the single circuits.



Series 3201.C

Modular brass complete with valves with thermostatic option and manual handwheel.

- Temperature range 0 100 °C
- Max operating pressure 10 Bar

Code	Measure	Ways	Pack	Outer	Cat.
3201.06.30	1"	1	1	10	30.01
3202.06.30	1"	2	1	10	30.01
3203.06.30	1"	3	1	10	30.01
3204.06.30	1"	4	1	10	30.01
3205.06.30	1"	5	1	10	30.01

 $Centre \ distance \ between \ connections \ via \ distribution \ manifolds \ 37 \ mm-threading \ Standard \ RBMW24,5x19F$



Use fittings with RBM Standard thread for pipe connection. Available thermal insulation shell accessory cod. 3674.X0.02



Series 3248

Pair of steel brackets with collar for the aligned fixing of the series 3201 - 3202 brass modular manifolds.

Code	Pack	Outer	Cat.
3248.06.00	1	10	30.01



Suitable for RBM housing boxes cod. 2606.x0.02. Provided as standard in 3202 series modular brass manifolds kits.





Series 3201.A

Modular manifold, complete with flow meters, with lockshield and flow indicator function.

- Temperature range 0 80 °C
- Max operating pressure 10 Bar

Code	Measure	Ways	Pack	Outer	Cat.
3201.06.00	1"	1	1	10	30.01
3202.06.00	1"	2	1	10	30.01
3203.06.00	1"	3	1	10	30.01
3204.06.00	1"	4	1	10	30.01
3205.06.00	1"	5	1	10	30.01

 $Centre\ distance\ between\ connections\ via\ distribution\ manifolds\ 37\ mm-threading\ Standard\ RBM\ W24,5x19F$



 $Use fittings with RBM Standard thread for pipe connection. \\ Available thermal insulation shell accessory cod. 3674.X0.02$



Series 8647

Thermometer for 3615, 3201, 3202 series manifold kit

• Thermometer scale $0 \div 80^{\circ}C$

Code	Pack	Outer	Cat.
864.70.05	1	1	30.01



Series 3201.B

Modular manifold complete with micrometric lockshield regulating valves with graduated handwheel.

- Temperature range 0 100 °C
- Max operating pressure 10 Bar

Code	Measure	Ways	Pack	Outer	Cat.
3201.06.20	1"	1	1	10	30.01
3202.06.20	1"	2	1	10	30.01
3203.06.20	1"	3	1	10	30.01
3204.06.20	1"	4	1	10	30.01
3205.06.20	1"	5	1	10	30.01

 $Centre\ distance\ between\ connections\ via\ distribution\ manifolds\ 37\ mm-threading\ Standard\ RBM\ W24,5x19F$



Use fittings with RBM Standard thread for pipe connection. Available thermal insulation shell accessory cod. 3674.X0.02



Series 3615R



3615R0300 1" 3+3 1 3615R400 1" 4+4 1 3615R5300 1" 5+5 1 3615R600 1" 6+6 1 3615R700 1" 7+7 1	30.01
3615R5300 1" 5+5 1 3615R600 1" 6+6 1	
3615R600 1" 6+6 1	30.01
	30.01
3615R700 1" 7+7 1	30.01
	30.01
3615R800 1" 8+8 1	30.01
3615R900 1" 9+9 1	30.01
3615R1000 1" 10+10 1	30.01
3615R1100 1" 11+11 1	30.01
3615R1200 1" 12+12 1	30.01
3615R1300 1" 13+13 1	30.01
3615R1400 1" 14+14 1	30.01

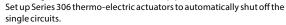
 $Centre \ distance \ between \ connections \ via \ distribution \ manifolds \ 37 \ mm-threading \ Standard \ RBM \ W24,5x19F$

KILMA-ZONE

Multi-zone brass modular manifolds kit.

- Temperature range 0÷80 °C
- Max operating pressure 10 Bar
- · Each kit contains:
- n° 1 multi-way manifold unit complete with flow meters with lockshield and flow indicator function;
- n° 1 pair of steel brackets for mounting manifolds;
- n° 2 thermometers 0÷80 °C;
- 1 x 1" air / water automatic discharge terminal unit;
- n° 1 manual 1" air / water discharge terminal unit.

Manifold kit can be inserted in walls constructed in 8 cm box, plastered. Made up of flow meter supply indicator on each supply way. Use fittings with RBM Standard thread for pipe connection.



Provide for manifold with thermostatically-controlled valves Series 3616 (compulsory completion accessory to be chosen according to circuit management configuration).



Series 3215

Air and water automatic discharge terminal.

Standard installation on the delivery line of modular brass manifold kits.

 Pressure gauge holder connection G 1/8" (for RBM Ø 40 radial pressure gauge - scale 0 - 16 bar - Code 7469.005)

Code	Measure	Pack	Outer	Cat.
3215.06.50	1"	1	10	30.01



Pressure gauge holder connection G 1/8" (for RBM Ø 40 radial pressure gauge - scale 0 - 16 bar - Code 7469.005) Available thermal insulation shell accessory cod. 3672.00.02





 $Air and \, water \, manual \, discharge \, terminal.$

Standard installation on return line of modular brass manifold kits.

 Pressure gauge holder connection G 1/8" (for RBM Ø 40 radial pressure gauge - scale 0 - 16 bar - Code 7469.005)

Code	Measure	Pack	Outer	Cat.
3216.06.50	1"	1	10	30.01

(i)

Pressure gauge holder connection G 1/8" (for RBM Ø 40 radial pressure gauge - scale 0 - 16 bar - Code 7469.005) Available thermal insulation shell accessory cod. 3674.10.02



Series 3217

By-pass group with rotatable elbow fittings for the system filling.

It consists of (loose pieces): Automatic air vent; By-pass adjustment group; Fittings and connection pipe.

 Pressure gauge holder connection G 1/8" (for RBM ø 40 axial pressure gauge - scale 0 - 10 bar -Code 832.005)

Code	Measure	Pack	Outer	Cat.
3217.06.00	1"	1	10	30.01



It allows for by-pass fixed adjustment.



Series 3672.A

Insulation shell for manual air and water discharge terminal unit series 3216 made of expanded polyethylene half-bearings with external anti-scratch coating.

 $\label{lem:half-bearings} Half-bearings fixed with double-sided adhesive tape already applied.$

- Max temperature application -40 $^{\circ}$ C \div +90 $^{\circ}$ C
- Fire behaviour class I
- Density 33 Kg/m³

Code	Pack	Outer	Cat.
3672.10.02	1	1	30.01



Series 3672.B

Insulation shell for automatic air and water discharge terminal unit made from expanded polyethylene half-bearings with external anti-scratch coating.

 $\label{lem:half-bearings} Half-bearings fixed with double-sided adhesive tape already applied.$

- Max temperature application -40 $^{\circ}$ C \div +90 $^{\circ}$ C
- Fire behaviour class I
- Density 33 Kg/m³

Code	Pack	Outer	Cat.
3672.00.02	1	1	30.01





Insulation shell for modular brass manifold with thermostatically-controlled valve series 3616, made of expanded polyethylene half-bearings with external anti-scratch coating.

Half-bearings fixed with double-sided adhesive tape already applied.

- Max temperature application -40 $^{\circ}$ C \div +90 $^{\circ}$ C
- Fire behaviour class I
- Density 33 Kg/m³

Code	Ways	Pack	Outer	Cat.
3673.10.02	1	1	1	30.01
3673.20.02	2	1	1	30.01
3673.30.02	3	1	1	30.01
3673.40.02	4	1	1	30.01
3673.50.02	5	1	1	30.01

 \bigcirc

Insulation can be combined with 3616 series manifold.



Series 3674

Insulation shell for manifold with flow meters or manifold with micrometric lockshield valves, made of expanded polyethylene half-bearings with external anti-scratch coating.

 $\label{lem:half-bearings} Half-bearings fixed with double-sided adhesive tape already applied.$

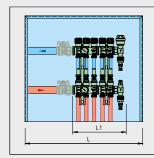
- Max temperature application -40 $^{\circ}$ C \div +90 $^{\circ}$ C
- Fire behaviour class I
- Density 33 Kg/m³

Code	Ways	Pack	Outer	Cat.
3674.10.02	1	1	1	30.01
3674.20.02	2	1	1	30.01
3674.30.02	3	1	1	30.01
3674.40.02	4	1	1	30.01
3674.50.02	5	1	1	30.01

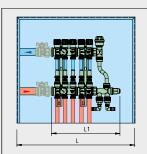


MANIFOLD/HOUSING BOX COUPLING

COMPOSITION WITH RELIEF VALVES



			NAC		DACC MA	MIFOLD	CWITLED		\/C!-	- 2202			
MODULAR BRASS MANIFOLDS WITH RELIEF VALVE series 3202													
	2	3	4	5	6	7	8	9	10	11	12	13	14
	L1 (mm) 133	L1 (mm) 170	L1 (mm) 207	L1 (mm) 247	L1 (mm) 284	L1 (mm) 321	L1 (mm) 358	L1 (mm) 398	L1 (mm) 435	L1 (mm) 472	L1 (mm) 509	L1 (mm) 549	L1 (mm) 586
	BOX L=400 Code 2606.40.02 Code 3834R.40.12				BOX L=600 Code 2606.60.02 Code 3834R.60.12					Cod	SING BOX I de 2606.80 le 3834R.8 0	.02	
	BOX L=550 Code 1972.55.00					Со	BOX L=70 de 1972.7 0						



	MODULAR BRASS MANIFOLDS WITH BY-PASS series 3202											
2	3	4	5	6	7	8	9	10	11	12	13	14
L1 (mm) 208	L1 (mm) 245	L1 (mm) 282	L1 (mm) 322	L1 (mm) 359	L1 (mm) 396	L1 (mm) 433	L1 (mm) 473	L1 (mm) 510	L1 (mm) 547	L1 (mm) 584	L1 (mm) 624	L1 (mm) 661
BOX L=400 BOX L=600 Code 2606.40.02 Code 2606.6 Code 3834R.40.12 Code 3834R.6			0.02					BOX L=800 06.80.02 34R.80.12)			
BOX L=550 Code 1972.55.00						Cod	BOX L=70 de 1972.70					

80 mm clearance was already considered for the installation of an accessory shut-off valve to define the coupling of the manifolds/housing boxes kit.

GUIDE TO THE CHOICE OF INSULATING CASING FOR MANIFOLD KIT SERIES 3202

The choice of insulating casings to insulate the manifold kit must be carried out according to the precise configuration of the single modules that comprise the delivery and return manifold kit. Refer to the table below for the correct codes to order.

No. of manifold kit branches	Module composition	Supply and return manifold insulation codes	Drain units insulation codes
3	3	3674.30.02 (2 pcs)	3672.00.02 + 3672.10.02
4	4	3674.40.02 (2 pcs)	3672.00.02 + 3672.10.02
5	5	3674.50.02 (2 pcs)	3672.00.02 + 3672.10.02
6	3+3	3674.30.02 (4 pcs)	3672.00.02 + 3672.10.02
7	3+4	3674.30.02 (2 pcs) + 3674.40.02 (2 pcs)	3672.00.02 + 3672.10.02
8	4+4	3674.40.02 (4 pcs)	3672.00.02 + 3672.10.02
9	5+4	3674.50.02 (2 pcs) + 3674.40.02 (2 pcs)	3672.00.02 + 3672.10.02
10	5+5	3674.50.02 (4pcs)	3672.00.02 + 3672.10.02
11	3+4+4	3674.30.02 (2 pcs) + 3674.40.02 (4 pcs)	3672.00.02 + 3672.10.02
12	4+4+4	3674.40.02 (6 pcs)	3672.00.02 + 3672.10.02
13	5+4+4	3674.50.02 (2 pcs) + 3674.40.02 (4 pcs)	3672.00.02 + 3672.10.02
14	5+5+4	3674.50.02 (4 pcs) + 3674.40.02 (2 pcs)	3672.00.02 + 3672.10.02

03. CLIMATE COMFORT

30. RADIANT CLIMATE CONTROL SYSTEMS

30.02 MIXING AND DISTRIBUTION UNITS

267

Mixing and distribution units Kilma Basic 2 mixing uNIT Kilma Easy 2 mixing unit

267



Series 782.A

KILMA-EVO-RM-AT Climate mixing unit Kilma-EVO-RM AT

Mixing and distribution unit for low and high temperature circuits, comprised of: H.T. manifold, circulation pump, manifold recirculation by-pass and mixing unit in-one; modulating adjustment $using injection \, unit \, with \, servo motor, electronic$ $climatic\,control\,unit, safety\,thermostat, external$ $probe, immersed \, internal \, probe \, (low \, temperature \,$

- · System side connection centre distance 90 mm, G 3/4" ball valve connections.
- · Centre distance of connections on the diverter line of the high temperature manifold 45 mm, Euroconus G 3/4" threaded connections

Code	Pump	Pack	Outer	Cat.
782.06.51	Para 15/7 SC 130	1	1	30.02

High performance adjustable flow pump EEI<0.23 - ERP 622/2012

Use RBM fittings with Euroconus G3/4" thread for connection to the H.T. manifold.

For matching manifolds, please refer to the Manifolds category in the RBM catalogue. Provide for assemblies without ball shut-off valves.

> Minimum recessed depth of the accessory containment metal case 130 mm.



Series 782.B

KILMA-EVO-RF-AT Fixed Point mixing unit Kilma-EVO-RF AT high performance adjustable flow pump EEI<0.23 - ERP 622/2012

Mixing and distribution unit for low and high temperature circuits, comprised of: H.T. manifold, circulation pump, manifold recirculation by-pass and mixing unit in-one; fixed value adjustment, using injection valve with thermostatic head with internal probe (low temperature delivery), immersed safety thermostat.

- System side connection centre distance 90 mm, G 3/4" ball valve connections.
- Centre distance of connections on the diverter line of the high temperature manifold 45 mm, Euroconus G 3/4" threaded connections

Code	Pump	Pack	Outer	Cat.
782.06.61	Para 15/7 SC 130	1	1	30.02

Use RBM fittings with Euroconus G3/4" thread for connection to the H.T. manifold.

For matching manifolds, please refer to the Manifolds category in the RBM catalogue. Provide for assemblies without ball

> $Minimum\, recessed\, depth\, of\, the\, accessory\, containment\, metal$ case 130 mm.



Series 701.A

KILMA-ECO-RF-AT Fixed Point mixing unit Kilma-**ECONBLOCK RF-AT series.**

Mixing and distribution unit for low and high temperature circuits, comprised of: H.T. manifold, circulation pump, mixing manifold, including non-return valve and control return unit: fixed value adjustment using injection valve with thermostatic head with internal probe (low temperature delivery), immersed safety

- System side connection centre distance 90 mm, G 3/4" ball valve connections.
- · Centre distance of connections on the diverter line of the high temperature manifold 45 mm, Euroconus G 3/4" threaded connections

Code	Pump	Pack	Outer	Cat.
701 06 61	Dara 15/7 CC 130	1	1	30 03

high performance adjustable flow pump EEI<0.23 - ERP 622/2012

Use Euroconus fittings with G 3/4" thread (see page 318) to connect the pipe to the H.T. manifold.

For matching manifolds, refer to the Manifold kit section of this catalogue (see page 249). Provide for assemblies without ball shut-off valves.

Minimum recessed depth of the accessory containment metal case 130 mm.





Series 1531.A

KILMA-ECO-RF-AT Polymer Fixed Point mixing unit Kilma-ECONBLOCK RF-AT series in Polymer.

Mixing and distribution unit for low and high temperature circuits, comprised of: H.T. manifold, circulation pump, mixing manifold, including non-return valve and control return unit: fixed value adjustment using injection valve with thermostatic head with internal probe (low temperature delivery), immersed safety

- System side connection centre distance 111 mm, G 3/4" ball valve connections.
- · Centre distance between outlet connections for $high \, temperature \, 37 \, mm, Standard \, threaded$ RBM connections

Code	Pump	Pack	Outer	Cat.
1531.06.71	Para 15/7 SC 130	1	1	30.02

 $high \, per formance \, adjustable \, flow \, pump \, EEI < 0.23 - ERP \, 622/2012$

Use fittings with Standard RBM thread (see pg. 253) to connect the pipe to the H.T. manifold.



For matching manifolds, refer to the Manifold kit section of this $catalogue \, (see \, page \, 249). \, Provide \, for \, assemblies \, without \, ball \,$ shut-off valves.

Minimum recessed depth of the accessory containment metal case 130 mm.



Warning: branch pipe fittings tightened to max torque of 30Nm.



Series 770.A

KILMA-EVO-RM Climate mixing unit Kilma-EVO-RM

Mixing and distribution unit for low temperature circuits, comprised of: circulation pump, manifold recirculation by-pass, boiler recirculation by-pass and mixing unit in-one; modulating adjustment using injection unit with servomotor, electronic climatic control unit, safety thermostat, external probe, immersed internal probe (low temperature delivery).

 System side connection centre distance 111 mm. G 3/4" ball valve connections and thermostatic mixer.

Code	Pump	Pack	Outer	Cat.
770.06.51	Para 15/7 SC 130	1	1	30.02

high performance adjustable flow pump EEI<0.23 - ERP 622/2012



 $For matching \, manifolds, please \, refer \, to \, the \, Manifolds \, category \,$ in the RBM catalogue. Provide for assemblies without ball

 $Minimum\, recessed\, depth\, of\, the\, accessory\, containment\, metal$



Series 770.B

KILMA-EVO-RF Fixed Point mixing unit Kilma-EVO-RF

Mixing and distribution unit for low temperature circuits, comprised of: circulation pump, manifold recirculation by-pass, boiler recirculation by-pass and mixing unit in-one; fixed value adjustment using injection valve with thermostatic head with $internal\,probe\,(low\,temperature\,delivery)$ immersed safety thermostat.

• System side connection centre distance 111 mm, $G\,3/4"\,ball\,valve\,connections\,and\,thermostatic$ mixer.

Code	Pump	Pack	Outer	Cat.
770.06.61	Para 15/7 SC 130	1	1	30.02

high performance adjustable flow pump EEI<0.23 - ERP 622/2012



For matching manifolds, please refer to the Manifolds category in the RBM catalogue. Provide for assemblies without ball shut-off valves.

Minimum recessed depth of the accessory containment metal case 130 mm.





Series 701.B

KILMA-ECO-RF Fixed Point mixing unit Kilma-ECONBLOCK RF series.

Mixing and distribution unit for low temperature circuits, comprised of: circulation pump, mixing manifold, including non-return valve and control return unit; fixed value adjustment using injection valve with thermostatic head with internal probe (low temperature delivery), immersed safety thermostat.

• System side connection centre distance 111 mm, G 1/2" F connections.

Code	Pump	Pack	Outer	Cat.
701.06.51	Para 15/7 SC 130	1	1	30.02

high performance adjustable flow pump EEI<0.23 - ERP 622/2012



For matching manifolds, refer to the Manifold kit section of this catalogue (see page 249). Provide for assemblies without ball shut-off valves.

 $\label{lem:minimum} \mbox{Minimum recessed depth of the accessory containment metal case 130 \, mm.}$



Series 1531.B

KILMA-ECO-RF Polymer Fixed Point mixing unit KilmaECONBLOCK RF series in Polymer.

Mixing and distribution unit for low temperature circuits, comprised of: circulation pump, mixing manifold, including non-return valve and control return unit; fixed value adjustment using injection valve with thermostatic head with internal probe (low temperature delivery), immersed safety thermostat.

 System side connection centre distance 111 mm, G 1/2" M connections.

Code	Pump	Pack	Outer	Cat.
1531.06.51	Para 15/7 SC 130	1	1	30.02

high performance adjustable flow pump EEI<0.23 - ERP 622/2012



For matching manifolds, refer to the Manifold kit section of this catalogue (see page 249). Provide for assemblies without ball shut-off valves.

 $\label{lem:minimum} \mbox{Minimum recessed depth of the accessory containment metal case 130 mm.}$



Series 3523

Kilma-ECOMIX RF series Fixed Point mixing unit.

Mixing and distribution unit for low temperature circuits consisting of: circulation pump and thermostatic mixer.

• G 1" M system side connections.

ECOMIX RF 50 mixing unit

Code	Pump	Pack	Outer	Cat.
3523.06.51	Para 15/7 SC 130	1	1	30.02

high performance adjustable flow pump EEI<0.23 - ERP 622/2012 To be matched to manifolds with a 50 mm centre distance (see page 249)

ECOMIX RF 37 mixing unit

Code	Pump	Pack	Outer	Cat.
3523.06.37	Para 15/7 SC 130	1	1	30.02

high performance adjustable flow pump EEI<0.23 - ERP 622/2012 To be matched to manifolds with a 37 mm centre distance (series 3615 and 3202)



For matching manifolds, refer to the Manifold kit section of this catalogue (see page 249). Provide for assemblies without ball shut-off valves.

Minimum recessed depth of the accessory containment metal case 130 mm.



Series 782.C



KILMA-EVO-RM2 Climate Control Unit Kilma-Evo-RM2 series

Distribution unit for low and high temperature circuits consisting of: specific manifolds, circulation pump and mixing unit integrated together: modulating adjustment by means of injection unit with actuator, electronic climate mixing unit, safety thermostat, external probe, internal probe (low temperature delivery) with well, all housed in a recessed metal case with locking hatch; Including: supply control flow meters, thermostatically controlled valves on the return line, 1 automatic air vent valve/degasser, equipped with connection for system filling, 1 air manual discharge unit, system loading 2 shut-off ball valves, thermometers for reading delivery and return temperatures.

- Centre distance between attachments on the plant side 90 mm.
- Centre distance of connections on the diverter line of the high temperature manifold 45 mm, Euroconus G 3/4" threaded connections
- Centre distance of connections on the diverter line of the low temperature manifold 50 mm, Euroconus G 3/4" threaded connections

KILMA EVO-RM2

Code	Measure	Ways	Width (mm)	Height (mm)	Pack	Outer	Cat.
782.06.80	1"	3+3	800	700÷820	1	1	30.02
783.06.80	1"	4+4	800	700÷820	1	1	30.02
784.06.80	1"	5+5	800	700÷820	1	1	30.02
785.06.80	1"	6+6	800	700÷820	1	1	30.02
786.06.80	1"	7+7	1000	700÷820	1	1	30.02
787.06.80	1"	8+8	1000	700÷820	1	1	30.02
788.06.80	1"	9+9	1000	700÷820	1	1	30.02
789.06.80	1"	10+10	1200	700÷820	1	1	30.02
790.06.80	1"	11+11	1200	700÷820	1	1	30.02
790.12.80	1"	12+12	1200	700÷820	1	1	30.02
790.13.80	1"	13+13	1200	700÷820	1	1	30.02

high performance adjustable flow pump EEI<0.23 - ERP 622/2012

Available version is equipped with 3-way H.T. distribution manifold with thermostatically controlled valves and lockshield regulating valves. Ordering code becomes 1xxx.xx.xx (request price).

Box depth 110÷160 mm

Insulation casing

Code	Pack	Outer	Cat.
3705.00.02*	1	1	30.02
3705.00.12**	1	1	30.02

^{*}Specific insulation casing for mixing valve, circulator and well

^{**}Specific insulation casing for H.T. manifold.



The case size enables installation of the Bypass unit code 910.06.00 Use RBM fittings with Euroconus G3/4" thread for connection to the H.T. manifold.

Use RBM fittings with Euroconus G3/4" thread for connection to the L.T. manifold.



Series 782.D



KILMA EVO-RF2

Code	Measure	Ways	Width (mm)	Height (mm)	Pack	Outer	Cat.
782.06.90	1"	3+3	800	700÷820	1	1	30.02
783.06.90	1"	4+4	800	700÷820	1	1	30.02
784.06.90	1"	5+5	800	700÷820	1	1	30.02
785.06.90	1"	6+6	800	700÷820	1	1	30.02
786.06.90	1"	7+7	1000	700÷820	1	1	30.02
787.06.90	1"	8+8	1000	700÷820	1	1	30.02
788.06.90	1"	9+9	1000	700÷820	1	1	30.02
789.06.90	1"	10+10	1000	700÷820	1	1	30.02
790.06.90	1"	11+11	1200	700÷820	1	1	30.02
790.12.90	1"	12+12	1200	700÷820	1	1	30.02
790.13.90	1"	13+13	1200	700÷820	1	1	30.02

high performance adjustable flow pump EEI<0.23 - ERP 622/2012 Available version is equipped with 3-way H.T. distribution manifold with valves with thermostatic capacity and lockshield regulating valves. Order code becomes 1xxx.xx.xx. Box depth 110÷160 mm

Insulation casing

Code	Pack	Outer	Cat.
3705.00.02*	1	1	30.02

^{*}Specific insulation casing for mixing valve, circulator and well

KILMA-EVO-RF2 Fixed Point Control Unit Kilma-Evo-RF2 series

Control unit for low and high temperature circuits consisting of: Specific manifolds, circulation pump and injection unit integrated together; fixed value adjustment, by means of injection valve with thermostatic head, internal probe (low temperature delivery), safety thermostat with well, all housed in a recessed metal case with locking hatch; Including: supply control flow meters, thermostatically controlled valves on the return line, 1 automatic air vent valve / degasser, equipped with connections for system filling, 1 air manual discharge unit, system loading, 2 shut-off ball valves, thermometers for reading delivery and return temperatures.

- Centre distance between attachments on the plant side 90 mm.
- Centre distance of connections on the diverter line of the high temperature manifold 45 mm, Euroconus G 3/4" threaded connections
- Centre distance of connections on the diverter line of the low temperature manifold 50 mm, Euroconus G 3/4" threaded connections

The case size enables installation of the Bypass unit code 910.06.00 Use RBM fittings with Euroconus G3/4" thread for connection to the H.T. manifold.

Use RBM fittings with Euroconus G3/4" thread for connection to the L.T. manifold.





Series 770.C



Code	Measure	Ways	Width (mm)	Height (mm)	Pack	Outer	Cat.
770.06.80	1"	3+3	800	700÷820	1	1	30.02
771.06.80	1"	4+4	800	700÷820	1	1	30.02
772.06.80	1"	5+5	800	700÷820	1	1	30.02
773.06.80	1"	6+6	800	700÷820	1	1	30.02
774.06.80	1"	7+7	1000	700÷820	1	1	30.02
775.06.80	1"	8+8	1000	700÷820	1	1	30.02
776.06.80	1"	9+9	1000	700÷820	1	1	30.02
777.06.80	1"	10+10	1000	700÷820	1	1	30.02
778.06.80	1"	11+11	1200	700÷820	1	1	30.02
778.12.80	1"	12+12	1200	700÷820	1	1	30.02
778.13.80	1"	13+13	1200	700÷820	1	1	30.02

high performance adjustable flow pump EEI<0.23 - ERP 622/2012 Box depth 110÷160 mm

 $The FLUSH \textit{WALL version is available for the control units in the list with a 10\% surcharge.} \\ When placing the order, add FP to the end of each individual code.$

KILMA-EVO-RM4 Climate Control Unit Kilma-Evo-RM4 series

Control distribution unit for low temperature circuits consisting of: specific manifolds, circulation pump, boiler recirculating by-pass and mixing unit integrated together: modulating regulation by means of injection unit with actuator, electronic climate control unit, safety thermostat, external probe, internal probe (low temperature delivery) with well, all housed in a recessed metal case with locking hatch; Including: supply control flow meters, thermostatically controlled valves on the return line, 1 automatic air vent valve/degasser, equipped with connection for system filling, 1 air manual discharge unit, system loading, 2 shut-off ball valves, thermometers for reading delivery and return temperatures.

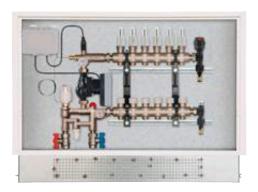
- Centre distance between attachments on the plant side 111 mm.
- Centre distance of connections on the diverter line of the low temperature manifold 50 mm, Euroconus G 3/4" threaded connections



The case size enables installation of the Bypass unit code 910.06.00 Use RBM fittings with Euroconus G3/4" thread for connection to the L.T. manifold



Series 770.D



Code	Measure	Ways	Width (mm)	Height (mm)	Pack	Outer	Cat.
770.06.90	1"	3+3	800	700÷820	1	1	30.02
771.06.90	1"	4+4	800	700÷820	1	1	30.02
772.06.90	1"	5+5	800	700÷820	1	1	30.02
773.06.90	1"	6+6	800	700÷820	1	1	30.02
774.06.90	1"	7+7	1000	700÷820	1	1	30.02
775.06.90	1"	8+8	1000	700÷820	1	1	30.02
776.06.90	1"	9+9	1000	700÷820	1	1	30.02
777.06.90	1"	10+10	1000	700÷820	1	1	30.02
778.06.90	1"	11+11	1200	700÷820	1	1	30.02
778.12.90	1"	12+12	1200	700÷820	1	1	30.02
778.13.90	1"	13+13	1200	700÷820	1	1	30.02

High performance adjustable flow pump EEI<0.23 - ERP 622/2012 Box depth 110÷160 mm

KILMA-EVO-RF4 Fixed Point Control Unit Kilma-EVO-RF4 series

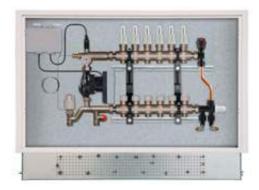
Control unit for low temperature circuits consisting of: Specific manifolds, circulation pump and injection unit integrated together; fixed value adjustment, by means of injection valve with thermostatic head, internal probe (low temperature delivery), safety thermostat with well, all housed in a recessed metal case with locking hatch; Including: supply control flow meters, thermostatically controlled valves on the return line, 1 automatic air vent valve /degasser, equipped with connections for system filling, 1 air manual discharge unit, system loading, 2 shut-off ball valves, thermometers for reading delivery and return temperatures.

- Centre distance between attachments on the plant side 111 mm.
- Centre distance of connections on the diverter line of the low temperature manifold 50 mm, Euroconus G 3/4" threaded connections

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The case size enables installation of the bypass unit code 910.06.00 Use RBM fittings with Euroconus G3/4" thread for connection to the L.T. manifold.

Series 701.C



Code	Measure	Ways	Width (mm)	Height (mm)	Pack	Outer	Cat.
701.06.50	1"	3+3	800	700÷820	1	1	30.02
702.06.50	1"	4+4	800	700÷820	1	1	30.02
703.06.50	1"	5+5	800	700÷820	1	1	30.02
704.06.50	1"	6+6	800	700÷820	1	1	30.02
705.06.50	1"	7+7	1000	700÷820	1	1	30.02
706.06.50	1"	8+8	1000	700÷820	1	1	30.02
707.06.50	1"	9+9	1000	700÷820	1	1	30.02
708.06.50	1"	10+10	1200	700÷820	1	1	30.02
709.06.50	1"	11+11	1200	700÷820	1	1	30.02
709.12.50	1"	12+12	1200	700÷820	1	1	30.02

high performance adjustable flow pump EEI<0.23 - ERP 622/2012 Box depth 110 \div 160 mm

The FLUSH WALL version is available for the control units in the list with a 10% surcharge. When placing the order, add FP to the end of each individual code.

KILMA-ECONBLOCK RF

Fixed Point control unit Kilma-ECONBLOCK RF series

Distribution control unit for low temperature circuits consisting of: specific manifolds, circulation pump, mixing manifold, including non-return valve and control return unit; fixed point control through injection valve with thermostatic head internal probe (low temperature flow), immersion safety thermostat, all housed in a built-in metal case with locking hatch. Including: flow control meters, flow thermometer, valves with thermostatic option on return, 1 automatic air vent valve / air separator valve, adjustable by-pass valve equipped with connections for system filling.

Model recommended for use with electrothermic heads.

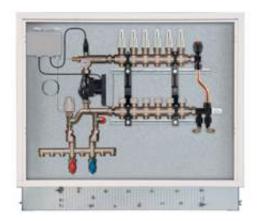
- Centre distance between attachments on the plant side 111 mm.
- Centre distance of connections on the diverter line of the low temperature manifold 50 mm, Euroconus G 3/4" threaded connections



Use Euroconus fittings with G 3/4" thread (see page 318) to connect the pipe to the L.T. manifold.



Series 701.D



Code	Measure	Ways	Width (mm)	Height (mm)	Pack	Outer	Cat.
701.06.60	1"	3+3	800	700÷820	1	1	30.02
702.06.60	1"	4+4	800	700÷820	1	1	30.02
703.06.60	1"	5+5	800	700÷820	1	1	30.02
704.06.60	1"	6+6	800	700÷820	1	1	30.02
705.06.60	1"	7+7	1000	700÷820	1	1	30.02
706.06.60	1"	8+8	1000	700÷820	1	1	30.02
707.06.60	1"	9+9	1000	700÷820	1	1	30.02
708.06.60	1"	10+10	1200	700÷820	1	1	30.02
709.06.60	1"	11+11	1200	700÷820	1	1	30.02
709.12.60	1"	12+12	1200	700÷820	1	1	30.02

high performance adjustable flow pump EEI<0.23 - ERP 622/2012

Available version is equipped with 3-way H.T. distribution manifold with thermostatically controlled valves and lockshield regulating valves. Ordering code becomes 1xxx.xx.xx (request price).

Box depth 110÷160 mm

 $The FLUSH \textit{WALL version is available for the control units in the list with a 10\% surcharge.} \\ When placing the order, add FP to the end of each individual code.$

KILMA-ECONBLOCK RF-AT Fixed Point control unit Kilma-ECONBLOCK RF-AT series

Distribution control unit for low and high temperature circuits consisting of: specific manifolds, circulation pump, mixing manifold, including non-return valve and control return unit; fixed point control through injection valve with thermostatic head internal probe (low temperature flow), immersion safety thermostat, all housed in a built-in metal case with locking hatch. Including: supply control flow meters, delivery thermometer, valves with thermostatic option on return,, 1 automatic air vent valve / air separator valve, adjustable by-pass unit equipped with connections for system filling, 2 shut-off ball valves. Model recommended for use with electrothermic heads.

- Centre distance between attachments on the plant side 90 mm.
- Centre distance of connections on the diverter line of the high temperature manifold 45 mm, Euroconus G 3/4" threaded connections
- Centre distance of connections on the diverter line of the low temperature manifold 50 mm, Euroconus G 3/4" threaded connections

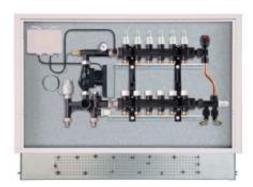


Use Euroconus fittings with G 3/4" thread (see page 318) to connect the pipe to the H.T. manifold.

Use Euroconus fittings with G 3/4" thread (see page 318) to connect the pipe to the L.T. manifold.



Series 1531.C



KILMA-ECONBLOCK RF Polymer
Fixed Point control unit Kilma-ECONBLOCK RF series in
Polymer

Distribution control unit for low temperature circuits consisting of: specific manifolds, circulation pump, mixing manifold, including non-return valve and control return unit; fixed point control through injection valve with thermostatic head internal probe (low temperature flow), immersion safety thermostat, all housed in a built-in metal case with locking hatch. Including: flow control meters, flow thermometer, valves with thermostatic option on return, 1 automatic air vent valve / air separator valve, adjustable by-pass valve equipped with connections for system filling.

Model recommended for use with electrothermic heads.

- Centre distance between attachments on the plant side 111 mm.
- Centre distance of connections on the diverter line of the low temperature manifold 50 mm, Euroconus G 3/4" threaded connections

Code	Measure	Ways	Width (mm)	Height (mm)	Pack	Outer	Cat.
1531.06.50	1"	3+3	800	700÷820	1	1	30.02
1532.06.50	1"	4+4	800	700÷820	1	1	30.02
1533.06.50	1"	5+5	800	700÷820	1	1	30.02
1534.06.50	1"	6+6	800	700÷820	1	1	30.02
1535.06.50	1"	7+7	1000	700÷820	1	1	30.02
1536.06.50	1"	8+8	1000	700÷820	1	1	30.02
1537.06.50	1"	9+9	1000	700÷820	1	1	30.02
1538.06.50	1"	10+10	1200	700÷820	1	1	30.02
1539.06.50	1"	11+11	1200	700÷820	1	1	30.02
1540.06.50	1"	12+12	1200	700÷820	1	1	30.02

high performance adjustable flow pump EEI<0.23 - ERP 622/2012 Box depth 120÷160 mm

The FLUSH WALL version is available for the control units in the list with a 10% surcharge. When placing the order, add FP to the end of each individual code.



Use Euroconus fittings with G 3/4" thread (see page 318) to connect the pipe to the L.T. manifold.



Warning: branch pipe fittings tightened to max torque of 30Nm.



Series 1531.D



Code	Measure	Ways	Width (mm)	Height (mm)	Pack	Outer	Cat.
1531.06.70	1"	3+3	800	700÷820	1	1	30.02
1532.06.70	1"	4+4	800	700÷820	1	1	30.02
1533.06.70	1"	5+5	800	700÷820	1	1	30.02
1534.06.70	1"	6+6	800	700÷820	1	1	30.02
1535.06.70	1"	7+7	1000	700÷820	1	1	30.02
1536.06.70	1"	8+8	1000	700÷820	1	1	30.02
1537.06.70	1"	9+9	1000	700÷820	1	1	30.02
1538.06.70	1"	10+10	1200	700÷820	1	1	30.02
1539.06.70	1"	11+11	1200	700÷820	1	1	30.02
1540.06.70	1"	12+12	1200	700÷820	1	1	30.02

high performance adjustable flow pump EEI<0.23 - ERP 622/2012

Box depth 130÷160 mm

The FLUSH WALL version is available for the control units in the list with a 10% surcharge. When placing the order, add FP to the end of each individual code.

KILMA-ECONBLOCK RF-AT Polymer Fixed Point control unit Kilma-ECONBLOCK RF-AT series in Polymer

Distribution control unit for low and high temperature circuits consisting of: specific manifolds, circulation pump, mixing manifold, including non-return valve and control return unit; fixed point control through injection valve with thermostatic head internal probe (low temperature flow), immersion safety thermostat, all housed in a built-in metal case with locking hatch. Including: supply control flow meters, delivery thermometer, thermostatic valves on return, 1 automatic air vent valve / air separator valve, adjustable by-pass unit equipped with connections for system filling, 2 shut-off ball valves.

Model recommended for use with electrothermic heads.

- Centre distance between attachments on the plant side 111 mm.
- Centre distance between outlet connections for high temperature 37 mm, Standard threaded RBM connections
- Centre distance of connections on the diverter line of the low temperature manifold 50 mm, Euroconus G 3/4" threaded connections

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Use fittings with Standard RBM thread for pipe connection to the H.T. manifold.

Use Euroconus fittings with G 3/4" thread (see page 318) to connect the pipe to the L.T. manifold.



Warning: branch pipe fittings tightened to max torque of 30Nm.

Series 3524



Code	Measure	Ways	Width (mm)	Height (mm)	Pack	Outer	Cat.
3524.06.90	1"	3+3	800	700÷820	1	1	30.02
3525.06.90	1"	4+4	800	700÷820	1	1	30.02
3526.06.90	1"	5+5	800	700÷820	1	1	30.02
3527.06.90	1"	6+6	800	700÷820	1	1	30.02
3528.06.90	1"	7+7	1000	700÷820	1	1	30.02
3529.06.90	1"	8+8	1000	700÷820	1	1	30.02
3530.06.90	1"	9+9	1000	700÷820	1	1	30.02
3531.06.90	1"	10+10	1000	700÷820	1	1	30.02
3532.06.90	1"	11+11	1200	700÷820	1	1	30.02
3533.06.90	1"	12+12	1200	700÷820	1	1	30.02

 $high\ performance\ adjustable\ flow\ pump\ EEI<0.23-ERP\ 622/2012\\ Box\ depth\ 130\div160\ mm$

The FLUSH WALL version is available for the control units in the list with a 10% surcharge. When placing the order, add FP to the end of each individual code.

KILMA-ECOMIX-RF Kilma-ECOMIX RF series Fixed Point control unit

Distribution unit for low temperature circuits consisting of: specific manifolds, circulation pump, thermostatic mixer, all placed in a metal case with door designed for recessed installation. Includes: delivery control flowmeters, valves with thermostatic option on return, 1 automatic air vent/degasser valve fitted with a connection to fill the system and 1 air discharge manual unit.

- G 1" system side connections
- Centre distance of connections on the diverter line of the low temperature manifold 50 mm, Euroconus G 3/4" threaded connections



Use Euroconus fittings with G 3/4" thread (see page 318) to connect the pipe to the L.T. manifold.



Series 941



Code Pump Pack Outer Cat. 941.05.60 Para 15/7 SC 130 1 1 30.02

Centre distance between attachments on the plant side 111 mm. high performance adjustable flow pump EEI<0.23 - ERP 622/2012

KILMA-EKONPAKT

Fixed Point Control Unit Kilma-EKONPAKT series.

Distribution control unit for low temperature circuits consisting of mixing manifold including:

fixed-point setting unit b means of injection valve with thermostatic head internal immersion probe, air vent valve, safety thermostat, circulation pump, non return valve, circuit control unit, assembly of motorized shut-off valves on the return.



Series 2623

Mixing manifold and probe holder unit for Kilma-ECONBLOCK RF series Fixed Point control unit.

unit comprised of: mixing manifold, including non-return valve and control return unit; fixed value adjustment using injection valve with thermostatic head with internal probe (low temperature delivery), probe holder unit and connector for circulation pump.

Code	Pack	Outer	Cat.
2623.06.00	1	1	30.02



Series 3691.A



Kilma Basic2

"Kilma Basic2" distribution module in kit

 $Distribution\,module\,pre-assembled\,in\,wall\,flush\,mounted\,kit\,suitable$ $for \, hydronic \, heating \, and \, cooling \, circuits.$

The module is supplied with Kilma EVO2 HC internal regulator. $In sulation\, casing, of\, the\, brass\, parts, not\, included.$

- Centre distance between attachments on the plant side 111 mm.
- Centre distance of connections on the diverter line of the low $temperature\,manifold\,50\,mm, Euroconus\,G\,3/4"\,threaded$ connections.

Kilma Basic2

Code	Measure	Ways	Width (mm)	Height (mm)	Pack	Outer	Cat.
3691.02.60	1"	2+2	800	700÷820	1	1	30.02
3691.03.60	1"	3+3	800	700÷820	1	1	30.02
3691.04.60	1"	4+4	800	700÷820	1	1	30.02
3691.05.60	1"	5+5	800	700÷820	1	1	30.02
3691.06.60	1"	6+6	800	700÷820	1	1	30.02
3691.07.60	1"	7+7	1000	700÷820	1	1	30.02
3691.08.60	1"	8+8	1000	700÷820	1	1	30.02
3691.09.60	1"	9+9	1000	700÷820	1	1	30.02
3691.10.60	1"	10+10	1200	700÷820	1	1	30.02
3691.11.60	1"	11+11	1200	700÷820	1	1	30.02
3691.12.60	1"	12+12	1200	700÷820	1	1	30.02
3691.13.60	1"	13+13	1200	700÷820	1	1	30.02
3691.14.60	1"	14+14	1200	700÷820	1	1	30.02

high performance adjustable flow pump EEI<0.23 - ERP 622/2012

Box depth 110 ÷ 160 mm

The FLUSH WALL version is available for the control units in the list with a 10% surcharge. $When {\it placing the order}, add {\it FP} {\it to the end of each individual code}.$

Insulation casing

Code	Pack	Outer	Cat.
3705.00.02*	1	1	30.02

^{*} Specific insulation casing for mixing valve, circulator and well



 $External\,temperature\,probe\,available, code\,3502.00.12$

 $The \, case \, size \, enables \, in stallation \, of \, the \, By pass \, unit \, code \, 910.06.00 \, (except \, code) \, and \, code \, 910.06.00 \, (except \, code) \, and \, code) \, and \, code \, 910.06.00 \, (except \, code) \, and \, code) \,$ for 14-branch composition).

 $Product \, specific \, for \, summer/winter \, radiant \, climate \, control.$



Series 3691.B



Kilma Basic 2 H.T.

Code	Measure	Ways	Width (mm)	Height (mm)	Pack	Outer	Cat.
3691.02.70	1"	2+2	800	700÷820	1	1	30.02
3691.03.70	1"	3+3	800	700÷820	1	1	30.02
3691.04.70	1"	4+4	800	700÷820	1	1	30.02
3691.05.70	1"	5+5	800	700÷820	1	1	30.02
3691.06.70	1"	6+6	800	700÷820	1	1	30.02
3691.07.70	1"	7+7	1000	700÷820	1	1	30.02
3691.08.70	1"	8+8	1000	700÷820	1	1	30.02
3691.09.70	1"	9+9	1000	700÷820	1	1	30.02
3691.10.70	1"	10+10	1200	700÷820	1	1	30.02
3691.11.70	1"	11+11	1200	700÷820	1	1	30.02
3691.12.70	1"	12+12	1200	700÷820	1	1	30.02
3691.13.70	1"	13+13	1200	700÷820	1	1	30.02
3691.14.70	1"	14+14	1200	700÷820	1	1	30.02

high performance adjustable flow pump EEI<0.23 - ERP 622/2012

Box depth 110 ÷ 160 mm

 $The \textit{FLUSHWALL version is available for the control units in the list with a 10\% surcharge.} \\ When \textit{placing the order, add FP to the end of each individual code}.$

Insulation casing

Code	Pack	Outer	Cat.
3705.00.02*	1	1	30.02
3705.00.12**	1	1	30.02

^{*} Specific insulation casing for mixing valve, circulator and well

Kilma Basic2 H.T.

"Kilma Basic 2 H.T." distribution module in kit

 $Distribution\ module\ pre-assembled\ in\ wall\ flush\ mounted\ kit\ suitable\ for\ hydronic\ heating\ and\ cooling\ circuits.$

The module is supplied with Kilma Basic RM internal regulator. H.T. manifold thermostatically controlled. Insulation casing, of the brass parts, not included.

- Centre distance between attachments on the plant side 90 mm.
- Centre distance of connections on the diverter line of the low temperature manifold 50 mm, Euroconus G 3/4" threaded connections.
- Centre distance of connections on the diverter line of the high temperature manifold 45 mm, Euroconus G 3/4" threaded connections.

External temperature probe available, code 3502.00.12

The case size enables installation of the Bypass unit code 910.06.00 (except for 14-branch composition).

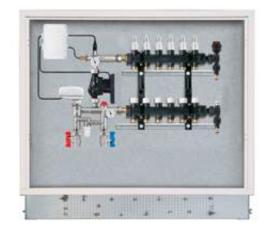
Product specific for summer/winter radiant climate control.





^{**}Specific insulation casing for H.T. manifold.

Series 3691.C



Kilma Easy2

Code	Measure	Ways	Width (mm)	Height (mm)	Pack	Outer	Cat.
3691.02.50	1"	2+2	800	700÷820	1	1	30.02
3691.03.50	1"	3+3	800	700÷820	1	1	30.02
3691.04.50	1"	4+4	800	700÷820	1	1	30.02
3691.05.50	1"	5+5	800	700÷820	1	1	30.02
3691.06.50	1"	6+6	800	700÷820	1	1	30.02
3691.07.50	1"	7+7	1000	700÷820	1	1	30.02
3691.08.50	1"	8+8	1000	700÷820	1	1	30.02
3691.09.50	1"	9+9	1000	700÷820	1	1	30.02
3691.10.50	1"	10+10	1200	700÷820	1	1	30.02
3691.11.50	1"	11+11	1200	700÷820	1	1	30.02
3691.12.50	1"	12+12	1200	700÷820	1	1	30.02
3691.13.50	1"	13+13	1200	700÷820	1	1	30.02
3691.14.50	1"	14+14	1200	700÷820	1	1	30.02

high performance adjustable flow pump EEI<0.23 - ERP 622/2012 Box depth 110 ÷ 160 mm

Insulation casing

Code	Pack	Outer	Cat.
3705.00.02*	1	1	30.02

 $^{* \}textit{Specific insulation casing for mixing valve, circulator and well} \\$

Kilma Easy2 Kilma Easy2 distribution module in kit

 $Distribution\,module\,pre-assembled\,in\,wall\,flush\,mounted\,kit\,suitable$ $for \, hydronic \, heating \, and \, cooling \, circuits.$

 $The \, Module \, can \, be \, electrically \, connected \, to \, the \, thermore gulators \, in \,$ the Kilma Set 2 series.

 $Insulation\, casing, of\, the\, brass\, parts, not\, included.$

Centre distance between attachments on the plant side 111 mm. $Centre\,distance\,of\,connections\,on\,the\,diverter\,line\,of\,the\,low$ $temperature\,manifold\,50\,mm, Euroconus\,G\,3/4"\,threaded\,connections.$ $The \, case \, size \, enables \, in stallation \, of \, the \, Bypass \, unit \, code \, 910M.06.00 \, (except \, and \, code \, 910M.06.00)$ for the 14-branch composition).



Use RBM fittings with Euroconus G 3/4" thread 217.A and 224.A series for pipe $connection \,to\,the\,manifold.$

 $Product \, specific \, for \, summer/winter \, radiant \, climate \, control.$



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Series 3691.D



Kilma Easy2 H.T.

Code	Measure	Ways	Width (mm)	Height (mm)	Pack	Outer	Cat.
3691.02.00	1"	2+2	800	700÷820	1	1	30.02
3691.03.00	1"	3+3	800	700÷820	1	1	30.02
3691.04.00	1"	4+4	800	700÷820	1	1	30.02
3691.05.00	1"	5+5	800	700÷820	1	1	30.02
3691.06.00	1"	6+6	800	700÷820	1	1	30.02
3691.07.00	1"	7+7	1000	700÷820	1	1	30.02
3691.08.00	1"	8+8	1000	700÷820	1	1	30.02
3691.09.00	1"	9+9	1000	700÷820	1	1	30.02
3691.10.00	1"	10+10	1200	700÷820	1	1	30.02
3691.11.00	1"	11+11	1200	700÷820	-	1	30.02
3691.12.00	1"	12+12	1200	700÷820	1	1	30.02
3691.13.00	1"	13+13	1200	700÷820	1	1	30.02
3691.14.00	1"	14+14	1200	700÷820	1	1	30.02

high performance adjustable flow pump EEI<0.23 - ERP 622/2012

Box depth 110 ÷ 160 mm

The FLUSH WALL version is available for the control units in the list with a 10% surcharge. $When {\it placing the order}, add {\it FP} {\it to the end of each individual code}.$

Insulation casing

Code	Pack	Outer	Cat.
3705.00.02*	1	1	30.02
3705.00.12**	1	1	30.02

^{*} Specific insulation casing for mixing valve, circulator and well

Kilma Easy2 H.T. Kilma Easy2 A.T. distribution module in kit

 $Distribution\,module\,pre-assembled\,in\,wall\,flush\,mounted\,kit\,suitable$ for hydronic heating and cooling circuits.

The Module can be electrically connected to the thermoregulators in the Kilma Set 2 series.

H.T. manifold thermostatically controlled.

Insulation casing, of the brass parts, not included.

Centre distance between attachments on the plant side 90 mm. Centre distance of connections on the diverter line of the low $temperature\,manifold\,50\,mm, Euroconus\,G\,3/4"\,threaded\,connections.$ Centre distance of connections on the diverter line of the high temperature manifold 45 mm, Euroconus G 3/4" threaded connections.



The case size enables installation of the Bypass unit code 910.06.00 (except for 14-branch composition).

Product specific for summer/winter radiant climate control.



^{**}Specific insulation casing for H.T. manifold.

MODULAR DISTRIBUTION SYSTEMS COUPLING AT + BT / HOUSING BOXES

COMPOSITION WITH RELIEF VALVES												
					NUM	BER OF B.	T. MANIF	OLDS				
	2	3	4	5	6	7	8	9	10	11	12	13
		HOUSING Cod .92	BOX L=80 2 41.005	0	ŀ	OUSING E Cod .92	3OX L=100 42.005	0	F		BOX L=120	0

COMPOSITION WITH BY-PASS UNIT												
					NUM	BER OF B.	T. MANIF	OLDS				
	2	3	4	5	6	7	8	9	10	11	12	13
	ļ	HOUSING Cod. 92		0	ŀ	OUSING E Cod .92		0		IING BOX I od. 9243.0		UNA- VAILABLE

03. CLIMATE COMFORT

30. RADIANT CLIMATE CONTROL SYSTEMS

30.03 HOUSING BOXES

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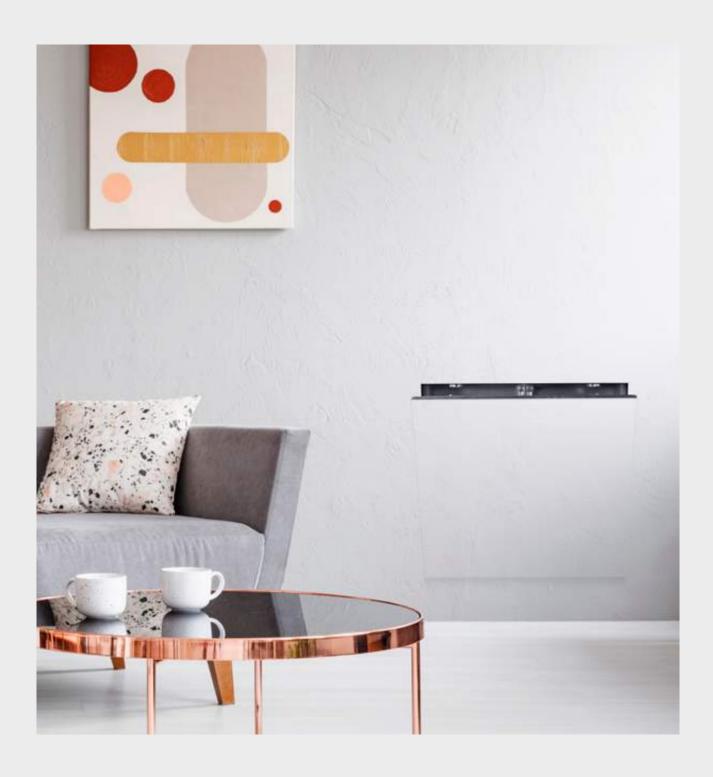
Housing boxes

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HOUSING AND INSPECTION BOXES FOR AIR CONDITIONING SYSTEMS

RBM's wide range of housing and inspection boxes is specially designed for manifolds and mixing units for air conditioning systems.

Choose the most comprehensive solution on the market, formulated to meet every functional and aesthetic need while guaranteeing high quality and maximum performance.





Box 1 flush with the wall Series 3834.R

Sizes: 400x500 mm - 600x500 mm 800x500 mm - 1000x500 mm





Box1 Filo Parete Series 3844.R

Sizes: 800x700 mm - 1000x700 mm 1200x700 mm



Paintable MDF cover

Telescopic frame





Box Dev Series 4124

Sizes: 400x500 mm - 600x500 mm 800x500 mm - 1000x500 mm





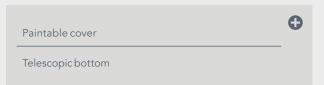
Box1 Series 2606.A

Sizes: 400x500 mm - 600x500 mm 800x500 mm - 1000x500 mm



Paintable cover

Telescopic bottom





Quickbox Series 1972

Sizes: 550x400 mm - 700x400 mm 850x400 mm





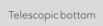
S-Box Series 9241

Sizes: 800x700 mm - 1000x700 mm 1200x700 mm



Paintable cover

Telescopic bottom







Series 3834R

Box 1 flush with the wall $In spection \, and \, housing \, box, flush \, with \,$ the wall installation.

 $Recessed \, metal \, case \, for \, manifolds, \, flush \, with \, the \,$ $wall\,in stall at ion.$

Paintable MDF cover. Telescopic frame 95 - 145 mm

 $Recessed\,metal\,case\,for\,manifolds, flush\,with\,the\,wall$ installation

Code	Dim.LxH(mm)	Pack	Outer	Cat.
3834R4012	400x500	1	1	30.03
3834R6012	600x500	1	1	30.03
3834R8012	800x500	1	1	30.03
3834R1012	1000x500	1	1	30.03

Adjustable depth 95 - 145 mm

Pair of floor-anchoring feet

Code	Pack	Outer	Cat.
2948.00.02	1	1	30.03

Maximum adjustable height 100 mm

Telescopic chassis/frame and cover.

 $\label{thm:equivalence} Execution with movable guides for the free positioning of the$ components inside the box.

Universal box, suitable for housing 1" manifolds kit series 608, 2028, 1410, 1002, 3202.

Feet for fastening to the floor, ordered separately as accessories.

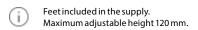


3844R series

Box for Kilma control units, flush with the wall installation.

Paintable cover.

Code	Dim. LxH (mm)	Pack	Outer	Cat.
3844R8002	800x700	1	1	30.03
3844R1002	1000x700	1	1	30.03
3844R1202	1200x700	1	1	30.03





BOX 1

Housing and inspection box. Flush wall installation.





It can be used with **simple** and **thermostatically controlled** manifolds for heating systems.
Galvanised steel structure, MDF cover.

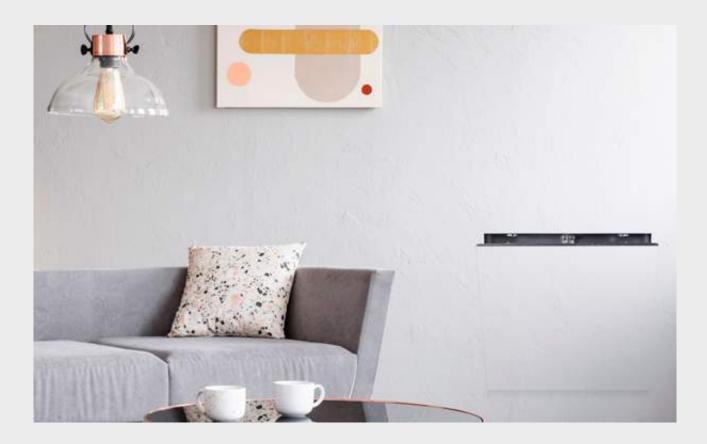
Adjustable depth/telescopic bottom

Can be installed in plasterboard and masonry walls

Tileable/paintable cover

Easy installation

Elegant, minimal design, which can be integrated with architectural solutions





Series 4124

Box DevBox for air-conditioning system manifolds.

Cover in MDF and white painted frame. Adjustable frame.

Box for air-conditioning system manifolds

Code	Dim. LxH (mm)	Pack	Outer	Cat.
4124.40.00	400x500	1	1	30.03
4124.60.00	600x500	1	1	30.03
4124.80.00	800x500	1	1	30.03
4124.10.00	1000x500	1	1	30.03

Pair of floor-anchoring feet

Code	Pack	Outer	Cat.
2948.00.02	1	1	30.03

Maximum adjustable height 100 mm

Telescopic chassis/frame and cover.

Execution with movable guides for the free positioning of the components inside the box.

Universal box, suitable for housing 1" manifolds kit series 608, 2028, 1410, 1002, 3202.

Feet for fastening to the floor, ordered separately as accessories.



Series 2606.A

Box 1Manifold containment and inspection box, for flush-mount installation.

Made of galvanized steel with bottom and side locks, complete with universal moveable guides for bracket mounting and removable paintable plastic lid. Feet for fastening to the floor, ordered separately.

Flush-mount manifold box, metal structure and plastic cover

Code	Dim. LxH (mm)	Pack	Outer	Cat.
2606.40.02	400x500	1	1	30.03
2606.60.02	600x500	1	1	30.03
2606.80.02	800x500	1	1	30.03
2606.10.02	1000x500	1	1	30.03

 $Adjustable depth 80-130\,mm (over all \,depth \,80-150\,mm \,if \,considering \,the \,useful \,stroke \,of \,the \,screws \,used \,for \,fixing \,the \,plastic \,cover \,to \,the \,metal \,structure).$

Pair of floor-anchoring feet

Code	Pack	Outer	Cat.
2948.00.02	1	1	30.03

Maximum adjustable height 100 mm

It can be inserted in walls made with 8 cm bricks, plastered on both sides.

Paintable plastic cover.

 $Telescopic\,chass is/frame\,and\,cover.$

With actuators installed on valves with thermostatic option, provide extended cover clamping screws code 2155.005
Execution with movable guides for the free positioning of the components inside the box.

UNIVERSAL case, suitable for housing 1" manifolds Kit series 608 - 2028 - 1410 - 1002 - 3202 - 3615

Feet for fastening to the floor, ordered separately as accessories.

HOUSING BOXES



30.03 HOUSING BOXES

Series 1972

Quickbox

Plastic manifold containment and inspection box, for flush-mount installation.

Plastic structure with bottom and side closures, complete with removable cover and manifold tube clips. Independent collars running lengthwise inside the guides.

Code	Dim. LxH (mm)	Pack	Outer	Cat.
1972.55.00	550x450	1	1	30.03
1972.70.00	700x450	5	1	30.03
1972.85.00	850x450	5	1	30.03

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adjustable depth 80÷100 mm

It can be inserted in walls made with 8 cm bricks, plastered on both sides.

Plastic box. Paintable cover

Suitable for housing 1" manifolds Kit SERIES 608-2028-1410 Box not suitable to house compositions with motorised zone valve.



Series 9241

Metal containment box for Kilma control unit.

Code	Useful Dim. (mm)	Pack	Outer	Cat.
924.10.05	800x110÷160x700÷820	1	1	30.03
924.20.05	1000x110÷160x700÷820	1	1	30.03
924.30.05	1200x110÷160x700÷820	1	1	30.03



Series 898

Containment box for manifold inspection, wall mounted.

Made of painted steel sheet with bottom and side closures, complete with guides for manifold fixing, lid with closure lock

- $\bullet \ \ Wall-installation (not flush-mount) for indoors.$
- Height Hadjustable with feet (730÷870 mm).
- Depth 235 mm.

Code	Lenght (mm)	Pack	Outer	Cat.
898.60.02	600	1	1	30.03
898.10.02	1000	1	1	30.03
898.15.02	1500	1	1	30.03



03. CLIMATE COMFORT

30. RADIANT CLIMATE CONTROL SYSTEMS

30.04 INSULATING PANELS

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Insulating panels

Series 1361



Code	Useful Dim. (mm)	Insul. Th. (mm)	Heat Res.	Pack	Pack m²	Pallet m²	Cat.
1361.10.00	1300x800x33	10	0,303	18	18,72	93,60	30.04
1361.18.00	1300x800x40	18	0,545	14	14,56	72,80	30.04
1361.28.00	1300x800x50	28	0,848	10	10,40	52	30.04
1361.42.00	1300x800x65	42	1,273	7	7,28	36,40	30.04
1361.50.00	1300x800x73	50	1,515	6	6,24	31,20	30.04

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KILMA-SUPER-STRONG Panel "KILMA-SUPER-STRONG".

Insulating panel made of sintered expanded polystyrene closed-cell foam, with preformed relief parts for pipe housing, combined with anti-collision polystyrene pre-formed sheet.

Suitable panel to make circuits with a 50 mm pitch and multiple circuits. Coupling with an overlap of the pre-formed foil on one side.

- Real size: 1350x850 mm
- Useful Dim. 1300x800 mm
- Usable floor area 1.04 m²
- Foil thickness 0.6 mm
- EPS 150
- Euroclass E



It is highly resistant to pressure from foot traffic. Applicable piping diameter: 14÷17 mm.

Certifications:

Compliant with UNI-EN 13163

- UNI 331 IIP certified - HBCD FREE



Compatible systems:

KILMA-ISI

Series 1188



Code	Useful Dim. (mm)	Pack	Pack m²	Pallet m²	Cat.
1188.20.02	1300x800x23	24	24,96	124,80	30.04

KILMA-STRONG Kilma STRONG thermoformed sheet

 $Pre-formed foil sheet in printed shockproof polystyrene. \\ Suitable for the creation of 50 mm multiple pitch circuits. \\ Coupling by the overlapping of the pre-formed foil itself on one side. \\$

- Real size: 1350x850 mm
- Useful Dim. 1300x800 mm
- Usable floor area 1.04 m²
- Foil thickness 1 mm



It is highly resistant to pressure from foot traffic. Applicable piping diameter: 14÷17 mm.

 $Compatible \ systems:$

KILMA-ISI



Series 1938



Code	Useful Dim. (mm)	Insul.Th. (mm)	Heat Res.	Pack m²	Pallet m²	Cat.
1938.13.00	1223X823x33	10+3	0,300	19,20	76,80	30.04
1938.25.00	1223x823x60	15+10	0,450	13,44	53,76	30.04
1938.40.00	1223x823x45	30+10	0,910	9,60	38,40	30.04

KILMA-BULL

"Kilma-BULL" panel.

 $Insulating\,panel\,made\,of\,stamped\,sintered\,expanded\,polystyrene$ $closed-cell\,foam, with\,pre-formed\,relief\,parts\,for\,pipe\,housing,$ combined with "PS" film.

 $Grooves\,undercut\,spacing\,50mm\,for\,the\,realisation\,of\,50\,mm\,multiple$ $pitch\,circuits$

 $Coupling \,possible \,by \,male/female \,peripheral \,interlocking \,joints.$

- Real size: 1223x823 mm
- Net size: 1200x800 mm
- $\bullet \ \ Usable \, floor \, area \, 0.96 \, m^2$
- EPS 200 (thickness 33 mm) EPS 150 (thickness 45-60 mm)
- Euroclass E

Certifications:

Compliant with UNI-EN 13163 - UNI 331 IIP certified - CSTB 250-179 certified - HBCD FREE







Applicable piping diameter: 16÷20 mm

Series 1978



KILMA-ROLL

Code	Useful Dim. (mm)	Insul. Th. (mm)	Heat Res.	Pack	Pack m²	Pallet m²	Cat.
1978.20.02	1000x10000x20	20	0,606	1	10	70	30.04
1978.30.02	1000x10000x30	30	0,909	1	10	60	30.04
1978.40.02	1000x10000x40	40	1,212	1	10	50	30.04
1978.50.02	1000x10000x50	50	1,515	1	10	50	30.04

KILMA-ROLL EVO with athermanous elements

Code	Useful Dim. (mm)	Insul. Th. (mm)	Heat Res.	Pack	Pack m²	Pallet m²	Cat.
1978.40.12	1000x10000x40	40	1,333	1	10	50	30.04

"Kilma-ROLL" rolled panel.

 $Roll\,panel\,made\,of\,expanded\,polystyrene, bonded\,with\,reflective$ $aluminised film, and featuring cross \, tracing \, with \, 50mm \, installation$ spacing. Can be combined with other panels by overlapping the reflective film on one side.

• Euroclass E



For head joints use anodised aluminium adhesive tape code 2018.00.02

Certifications:

HBCD FREE

Compatible systems:

KILMA-GRAF

KILMA-RETE



03. CLIMATE COMFORT

30. RADIANT CLIMATE CONTROL SYSTEMS

30.05 DRY INSULATING PANEL

294

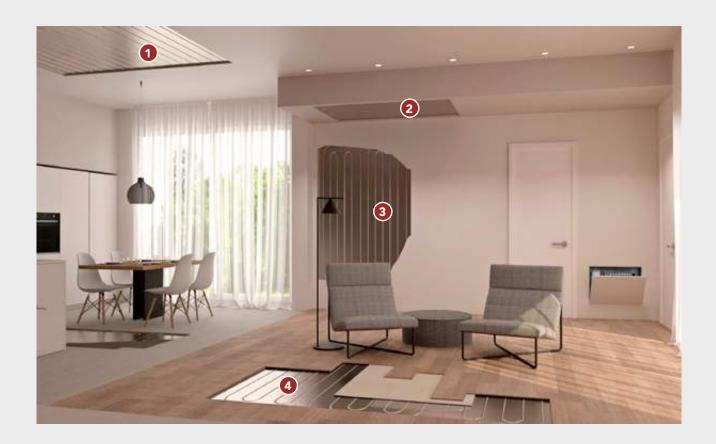
Kilma Futura

KILMA FUTURA

The new high efficiency radiant air conditioning system for dry installation

KILMA FUTURA is a revolutionary high efficiency radiant air conditioning system, suitable for dry floor, wall and ceiling installation. If in-stalled on the floor, **KILMA FUTURA** does not require a screed, therefore, it has very small overall dimensions.

Kilma Futura eliminates downtime in the site caused by waiting times for the screed to dry and consequently, guarantees immediate walk- ability. Lastly, thanks to the absence of the screed, it is possible for systems to be installed with very low thermal inertia.



No cement screed is needed
Low thermal inertia: heats up in a few minutes
Great savings
Maximum comfort
Floor, wall, ceiling installation
Can be used in heating or cooling
Total thickness less than 3 cm
Quick and easy to install
Ideal for restorations and new homes with high energy efficiency!







FLOOR INSTALLATION

CERAMIC FINISH

- 1 Perimeter expansion joint
- 2 Glue for fixing the panel to the substrate
- 3 Kilma-Futura Panel
- 4 Pipe Kilma-Flex PE-RT Ø16x2 mm
- ${f 5}$ If necessary, aluminised tape to block the pipe on the bends (about $1 \, \text{m/m}^2$)
- 6A Protection epoxy primer (e.g. PRIMER MF RBM by Mapei)
- 6B Superior glue gripping primer (not supplied)
- 7 Glue for tiles (not supplied)
- 8 Tiles (minimum dim. 25x25 cm or in alternative 15x30 cm strips)
- 9 Skirting board



8

(6a)

PARQUET FINISH (TYPE 1 WITH FLOATING PARQUET)

- 1 Perimeter expansion joint
- 2 Glue for fixing the panel to the substrate
- 3 Kilma-Futura Panel
- 4 Pipe Kilma-Flex PE-RT Ø16x2 mm
- ${\bf 5}\,$ If necessary, aluminised tape to block the pipe on the bends (about $1\text{m/m}^2\!)$
- **6** PE protective sheet
- **7** Any substrate fabric/non-fabric layer (not supplied)
- 8 Floating parquet placed resting on the underlying surface
- 9 Skirting board



PARQUET FINISH (TYPE 2 WITH GLUED PARQUET)

- 1 Perimeter expansion joint
- 2 Glue for fixing the panel to the substrate
- 3 Kilma-Futura Panel
- 4 Pipe Kilma-Flex PE-RT Ø16x2 mm
- 5 If necessary, aluminised tape to block the pipe on the bends (about 1 m/m²)
- 6 IsolTile support mat (with adhesive)/IsolTile (without adhesive,requires glue not supplied by RBM) by Isolmant (not supplied)
- 7 Glue for parquet (not supplied)
- 8 Parquet
- 9 Skirting board



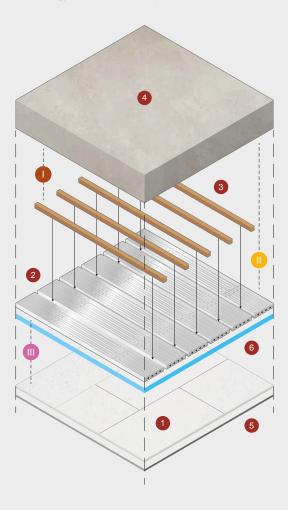
KILMA FUTURA

The new high efficiency radiant air conditioning system for dry installation

A1

KILMA-FUTURA SYSTEM / CEILING

Version: IN ADHERENCE on the soffit floor slab Hypothesised finish: 12,5 mm plasterboard slab

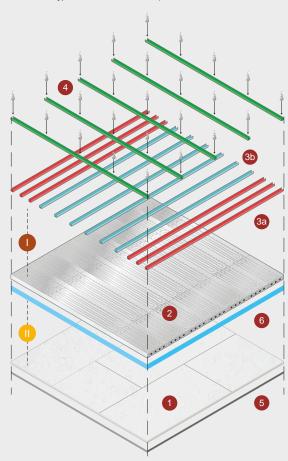


В1

KILMA-FUTURA SYSTEM / CEILING

Version: HANGING with cavity with DOUBLE OVERLAPPED STRUCTURE 1st level structure pitch RESTRICTED to the installation of the radiant

Hypothesised finish: 12,5 mm plasterboard slab



COMPONENTS

- Plasterboard slab
 approximately 12.5
- 2 Kilma Futura Panel Th. 25 mm (or other chosen thickness, excluding 17 mm th.)
- Wood planks
 40x25 mm section
 with possible interruptions of the
 section to allow the passage of
 pipe bends and circuit supplies.
- Attic (necessarily flat)
- Elastic joint for slabs in plasterboard

 PLEASE NOTE: Any expansion joints to be provided are the responsibility of to

PLEASE NOTE: Any expansion joints to be provided are the responsibility of the plasterer, in compliance with the specific installation specifications for the chosen finish.

6 Perimeter strip (optional)

FIXING TYPES

Fixing I:
wood plank on soffit floor slab

Fixing II:
Futura panel on soffit floor slab

Fixing III:
lasterboard finish fixed to the wood planks

COMPONENTS

- Plasterboard slab
- Kilma Futura Panel
 Th. 25 mm
 (or other chosen thickness, excluding 17 mm th.)
- excluding 17 mm th.)

 1st Level structure
 - Fine Pitch Zone
 (for supporting the circuit curves)

structure restricted
1st Level structure

- Straight Zone
 (for supporting the straight sections of the circuits)
- 2st level structure + suspension
 - Elastic joint for plasterboard slabs
 PLEASE NOTE: Any expansion joints to be provided are the responsibility of the plasterer, in compliance with the specific installation specifications for the chosen finish.
- Perimeter strip (optional)

FIXING TYPES

Fixing I: Futura panel on 1st level structure

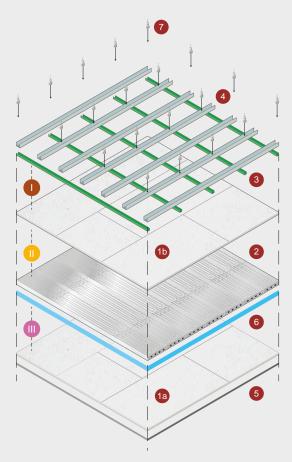
we recommend:
- "flange head" screws
suitable for self-drilling EPS

Fixing II: for finishing slab on 1st level structure

B2

KILMA-FUTURA SYSTEM / CEILING

Version: HANGING with cavity with DOUBLE OVERLAPPED STRUCTURE 1st level structure pitch NOT RESTRICTED to the installation of the radiant system. Hypothesised finish: 12,5 mm plasterboard slab



COMPONENTS

- FINISH plasterboard slab
- SUPPORT plasterboard slab ximately 12.5
- Kilma Futura Panel Th. 25 mm

(or other chosen thickness, excluding 17 mm th.)

- FREE STRUCTURE PITCH 2nd level structure
- Elastic joint for PLEASE NOTE: Any expansion joints to be provided are the responsibility of the plasterer, in compliance with the specific installation specifications for the chosen finish.
- Perimeter strip (optional)
- Attic (necessarily flat)

FIXING TYPES

Fixing I: for support slab (1st slab) on 1st level structure

Fixing II: Futura panel on 1st level structure

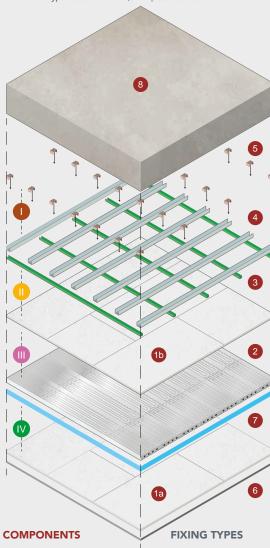
(or on support plasterboard slab) we recommend: - "flange head" screws suitable for self-drilling EPS

Fixing III: for finishing slab on 1st level structure

KILMA-FUTURA SYSTEM / CEILING

Version: WITH DOUBLE FLOATING STRUCTURE on soffit

Hypothesised finish: 12,5 mm plasterboard slab



- FINISH plasterboard slab
- REINFORCEMENT
- Kilma Futura Panel Th. 25 mm
- 1st level structure Alternatively it is possible to use a single structure level defining an overall dimens of less than 90 mm.
- 2nd level structure
- Simple snap hooks with spacer function
 - Elastic joint for plasterboard slabs PLEASE NOTE: Any expansion joints to be provided are the responsibility of the plasterer, in compliance with the specific installation specifications for the chosen finish.
- Perimeter strip (optional)
- (necessarily flat)



for support slab (1st slab) on 1st level structure

Fixing II: for support slab (1st slab) on 1st level structure

Fixing III: for Futura panel on 1st level structure

- "flange head" screws suitable for self-drilling EPS

Fixing IV: plasterboard finish on 1st level structure

KILMA FUTURA

Wall mounted

The Kilma-Futura panel can also be mounted **on the wall**. It can be installed on masonry walls and on plasterboard walls, and then is covered with a plasterboard or gypsum fibre sheet. Its reduced thickness, quick installation and the use of 16x2 pipes that can be connected directly to the radiant manifold make it suitable for any installation.

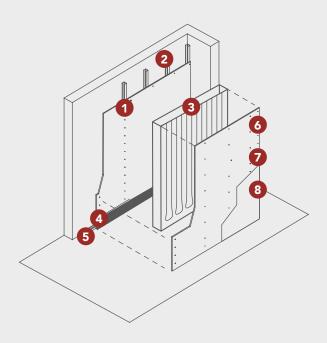
MASONRY WALL



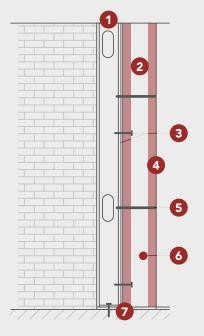
- 1 Wooden strip 40x25mm
- 2 EPS300 RBM Kilma Futura panel 25 mm thick
- 3 RBM Kilma Flex pipe Ø16x2 mm
- 4 Plasterboard panel
- 5 Possible buffer strip for installation of electrical sockets according to CEI 64-8



PLASTERBOARD WALL



- 1 Single plasterboard slab (support)
- 2 Upright profile
- 3 RBM FUTURA panel
- 4 Clearance from floor level (for electrical sockets according to IEC 64-8)
- 5 Basic profile
- 6 Fixing the finishing sheet
- 7 Plasterboard sheet (system closure)
- 8 Levelling and finishing



- 1 Metal profile (upright)
- 2 RBM FUTURA 25 mm panel
- 3 Fixing I: for support sheet on upright profile frame
- 4 Plasterboard slab + levelling
- 5 Fixing II: for finishing sheet on upright profile structure
- 6 RBM tube Ø16x2 mm
- 7 Basic profile

Series 3841.A



Code	Useful Dim. (mm)	Insul.Th. (mm)	Heat Res.	Pack m²	Pallet m ²	Cat.
3841.20.00	1200x800x20	20	0,56	22,08	88,32	30.05
3841.25.00	1200x800x25	25	0,71	18,24	72,96	30.05
3841.33.00	1200x800x33	33	0,95	14,40	57,60	30.05
3841.48.00	1200x800x48	48	1,41	9,60	38,40	30.05

KILMA FUTURA

High efficiency insulation panel for dry installations.

Installation pitch 160 mm; coil circuit placement. Suitable for floor, wall, ceiling and false ceiling installation.

Panel obtained from EPS 300 sheet, milled to allow piping to be laid, top coating with an aluminium layer.

- Real Dim.: 1200X800 mm
- Usable floor area 0.96 m²

Applicable piping type: Hi Performance Plus 16x2 polyethylene. To install the panel, it is recommended to use specific adhesives compatible with EPS and relative substrate (use KILMA FUTURA AD code 37020002 or else glues as per technical documentation.

To prevent the pipe from coming off the retention guides and to restore the aluminised film (in case this has been removed during operations performed at the building site) use the anodised aluminium adhesive tape code 2018.00.02

Certifications:

HBCD FREE

Series 3841.B



Code	Useful Dim. (mm)	Insul.Th. (mm)	Heat Res.	Pack m ²	Pallet m²	Cat.
3841.20.10	1200x800x20	20	0,51	22,08	88,32	30.05
3841.25.10	1200x800x25	25	0,53	18,24	72,96	30.05
3841.33.10	1200x800x33	33	0,78	14,40	57,60	30.05
3841.48.10	1200x800x48	48	1.25	9.60	38.40	30.05

KILMA FUTURA

High efficiency insulation panel for dry installations.

Installation pitch 100 mm; coil circuit laying. Suitable for floor, ceiling and false ceiling installation.

Panel obtained from EPS 300 sheet, milled to allow piping to be laid, top coating with an aluminium layer.

- Real Dim.: 1200X800 mm
- Usable floor area 0.96 m²

Applicable piping type: Hi Performance Plus 16x2 polyethylene. To install the panel, it is recommended to use specific adhesives compatible with EPS and relative substrate (use KILMA FUTURA AD code 37020002 or else glues as per technical documentation.



To prevent the pipe from coming off the retention guides and to restore the aluminised film (in case this has been removed during operations performed at the building site) use the anodised aluminium adhesive tape code 2018.00.02

Certifications:

HBCD FREE



30.05 DRY INSULATING PANEL **KILMA FUTURA**



Series 4120

PHONOFIX $Stabilising \, layer \, for \, parquet \,$

PHONOFIX is a low-thickness, desolidarising andreinforcing elastodynamic resilient acoustic layer designed for the application of parquet glued with the KILMA FUTURA system.

- Nominal thickness 2 mm
- Supplied in 20 m rolls (covered area 20 m²)
- Compressive strength (CS): 127 kPa (0.5 mm) strain)
- Thermal conductivity: λ=0,037 W/mK
 Thermal resistance: Rt = 0.054 m²K/W
 Reaction to fire class: Cfl-s1 (3)

Code	Lenght (m)	Width (cm)	Pack	Outer	Cat.
4120.00.00	20	100	1	1	30.07

301

It provides a significant increase in impact sound insulation in both renovations and new constructions.

Can be used in all environments, both residential and tertiary. Low thickness, does not require changes to existing dimensions.

 $Low \, thermal \, resistance \, (compatible \, with \, underfloor \, heating \,$ $systems\ even\ when\ laid\ under\ the\ floor).$

Enables glue-in installation of parquet directly onto Kilma Futura with low thickness/low inertia.







Stabilising layer for parquet

Phonofix by RBM is a technological and innovative product specifically for the application of glued parquet in combination with the Kilma Futura system.

PHONOFIX is a low-thickness, desolidarising and reinforcing elastodynamic resilient acoustic layer designed for the application of parquet glued with the KILMA FUTURA system. Nominal thickness 2 mm.



INSTALLATION

STEP 1

SUBSTRATE PREPARATION

The surface of the KILMA FUTURA system onto which PHONOFIX is to be applied must be load-bearing, flat, level, clean and free of debris or oil. Check that the pipes are properly fitted into the appropriate seats in the panel and that they do not protrude from the panel. However, it will be the responsibility of the installer to assess the suitability of the surface for laying the mat.

STEP 2

LAYING OF SHEETS

Phonofix is laid floating on the KILMA FUTURA system (*). Remove any air pockets below the Phonofix sheets to achieve perfect adhesion to the surface. In this regard, it is recommended to apply adequate pressure on the sheets, preferably by using a glue roller. During laying, extreme care must be taken to place the Phonofix sheets next to each other without overlapping, so as to guarantee the continuity of the insulating layer and avoid the formation of acoustic bridges. It is also necessary to tape the joints between the sheets themselves with the joint strip included in the package.

(*) Only in the event that it is not easy to lay the sheets can they be bonded to the Kilma Futura system using, for example, an antislip adhesive such as D965 by Wakol or similar.

STEP 3

LAYING OF THE FLOOR

In the case of floating laying of the mat on the Kilma Futura system, the parquet laying operations can be carried out immediately, whereas when gluing the mats to the Kilma Futura panel, it will be necessary to wait for the times specified by the adhesive manufacturer before laying the flooring. The parquet (provided it is of a type compatible with the system) may be glued directly onto Phonofix by applying a layer of adhesive (excellent results have been obtained with epoxy-polyurethane glues) laid in accordance with the rules of art and according to the manufacturer's instructions. Phonofix is a water-proof covering: adequate drying times of the adhesive must be considered in relation to climate and site conditions.

STEP 4

SKIRTING BOARD LAYING

It is essential to make it known to all site operators that the excess of the perimeter strip should only be trimmed after the flooring has been laid and before the skirting board is installed. The direct contact of the floor with the walls, in fact, constitutes an acoustic bridge, causing a loss of insulation of several decibels. The perimeter strip also has the task of absorbing thermal expansion of the flooring subject to temperature differences.

Easy to lay

Thickness 2 mm

Can be used in all environments

Does not require the use of special adhesives

Contains no volatile substances (VOC A+)

Production with low environmental impact

Can be recycled and disposed of according to EWC No. 170604

Contributes to achieving credits for the environmental certification of a building according to LEED or ITACA protocols

Complies with the requirements defined by the CAM-Building for acoustic and thermal insulation materials regarding the demand for high acoustic insulation performance, the percentage of recycled material and the absence of hazardous substances



03. CLIMATE COMFORT

30. RADIANT CLIMATE CONTROL SYSTEMS

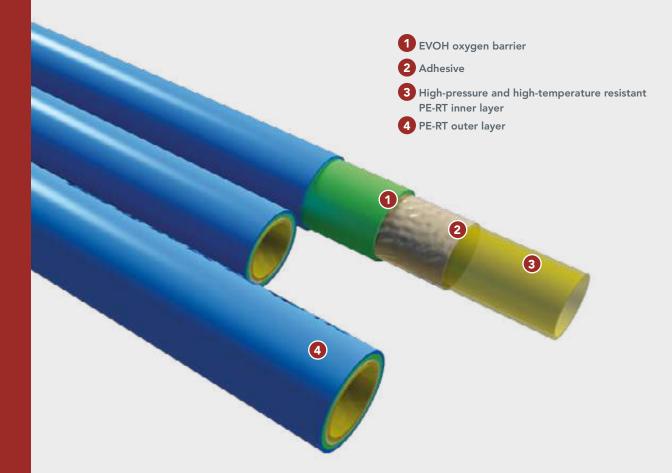
30.06 PIPING

304

Polyethylene pipes

HI-PERFORMANCE PLUS PIPES





Hi Performance Plus pipes are made of a polymer resin, which has the traditional properties of polyethylene, with the addition of important extra features such as **increased resistance to high temperatures and high pressures.**

They do not require the post-extrusion cross-linking processes typical of PE-X pipes, making it possible to obtain a product that is:

- Homogeneous along the entire length and surface, not suject to unevenness
- Heat-sealable
- Extremely **flexible** in all weather conditions
- **Shape memory:** for example, in the case of crushing, just heat it up to make it perfectly circular again
- Duration over 50 years

4 LAYERS

Hi Performance Plus pipes consist of 4 layers, unlike conventional pipes which have only 3 layers (Polyethylene - Adhesive - Oxygen barrier).

In fact, the EVOH (oxygen barrier) layer is covered by a 4th PE-RT layer that protects its integrity from mechanical damage (e.g. from dragging or rubbing on site).

OPERATING CONDITIONS ACCORDING TO ISO 10508 AND EN ISO 22391

SIZE	OPERATING PRESSURE [BAR]						
	FOR APPLICATION CLASS						
	CLASS 1	CLASS 2	CLASS 4	CLASS 5			
16X2	10	8	8	8			
17X2	8	8	8	6			
20X2	6	6	6	6			

APPLICATION CLASS	OPERATING CONDITIONS FOR A PERIOD OF 50 YEARS AND 100 HOURS OF WHICH	FIELD OF APPLICATION
1	49 years at operating temperature (TD) of 60°C, 1 year at maximum temperature (Tmax) of 80°C and 100 hours at malfunction temperature (Tmal) of 95°C	Hot water supply (60°C)
2	49 years at operating temperature (TD) of 70°C, 1 year at maximum temperature (Tmax) of 80°C and 100 hours at malfunction temperature (Tmal) of 95°C	Hot water supply (70°C)
4	2.5 years at operating temperature (TD) of 20°C, 20 years at operating temperature (TD) of 40°C, 25 years at operating temperature (TD) of 60°C, 2.5 years at maximum temperature (Tmax) of 70°C and 100 hours at malfunction temperature (Tmal) of 100°C	Low temperature underfloor heating and radiators
5	14 years at operating temperature (TD) of 20°C, 25 years at operating temperature (TD) of 60°C, 10 years at operating temperature (TD) of 80°C, 1 year at maximum temperature (Tmax) of 90°C and 100 hours at malfunction temperature (Tmal) of 100°C	High temperature underfloor heating and radiators

CLASS 1

Hi-Performance Plus pipes can be used for sanitary installations (Class 4 and 5) and heating installations (Class 1 and 2).

Hi Performance Plus polymer resins show excellent performance in internal pressure resistance tests at elevated temperatures, making them ideal for use in hot and cold water piping systems.

Independent tests according to ISO 9080 at 20° , 80° , 95° and 110° C consistently show the absence of knee in the regression curves before 10,000 hours.

Therefore, RBM Kilma Hi Performance Plus pipes can be used for all class 1 applications in the same way as PE-Xa and PE-Xc.



Pipe Kilma HI-PERFORMANCE PLUS.

4-layer polyethylene pipe for underfloor heating (PE-RT Type II/EVOH/PE-RT).

The outer layer provides strong protection of the EVOH layer against the defects of mechanical agents. (e.g. scratches, gouges ...).

EVOH oxygen barrier pipe, co-extruded, DIN 4726.

Certifications:

Compliant with: EN ISO 22391-2

Code	Measu- re	Model	Roll (m)	Pack	Pallet m	Cat.
2517.16.12	16x2	PE-RT Type II/EVOH/ PE-RT	120	1	1680	30.06
2517.16.02	16x2	PE-RT Type II/EVOH/ PE-RT	240	1	1680	30.06
2517.16.22	16x2	PE-RT Type II/EVOH/ PE-RT	600	1	3600	30.06
2517.17.12	17x2	PE-RT Type II/EVOH/ PE-RT	120	1	1680	30.06
2517.17.02	17x2	PE-RT Type II/EVOH/ PE-RT	240	1	1680	30.06
2517.17.22	17x2	PE-RT Type II/EVOH/ PE-RT	600	1	3600	30.06
2517.20.02	20x2	PE-RT Type II/EVOH/ PE-RT	240	1	1680	30.06
2517.20.32	20x2	PE-RT Type II/EVOH/ PE-RT	500	1	2000	30.06

 ${\it Size: Outside \, \emptyset \, x \, pipe \, thickness.}$



Externally protected EVOH barrier against any mechanical

 $Full\,K\overset{\circ}{O}MO\,certified\,range\,available.\,Contact\,our\,sales$ department for the ordering codes.



Series 3954

Kilma-Flex 4 FIN pipe

4-layer pipe for underfloor and wall-mounted heating systems.

The innermost layer, in Polyethylene of raised temperature resistance (polyethylene of raised temperature resistance, not cross-linked), has an extremely smooth surface that allows a drastic $reduction\,in\,head\,loss\,compared\,to\,the\,traditional$ $metal\,pipe\,used\,in\,the\,heating\,and\,plumbing$ sector;

The two intermediate layers consist of a first layer $of pigmented \, adhesive \, material \, with \, high \,$ $strength \, and \, durability \, (in \, polyole fin \, polymers)$ and of a second film-forming and adjuvant film that increases installation flexibility;

 $The \, outermost \, layer \, consisting \, of \, a \, compound \, of \,$ $polyethylene \, and \, adhesive, with \, a \, thickness \, of \, a$ few tens of μm , constitutes a valid protection of the internal layers against defects caused by mechanical agents (e.g. scratches, gouges, etc.).

Code	Measure	Roll (m)	Pack	Pallet m	Cat.
3954.16.10	16x2	120	120	1680	30.06
3954.16.00	16x2	240	240	1680	30.06
3954.16.20	16x2	600	600	3600	30.06
3954.17.10	17x2	120	120	1680	30.06
3954.17.00	17x2	240	240	1680	30.06
3954.17.20	17x2	600	600	3600	30.06
3954.20.00	20x2	240	240	1680	30.06
3954.20.30	20x2	500	500	2000	30.06

 $\textit{Size: Outside } \emptyset \textit{x pipe thickness}.$



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Series 464

KILMA-FLEX PE-Xc pipe.

3-layers polyethylene pipe for underfloor heating. EVOH oxygen barrier pipe, co-extruded, DIN 4726.

Certifications:

Compliant with: EN ISO 15875-2

Code	Measure	Model	Roll (m)	Pack	Pallet m	Cat.
464.08.02	8x1	PE-Xc	1000	1	7000	30.06
464.08.12	8x1	PE-Xc	100	1	1200	30.06
464.10.02	10x1,2	PE-Xc	1000	1	7000	30.06
464.10.12	10x1,2	PE-Xc	120	1	1440	30.06
464.16.02	16x2	PE-Xc	120	1	1680	30.06
464.16.12	16x2	PE-Xc	240	1	1680	30.06
464.16.22	16x2	PE-Xc	600	1	3600	30.06
464.17.12	17x2	PE-Xc	120	1	1680	30.06
464.17.02	17x2	PE-Xc	240	1	1680	30.06
464.17.22	17x2	PE-Xc	600	1	3600	30.06
464.20.02	20x2	PE-Xc	240	1	1680	30.06
464.20.32	20x2	PE-Xc	500	1	2000	30.06
464.25.02	25x2,3	PE-Xc	240	1	960	30.06
464.25.22	25x2,3	PE-Xc	310	1	1240	30.06

Cross-linked polyethylene according to the "C" method with Beta type rays. Size: Outside Øx pipe thickness.



 $Do \, not \, expose \, to \, direct \, sun light.$



Series 2009

KILMA-FLEX PE-Xa pipe

 $3-layers \,polyethylene\,pipe\,for\,underfloor\,heating.$ EVOH oxygen barrier pipe, co-extruded, DIN 4726.

• Type: PE-Xa

Certifications:

Compliant with: EN ISO 15875-2

Code	Measure	Model	Roll (m)	Pack	Pallet m	Cat.
2009.17.02	17x2	PE-Xa	600	1	2400	30.06
2009.20.02	20x2	PE-Xa	500	1	1500	30.06

 ${\it Cross-linked polyethyle ne according to the "A" method with peroxides.}$ $\textit{Size: Outside } \emptyset \textit{x pipe thickness}.$



 $Do \, not \, expose \, to \, direct \, sun light.$



Series 1484

KILMA-FLEX PE-RT pipe.

3-layers polyethylene pipe for underfloor heating. EVOH oxygen barrier pipe, co-extruded, DIN 4726.

• Type: PE-RT

Certifications:

Compliant with: EN ISO 22391-2



Code	Measure	Model	Roll (m)	Pack	Pallet m	Cat.
1484.16.22	16x2	PE-RT	120	1	1680	30.06
1484.16.32	16x2	PE-RT	240	1	1680	30.06
1484.16.02	16x2	PE-RT	600	1	3600	30.06
1484.17.12	17x2	PE-RT	120	1	1680	30.06
1484.17.02	17x2	PE-RT	240	1	1680	30.06
1484.17.22	17x2	PE-RT	600	1	3600	30.06
1484.20.02	20x2	PE-RT	500	1	2000	30.06
1484.25.12	25x2,3	PE-RT	240	1	960	30.06
1484.25.02	25x2,3	PE-RT	310	1	1240	30.06

 $Polyethylene\ of\ raised\ temperature\ resistance.$ $\textit{Size: Outside } \emptyset \textit{x pipe thickness}$



Do not expose to direct sunlight.



03. CLIMATE COMFORT

30. RADIANT CLIMATE CONTROL SYSTEMS

30.07 ACCESSORIES FOR RADIANT SYSTEMS

309

Accessories for radiant systems
Distribution accessories

309



Series 4120

PHONOFIX Stabilising layer for parquet

PHONOFIX is a low-thickness, desolidarising andreinforcing elastodynamic resilient acoustic layer designed for the application of parquet glued with the KILMA FUTURA system.

- Nominal thickness 2 mm
- Supplied in 20 m rolls (covered area 20 m²)
- Compressive strength (CS): 127 kPa (0.5 mm strain)
- Thermal conductivity: λ= 0,037 W/mK
- Thermal resistance: Rt = 0.054 m² K/W
- Reaction to fire class: Cfl-s1 (3)

Code	Lenght (m)	Width (cm)	Pack	Outer	Cat.
4120.00.00	20	100	1	1	30.07

It provides a significant increase in impact sound insulation in both renovations and new constructions.

Can be used in all environments, both residential and tertiary. Low thickness, does not require changes to existing dimensions.

 $Low \, thermal \, resistance \, (compatible \, with \, underfloor \, heating \,$ systems even when laid under the floor).

Enables glue-in installation of parquet directly onto Kilma $Futura\,with\,low\,thickness/low\,inertia.$



Series 483

Corrugated sheath pipe protector.

Can also be used as a pipe protector at the manifold, and at the screed dilation joints (code 472.15.12).

Compatible systems:

KILMA-ISI

KILMA-GRAF

KILMA-RETE

KILMA-INDUSTRIALE

KILMA-FUTURA

ı	Code	Measure	Roll (m)	Pack	Outer	Cat.
	483.25.02*	Ø 25	50	1	1	30.07
	483.32.02**	Ø 32	25	1	1	30.07

^{*}Øsheathed pipe 17x2

^{**}Øsheathed pipe 20x2 - 25x2.3



Accessory that can be used on Kilma-Isi, Kilma-Graf, Kilma-Rete, Kilma-Industriale and Kilma-Futura radiant systems.



Series 603

Bend former.

90 $^{\circ}$ elbow, in polyamide F.V. used as a bend former as well as to protect the pipes close to their attachment to the manifold.

Code	Suitable for pipes	Pack	Outer	Cat.
603.18.12	Ø 17	50	500	30.07
603.20.12	Ø 20	50	300	30.07
603.25.02	Ø 25	25	150	30.07

Accessory that can be used on Kilma-Isi, Kilma-Graf, Kilma-Rete, $Kilma-Industriale\ and\ Kilma-Futura\ radiant\ systems.$



Series 306

Thermo-electrically controlled servo motor for valve with thermostatic option, complete with valve body clamping ring nut and electric power cable.

Normally closed valve position when power missing.

- Power supply 24/230 V
- Consumption 2.5W
- Frequency 50/60 Hz
- · IP54 protection rating
- Operating temperature -5 \div +50 °C
- 4 mm stroke
- Switch contact rating (0.5A) 1 A (if any)

Certifications:

Thermo-electrically controlled actuator

Code	Power supply	Pack	Outer	Cat.
306.00.02	230V AC	1	50	30.07
306.00.12	24V AC	1	50	30.07

Version without auxiliary microswitch (2 wires)

Thermo-electrically controlled actuator with auxiliary microswitch

Code	Power supply	Pack	Outer	Cat.
306.00.42	230V AC	1	50	30.07
306.00.52	24V AC	ī	50	30.07

Version supplied with auxiliary microswitch (4 wires)

Servo control that can be matched with SERIES 608 - 2028 - 1410 - 1002 - 279 manifolds with a 50 mm centre distance, and Kilma-Zone SERIES 3615 - 3616 manifolds





Thermo-electrically controlled servo motor for valve with thermostatic option, complete with valve body clamping ring nut and electric power cable.

Normally closed position when there is no power.

- Power supply 24/230 V
- Consumption 1.2W
- IP54 protection rating
- Operating temperature $0 \div +60\,^{\circ}\text{C}$
- 5 mm stroke
- Cable length 1 m

Certifications:



Thermo-electrically controlled actuator

Code	Power supply	Pack	Outer	Cat.
3189.00.02	230V AC	1	100	30.07
3189.00.12	24V AC	1	100	30.07

Version without auxiliary microswitch (2 wires)

$Thermo-electrically \,controlled\, actuator\, with\, auxiliary\, microswitch$

easier. See the instruction manual for details.

Code	Power supply	Pack	Outer	Cat.
3189.00.42	230V AC	1	100	30.07
3189.00.52	24V AC	1	100	30.07

Version supplied with auxiliary microswitch (4 wires)



Servo control to be matched with modular brass SERIES 3202 manifolds with a 37 mm centre distance.
Servo control with a first-open feature to make installation



Series 778

Vapour barrier.

Roll, sheet in PE with moisture barrier feature.

- Roll width: 1m
- PE sheet width: 2 m (folded in the middle)
- Roll length: 100 m

Compatible systems:

KILMA-ISI

KILMA-GRAF

KILMA-RETE

KILMA-INDUSTRIALE

KILMA-FUTURA

Code	Thickness (mm)	Pack	Pack m²	Cat.
778.20.02	0,2	1	200	30.07



Accessory that can be used on Kilma-Isi, Kilma-Graf, Kilma-Rete, Kilma-Industriale and Kilma-Futura radiant systems.
Fitted with cross marking with 100 mm installation pitch.



Series 472.A

Base edging joint.

 $\label{lem:polythenelPDE} Adhesive edging dilation joint, in polythene LPDE foam containing grout.$

Compatible systems:

KILMA-ISI

KILMA-GRAF

KILMA-RETE

Code	Height (mm)	Thickness (mm)	Roll (m)	Pack	Outer	Cat.
472.15.12	150	8	60	1	5	30.07
475.25.12	250	8	60	60	180	30.07



Accessory that can be used on Kilma-Isi, Kilma-Graf, Kilma-Rete and Kilma-Industriale radiant systems.

Adhesive on the full height of the joint.





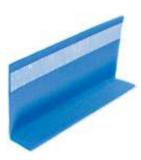
Series 472.B

Base edging joint.

 $Adhesive\,edging\,dilation\,joint, in\,polythene\,LPDE$ $foam\,containing\,grout.$

Code	Height (mm)	Thickness (mm)	Roll (m)	Pack	Outer	Cat.
472.08.12	80	5	25	1	1	30.07

 $Accessory\,that\,can\,be\,exclusively\,used\,on\,the\,Futura\,radiant$



Series 2531

Sound absorbing L-shaped base edging joint.

Code	Dim. (mm)	Lenght (m)	Pack	Outer	Cat.
2531.16.02	160x50x6*	2	120	120	30.07

 $Great \, sound \, absorbing \, properties. \,$



Series 2532

Adhesive joint tape.

Adhesive joint tape which prevents the formation of acoustic bridges between 2 adjacent panels and creates a single insulating layer.

- Tape width 10 cm
- Tape length 25 m
- Thickness 3 mm

Code	Lenght (m)	Width (cm)	Pack	Outer	Cat.
2532.10.02	25	10	1	1	30.07

 $Great \, sound \, absorbing \, properties.$



Series 3670

Screed expansion joint with adhesive base.

- Joint height 100 mm
- Profile length 2 m

Compatible systems: KILMA-ISI KILMA-GRAF KILMA-RETE

Code	Lenght (m)	Pack	Outer	Cat.
3670.10.02	2	90	90	30.07

Accessory to be used on Kilma-Graf, Kilma-Isi and Kilma-Rete radiant systems.





Pipe fastener clip.

Pipe anchor clip for KILMA panel Made of plastic with anchoring lugs.

Compatible systems:

KILMA-ISI

KILMA-GRAF

Pipe fastener clip

Code	Measure	Pack	Outer	Cat.
468.45.12	45x20	1000	10000	30.07
468.45.00*	45x20	300	300	30.07
468.39.02**	39x20	1050	1050	30.07
19475702***	56x20	300	300	30.07

^{*}Pack for fixing with special fastener clip tool code 469.00.02 - Clips joined together by heat-sealing

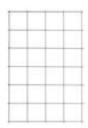
Strong pipe fastener clip

Code	Measure	Pack	Outer	Cat.
2003.42.02*	42x20	1050	1050	30.07

^{*}Pack for fixing with special fastener clip tool code 469.00.02 - Strong clip to be used with a luminised panels - Clips joined together with a dhesive tape



Accessory that can be used on Kilma-Isi and Kilma-Graf radiant systems



Series 476.A

Electro-welded binding mesh \emptyset 2 mm for screed.

Galvanised electro-welded mesh panels for underfloor heating which drastically reduces the formation of cracks in concrete screed. Overlap of 75 mm with very little waste.

- Dimension 991x2060 mm
- Wire diameter 2 mm

Compatible systems:

KILMA-ISI

KILMA-GRAF

KILMA-RETE

Code	Mesh (mm)	Pack	Pack m²	Outer	Cat.
476.40.02	75x75	1	40,80	20	30.07



Accessory that can be used on Kilma-Isi, Kilma-Graf and Kilma-Rete radiant systems.
Binding function for concrete screeds.
Supplied in bundles of 20 panels.



Series 825

Mesh fastener clip.

Clip for fixing the mesh to the Kilma panel, made of plastic with anchoring lugs.

- Centre distance 75 mm
- Height 28 mm

Compatible systems:

KILMA-ISI

Code	Centre distance (mm)	Height (mm)	Pack	Outer	Cat.
825.00.02	75	28	100	4000	30.07



 $Accessory\,that\,can\,be\,used\,on\,the\,Kilma-Isi\,radiant\,system.$



^{**}Pack for fixing with special fastener clip tool code 469.00.02 – Low clip to be used with thin panels (up to 20mm thick). Suitable for fixing pipes maximum ø 17 mm - Pack for fixing with special fastener clip tool code 469.00.02 - Clips joined together by heat-sealing

together by heat-sealing
***Pack for fixing with special fastener clip tool code 469.00.02 - Clips joined together by heat-sealing



Series 475.A

Kilma-Therm Super fluidifying additive "KILMA-THERM".

Superfluidifying liquid additive for concrete screeds. Improves workability and performance characteristics. Gives the screed greater mechanical resistance and a higher thermal conductivity.

Compatible systems:

KILMA-ISI

KILMA-GRAF

KILMA-RETE

Code	Weight (kg)	Capacity (I)	Pack	Outer	Cat.
475.10.02	10	9,80	1	60	30.07
475.25.02	25	24,5	1	24	30.07

Accessory that can be used on Kilma-Isi, Kilma-Graf, Kilma-Rete and Kilma-Industriale radiant systems.

Recommended dose: 1.0-1.2 Kg additive every 100 Kg of

cement.



Series 475.B

Polypropylene short fibre additive for concrete screeds.

Improves the elasticity and resistance of the screed, eliminating the risk of cracks as a result of plastic shrinkage in floors not properly wet cured. Non-flammable product.

Excellent resistance to acids, bases and chemical agents present in cement mixes.

Compatible systems:

KILMA-ISI

KILMA-GRAF

KILMA-RETE

C	ode	Weight (kg)	Pack	Outer	Cat.
475	.10.12	1	1	25	30.07

 $\label{lem:constraint} Accessory\,that\,can\,be\,used\,on\,Kilma-Isi,\,Kilma-Graf\,and\,Kilma-Rete\,radiant\,systems.$

Dosage for mixes with average cement content: 0.9 kg/1 m³ of screed.

To restore workability (concrete treated with fibre additive) combine with KILMA-THERM 0.5 \div 0.7 l/100kg cement.



Series 862.A

Rail for fastening of the pipe.

Profile in plastic, sections of 1m in length which can be hooked together for a custom size.

Compatible systems: KILMA-INDUSTRIALE

Code	Suitable for pipes	Pitch (mm)	Pack	Outer	Cat.
862.16.00	ø 16-17	50	80	80	30.07
862.16.10*	ø 16-17	50	80	80	30.07
862.20.00	ø 17 - 20 - 25	100	50	50	30.07
862.20.10*	ø 17 - 20 - 25	100	50	50	30.07
862.24.42**	ø 20	50	63	63	30.07

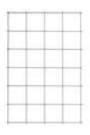
 $[*] with {\it fixing adhesive}\\$

Accessory that can be used on the Kilma-Industriale radiant system.

Suitable for Kilma-flex polyethylene pipe and Tita-fix multi-layer pipe



^{**} with fixing anchors



Series 476.B

Electro-welded mesh \emptyset 3 mm for pipe anchoring.

 $\label{lem:Galvanised} Galvanised \ electro-welded \ mesh \ panels for underfloor \ heating.$

- Size 1200x2100 mm
- Wire diameter 3 mm

Compatible systems:

KILMA-RETE

KILMA-INDUSTRIALE

I	Code	Mesh (mm)	Pack	Pack m²	Outer	Cat.
	476.10.02	100x100	1	40	18	30.07

Accessory that can be used on Kilma-Rete and Kilma-Industriale radiant systems.

Pipe fastener clip anchoring function. Supplied in bundles of 15 panels.



Series 595.A

Automatic pipe fastener clip for electro-welded mesh Ø 3 mm.

Plastic clip for anchoring the pipe to the electro-welded mesh (Code 476.10.02). Wire diameter of 3 mm.
Fastening by clip fastener tool.

Compatible systems:

KILMA-RETE

Code	Suitable for pipes	Pack	Outer	Cat.
595.00.42	ø 17	1700	1700	30.07

Accessory that can be used on the Kilma-Rete radiant system.



Series 595.B

Manual flat pipe fastener clip for electro-welded mesh Ø 3 mm.

Plastic clip for anchoring the pipe to the electro-welded mesh (Code 476.10.02). Wire diameter of 3 mm.

Compatible systems:

KILMA-RETE

Code	Suitable for pipes	Pack	Outer	Cat.
595.00.12	ø 17	500	500	30.07

Accessory that can be used on the Kilma-Rete radiant system.



Series 862.B

Rail for fastening of the pipe.

Profile in plastic, sections of 900 mm in length which can be hooked together for a custom size.

Code	Suitable for pipes	Pitch (mm)	Pack	Outer	Cat.
862.10.00	Ø 10	60	6	150	30.07



Series 595.C

Manual pipe fastener clip for electrowelded mesh \emptyset 3 mm.

Plastic clip for anchoring the pipe to the electro-welded mesh (Code 476.10.02). Wire diameter of 3 mm.

Compatible systems:

KILMA-RETE

KILMA-INDUSTRIALE

Code	Suitable for pipes	Pack	Outer	Cat.
595.00.00	ø 17 - 20	200	200	30.07

Accessory to be used on Kilma-Rete and Kilma-Industriale radiant systems.





Series 595.D

 ${\bf Manual\,pipe\,fastener\,clip\,for\,electro-}$ welded mesh Ø 6 mm.

 ${\sf Clip\,made\,of\,plastic\,for\,anchoring\,the\,pipe\,to\,the}$ electro-welded mesh. Wire diameter of 6 mm.

Compatible systems: KILMA-INDUSTRIALE

Code	Suitable for pipes	Pack	Outer	Cat.
595.00.22	ø 20	200	200	30.07
595.00.52	ø 25	100	100	30.07

 $Accessory\,that\,can\,be\,used\,on\,the\,Kilma-Industriale\,radiant$ system.



Series 470

Fixing clamp.

 $Clamp\,made\,of\,plastic\,for\,fastening\,the\,pipe\,to\,the$ electro-welded mesh (Cod.

Compatible systems: KILMA-INDUSTRIALE

Code	Size A	Pack	Outer	Cat.
470.00.02	х	1000	1000	30.07

Accessory that can be used on the Kilma-Industriale radiant system.



Series 1200

Pipe clip for mesh.

Ideal to fasten the pipe (up to Ø 25) to the industrial mesh (max \emptyset 8 ÷ 10 mm).

Compatible systems:

KILMA-INDUSTRIALE

Code	Suitable for pipes	Pack	Outer	Cat.
1200.00.02	untoØ25	50	2000	30.07

 $Accessory\,that\,can\,be\,used\,on\,the\,Kilma-Industriale\,radiant$



Series 1333

Double mesh spacer.

The ideal solution to assure maximum grip of the metal structure inside the castings, for increased resistance to compression.

It ensures that the structure is raised from the bottom (3 cm) and that there is an excellent distance between the two meshes (6 cm) and the PE-X pipes.

Compatible systems: KILMA-INDUSTRIALE

Code	Lenght (mm)	Height (mm)	Pack	Outer	Cat.
1333.00.02	150	95	1800	1800	30.07

Pack: 1800 pcs. on pallet wrapped with PE film.

 $Accessory\,that\,can\,be\,used\,on\,the\,Kilma-Industriale\,radiant$





30.07 ACCESSORIES FOR RADIANT SYSTEMS

Series 2018

Anodised aluminium adhesive tape.

Aluminium adhesive tape to prevent the formation of acoustic bridges between 2 adjacent panels and to create a single insulating layer.

- Tape width 5 cm
- Tape length 50 m

Code	Lenght (m)	Width (cm)	Pack	Outer	Cat.
2018.00.02	50	5	1	24	30.07

For use on the head joints of Kilma-Roll rolled panels, Kilma Reel and Futura system.





Series 3702

KILMA FUTURA AD Adhesive.

 $Gluing function of Kilma-Futura\ panels\ on\ existing\ substrate\ support.$

Code	Weight (kg)	Pack	Outer	Cat.
3702.00.02	1	1	1	30.07

Accessory that can be exclusively used on the Kilma-Futura radiant system.

Average use 0.10 - 0.15 kg/m².



Series 3055

PRIMER MF by MAPEI® Epoxy primer.

Waterproofing and protection of the aluminised surface of the panel and piping in case of subsequent laying of flooring with cement-based glues or self-levelling screeds.

Supplied as a kit consisting of 1 3-kg box (primer) + 1 1-kg box (reagent).

Code	Pack	Outer	Cat.
3055.00.12	1	1	30.07

Accessory that can be used on the Futura radiant system.

Average use 0.2 kg/m².



Series 832

Axial pressure gauge.

Pressure gauge for automatic Alinox feeder.

Code	Measure	Scale (bar)	Pack	Outer	Cat.
83.20.05	1/8"Ø40	0 ÷ 10	1	1	30.07





Compression fitting for polyethylenepipes, specifically designed for 3201 -3202 - 3615 - 3616 series manifolds.

 $Brass\,nut, core\,and\,pipe\,clamping\,ogive.$ Nickel plated nut. . Elastomer seal ring. Standard RBM threaded F connection.

- Max operating temperature 95 °CMax operating pressure 10 Bar

Code	Measure	Measure	Pack	Outer	Cat.
3597.16.00	16x2	RBM 16	10	100	30.07
3597.17.00	17x2	RBM 17	10	100	30.07

Standard RBM thread W 24.5x19 F - int. 37 mm $\textit{Size: Outside } \emptyset \textit{x pipe thickness}$



 $Fitting \ to \ be \ used \ exclusively \ with \ compact \ modular \ brass$ manifolds, centre-to-centre distance 37mm 3201-3202 - 3615 - 3616 series.



Serie 450.A

Air and water manual discharge terminal

Code	Measure	Pack	Outer	Cat.
450.06.00	1"	1	10	30.07
450.07.00	1"1/4	1	10	30.07











Polyethylene pipe fitting.

Euroconus G3/4" connection (UNI-EN-ISO 228)

Certifications:



Code	Measure	Measure	Pack	Outer	Cat.
217.16.00	16x2	G 3/4" 16 EK	10	100	30.07
217.17.00	17x2	G 3/4" 17 EK	10	100	30.07
217.20.00	20x2	G 3/4" 20 EK	10	100	30.07

 $\textit{Size:} Outside \textit{ \emptyset x pipe thickness }$



 $KOMO\,certified\,diameter\,16x2-17x2\,and\,20x2\,fittings\,available.$ $Contact \, our \, sales \, department \, for \, the \, ordering \, codes.$



Series 224.B

Compression fitting for multilayer pipe.

Euroconus G3/4" connection (UNI-EN-ISO 228)

Certifications:





Code	Measure	Measure	Pack	Outer	Cat.
224.16.00	16x2	G 3/4" 16 EK	10	100	30.07
224.20.00	20x2	G 3/4" 20 EK	10	100	30.07

Size: Outside Øx pipe thickness



Series 8579

$MM\,1"\,connection\,fitting.$

Suitable for connecting 21" manifolds to reach the $number\, of\, required\, junctions.$

Code	Measure	Pack	Outer	Cat.
857.90.03	1"	1	10	30.07



Series 208

Flow meter to measure the flow rate of single circuit directly.

Euroconus F threaded swivel connection for connection to manifold. $Euroconus\,M\,threaded\,straight\,connection\,for$ fittings for copper, polyethylene, multilayer pipe.

- Scale 0÷5 l/min
- Reading precision ±10%

Code	Measure	Pack	Outer	Cat.
208.05.10	G 3/4" EK	10	10	30.07





Series 311.B

 $Y-shaped\ fitting\ to\ split\ copper,$ polyethylene and multilayer metalplastic circuits.

Euroconus G3/4" swivel threaded connection (UNI-EN-ISO 228) Standard RBM split threaded connections W24.5x19F Nickel brass body. Elastomer seals.

- Max operating temperature 100 °C
- Max operating pressure 10 Bar

Certifications:



Code	Size A	Size B	Pack	Outer	Cat.
311.05.00	G 3/4" EK	RBM	10	10	30.07

 $Allows to split circuits deriving from {\it Euroconus manifolds}.$ Use fittings with Standard RBM thread (see page 98) for pipe



Series 215

Straight adjustment lockshield for junction circuits from Euroconus manifolds.

 $Euroconus\,F\,threaded\,swivel\,connection\,for$ connection to manifold. $Euroconus\,M\,threaded\,straight\,connection\,for$ fittings for copper, polyethylene, multilayer pipe.

Code	Measure	Pack	Outer	Cat.
215.05.50	G 3/4" EK	10	10	30.07



Series 267

 $Straight\,valve\,with\,thermostatic\,option$ for junction circuits from Euroconus manifolds.

Euroconus F threaded swivel connection for connection to manifold. Euroconus M threaded straight connection for $fittings \, for \, copper, \, polyethylene, \, multilayer \, pipe. \,$

Code	Measure	Pack	Outer	Cat.
267.05.50	G 3/4" EK	10	10	30.07

It can be coupled with RBM thermo-electric servo motors code 306.00.X2



Series 3930

Reversible ball valve

Nickel brass body. Thick chrome plated brass ball. Elastomer gaskets. UNI-EN-ISO 228 MF connections.

• Operating temperature with water 20 ± +120°C

Code	Measure	Pack	Outer	Cat.
3930.06.00	1"	2	20	30.07



Series 451

In line fitting with thermowell and socket and dial thermometer to check the manifold's temperature.

Threaded line connections MF UNI-EN-ISO 228

• Thermometer scale $0\div80\,^{\circ}\text{C}$

Code	Measure	Pack	Outer	Cat.
451.06.00	1"	10	10	30.07
451.07.00	1"1/4	10	10	30.07







Pressure gauge ø 40. For pressure

- Scale 0 16 Bar (radial pressure gauge).
- Scale 0 10 Bar (axial pressure gauge).

Code	Measure	Pack	Outer	Cat.
746.90.05	1/8"	1	1	30.07



Series 793

Joint connection for aligning zone valve.

Threaded line connections MF UNI-EN-ISO 228

Code	Measure	Pack	Outer	Cat.
793.06.00	1"	1	1	30.07



For the fitting of the zone valve, when using misaligned brackets cod. 792.06.00 or else 1528.06.00



Series 1529

By-pass group with rotatable elbow fittings for the system filling.

It consists of (loose pieces) : Automatic air vent; By-pass adjustment group; $Fittings\, and\, connection\, pipe.$

- G 1/8" pressure gauge holder connection (for RBM Ø 40 radial pressure gauge - scale 0-10 bar -Code 832.005)

Code	Measure	Pack	Outer	Cat.
1529.06.00	1"	1	1	30.07

 $For manifold {\it kits} code~1410.XX.XX-1420.XX.XX, 608.XX.XX-616.XX.XX and 2028.$ XX.XX-2038.XX.XX



It allows for by-pass fixed adjustment. For connection to manifolds series 608 and 1410. A, please also include the fitting code 930.06.00.



Series 3786

Insulation shell for series 1529 bypass, made of expanded polyethylene $half-bearings\,with\,external\,ant is cratch$ coating.

Fire behaviour class I Density 33 kg/m³ Max operating temperature -40 \div +90 $^{\circ}$ C

Code	Measure	Pack	Outer	Cat.
3786.00.00	1"	1	1	30.07





Series 114.C

Motorised zone valve, 4-way, with 220 mm extension lead.

Threaded connections FF UNI-EN-ISO 228 Complete with adjustable micrometric bypass.

- Centre distance 220 ÷ 225 mm
- Misalignment 33 mm

Code	Measure	Model	Pack	Outer	Cat.
114.06.30	1"	Zone 4	1	1	30.07



Fitted for servocontrols code 360.00.X0 and 373.00.X0



Series 1360

Polyethylene pipe fitting.

1" F connection (UNI-EN-ISO 228)

Code	Measure	Pack	Outer	Cat.
1360.00.10	20x2	10	40	30.07
1360.00.30	25x2,3	10	40	30.07

Size: Outside Øx pipe thickness



This connection can be used in combination with Kilma Big Acciaio Manifold Kit, SERIES 1349



Series 1095

Brass sealing cap with o-ring for pressurising system with air.

Code	Pack	Outer	Cat.
1095.00.00	1	1	30.07



For use only on the air vent valves model Vasa - VasaTre.



03. CLIMATE COMFORT

30. RADIANT CLIMATE CONTROL SYSTEMS

30.08 TEMPERATURE CONTROL

323

 $Thermostats, programmable thermostats and room humidity \, regulator$

TEMPERATURE CONTROL

Comfort and energy efficiency

A modern building cannot do without an efficient heating and air conditioning system that guarantees energy savings while maintaining comfort for the occupants.

The zoned temperature control system is a key element in achieving **comfort and energy efficiency.**

Dividing the building into separately controlled zones makes the following possible:

- Manage comfort temperature only when people are present
- Manage artificial heating or cooling only when it is really necessary, depending on the contribution of solar radiation

For example, in the cold season, rooms exposed to sunlight need less energy to be heated than those not exposed to the sun.

By installing multi-zone systems, **cost savings of up to 30%** can be achieved, compared to traditional systems with a single chronothermostat.





ADVANTAGES

ADVANCED RADIANT SYSTEM MANAGEMENT

The system stores usage patterns and recognises the climatically disadvantaged environment, correcting discomfort.

INTEGRATED SYSTEM WITH START & STOP

The intelligent control continuously calculates the inertia of each individual room, anticipating start-up and shutdown.

OPTIMISED PID CONTROL STRATEGY

The technology algorithm allows the radiant system to be managed with maximum efficiency.

ADVANCED AIR TREATMENT MANAGEMENT

Optimises unit operation according to different requirements.

TAX DEDUCTIONS

Compatible with the requirements of current legislation on tax deductions.

COMPATIBLE WITH HOME AUTOMATION SYSTEM

Using an interface device with the chosen home automation system, it will be possible to monitor and control the system from a single application in a simple way.

CONNECTION TO THE CLOUD PLATFORM

The platform allows system supervision and the display of graphs and statistics.

VOC SENSOR TO MEASURE AIR QUALITY

 $\ensuremath{\mathsf{VOC}}$ sensors help determine air quality by measuring volatile organic compounds.



Electromechanical room thermostat

Electromechanical room thermostat. Wall-mounted installation. White. Summer-Winter selector.

Setting range 5÷30 bar Thermal differential 1.3°C (± 0.2°C) Wall-mounted. Size mm (lxhxd.): 83.7x82.9x30.9 Electrical protection rating: IP20

Certifications:

CE

Code	Control	Colour	Pack	Outer	Cat.
386.00.22	 Daily	White	1	1	30.08



Wall mounted.



Series 2726

Digital electronic room chronothermostat

Digital electronic room chronothermostat. The temperature can be programmed at any time of day and for each day of the week. Wall-mounted installation. Summer-Winter switchover.

- Power supply: 3 x 1.5V AAA alkaline batteries (not included)
- Type of setting ON/OFF or proportional
- Setting range $2 \div 37.7^{\circ}C$
- Temperature resolution 0.1 $^{\circ}\text{C}$
- Fixed thermal differential 0.3 $^{\circ}\text{C}$
- $\bullet \ \ Minimum \ programming \ interval \ 1 \ hour$
- $\bullet \ 4 \, operating \, temperatures: Comfort-Economy$
- Manual Off
- Programming: 7 programmes for winter operation (editable) and 7 programmes for summer operation (editable).
- Size mm (lxhxd.): 123x86x23
- Electrical protection rating: IP40

Certifications:



Code	Control	Colour	Pack	Outer	Cat.
2726.00.12	Weekly	White	1	1	30.08



Wall mounted.





Electronic room thermostatElectronic ambient thermostat recessed installation. Summer-Winter-Off selector.

- Power supply: 2 x 1.5 V AAA alkaline batteries (not included)
- Mode: summer/winter/off
- Temperature setting:
- ON/OFF with fixed differential 0.3°C
- proportional with 0.8°C band and 8 min time base.
- proportional with 1.5°C band and 15 min time base.
- Temperature setting: 5÷35°C
- (Fixed) differential: 0-3°C
- Operating temperature: $0 \div 50^{\circ}C$
- Storage temperature: -10÷+60°C
- Operating humidity: 20÷90% RH (noncondensing)
- Electrical protection rating: IP40
- Interchangeable front panel available in two colours: white and anthracite grey (included in the package)

Certifications:



Code	Control	Colour	Pack	Outer	Cat.
1552.00.02	Daily	White/ Charcoal	1	1	30.08

Recessed assembly. Compatibility with civil series plates ABB S.p.a.: Chiara, Mylos.

AVE S.p.a.: S44.

BTICINO S.p.a.: Axolute, Light, Light Tech, Living, Livinglight, Luna, Matix.

GEWISS S.p.a.: Chorus.

VIMAR S.p.a.: Eikon, Eikon Evo, Idea, Plana, Arke



Series 1553

Digital electronic room chronothermostat. The temperature can be programmed at any time of day and for each day of the week. Recessed installation. Summer-Winter switchover.

- Power supply: 2 x 1.5V AAA alkaline batteries (not included)
- Mode: summer/winter/off
- Temperature setting: 2÷35°C
- Differential (adjustable): $0.1 \div 1\,^{\circ}\text{C}$
- Operating temperature: 0 ÷ 50 °C
- Antifreeze temperature: 1 ÷ +10 °C, can be disabled
- Storage temperature: -10 ÷ +65 °C
- Operating humidity: 20÷90% RH (noncondensing)
- Electrical protection rating: IP40
- Interchangeable front panel available in two colours: white and anthracite grey (included in the package)

CE

Code	Control	Colour	Pack	Outer	Cat.
1553.00.02	Weekly	White/ Charcoal	1	1	30.08

Recessed assembly. Compatibility with civil series plates ABB S.p.a.: Chiara, Mylos.

AVE S.p.a.: S44.

BTICINO S.p.a.: Axolute, Light, Light Tech, Living, Livinglight Luna, Matix.

GEWISS S.p.a.: Chorus.

VIMAR S.p.a.: Eikon, Eikon Evo, Idea, Plana, Arke.





Umiclima Touch Screen Wall mounted digital electronic ambient programmable thermostat with humidity sensor.

- Power supply 2 AAA 1.5V alkaline batteries
- · Autonomy (Stand-by): 2 years
- Automatic battery discharge control with 2 intervention thresholds
- Graphical display of set temperature, time, measured temperature, measured relative humidity and calculated dew point
- Temperature control
- Second relay for dehumidifier summer intervention control based on dew temperature control
- LCD touch screen display
- Battery replacement without loss of data within 1 minute
- Setting range: 5°C to 30°C in WINTER programme, 15°C to 35°C in SUMMER programme
- Setting pitch: 0.2°C
- Adjustable thermal differential: 0.2 to 2.0°C (intervention range + 0.1°C to +1.0°C)
- Possibility of programming any temperature within the setting ranges at any half-hour of the day for each day of the week
- Contacts capacity: 230Vac 5A (resistive load)
- Wall mounted
- Dimensions (LxHxD): 123.5x83.5x31mm
- · Available colours: white or anthracite grey
- Class 1 temperature control device
- Contribution of the temperature control device to the seasonal efficiency of room heating: 1%. (in accordance with Directive 2010/30/EC Regulation 811/2013/EU)

Certifications:





Series 2294

UMIDAY-V ambient humidistat Ambient humidistat.

- Power supply: 230Vac 50/60 Hz
- Absorption: 4Va (0.5W)
- Output with bistable relay 5(3)A/250Vac
- Setting range: 30÷90% RH
- Minimum time between one switchover and the next: 1 minute
- Operating temperature: 0÷50°C
- Storage temperature: $+0-+60^{\circ}C$
- Electrical protection rating: IP40
- Interchangeable front panel available in two colours: white and anthracite grey (included in the package)
- Selector with two positions: off and automatic

Certifications:



Code	Model	Colour	Pack	Outer	Cat.
2295.00.22	UMICLIMA TOUCH	White	1	1	30.08
2295.00.32	UMICLIMA TOUCH	Black	1	1	30.08

Code	Colour	Pack	Outer	Cat.
2294.00.32	White/Charcoal	1	1	30.08

 $Flush\,mount\,in stallation\,in\,503\,box.$

 $\label{thm:control} \textbf{Suitable for room relative humidity control and adjustment.}$

Compatibility with civil series plates

ABB S.p.a.: Chiara, Mylos.

AVE S.p.a.: S44.

BTICINO S.p.a.: Axolute, Light, Light Tech, Living, Livinglight, Luna, Matix.

GEWISS S.p.a.: Chorus.

 $VIMAR\,S.p.a.: Eikon, Eikon\,Evo, Idea, Plana, Arke$





Kilma Set 2

Kilma Set 2 MULTIZONE pre-configured electronic regulator. Regulator for DIN guide installation with control up to 32 zones, dehumidification control, clock/calendar with built-in buffer battery, 0/10V outputs, expansion bus to connect temperature and humidity sensors.

Specifically designed for radiant air-conditioning systems. Keyboard-guided settings and values shown on the backlit display on the controller.

- DIN rail insertion of 6 modules (108 mm long)
- Control up to 32 zones
- Power supply 12-14V DC, absorption 500 mA
- 8 relay outputs, NO potential-free contacts with a capacity of 4A 250V AC, 2A 30V DC
- 20/10V outputs to control the mixing valves
- Summer/winter mode
- 8 inputs for passive temperature probes

Code	Model	Pack	Outer	Cat.
3499.00.02*	Kilma Set 2*	1	1	30.08

* DIN rail controller with 6 modules fitted with 8 inputs, 8 digital outputs and 2 analogue outputs



Series 3500

Expansion module for Kilma Set 2 regulator.

Fixing to DIN rail.

- 12-14V DC power supply, connection with bus control systems
- Digital output, potential-free exchange contact, 4A, 250V AC, 2A 30V DC capacity
- 0/10V signal analogue output (if there is one)
- LED for status indication: inputs, outputs, power supply, bus communication
- Removable terminals

Code	Model	Pack	Outer	Cat.
35000002(a)	Kilma Set EXP	1	1	30.08
35000012(b)	Kilma Set DD	1	1	30.08
35000022(c)	Kilma Set AD	1	1	30.08
35000032(d)	Kilma Set AA	1	1	30.08

(a) DIN rail expansion with 6 modules fitted with 8 inputs, 8 digital outputs and 2 analogue outputs.

- (b) DIN rail expansion 2 module with 2 inputs and 2 digital outputs.
- (c) DIN rail expansion 2 module with 2 inputs and 1 digital output and 1 analogue output.
- (d) DIN rail expansion with 2 modules with 2 digital outputs and 2 analogue outputs.



Series 3501

Power supply.

Fixing to DIN rail (3 modules).

- 100-240V AC power supply
- 12V DC output voltage
- 60W rated power
- Protection against short circuit, overload, overvoltage
- Insulation Class II
- Operating temperature -20 ÷ +40°C (at full load)
 -20 ÷ +60°C (at 60% of the load)
- Operating humidity 20% ÷ 90%, without condensation
- Dimensions (HxLxD): 93x53x56 mm

Code	Model	Pack	Outer	Cat.
3501.00.12	W60	1	1	30.08







Series 3502.A

Immersion temperature probe and well.

Brass thermowell $PG7\ cable\ gland\ for\ probe\ insertion\ and\ fixing$

- Sensitive element ø 6 mm
- NTC sensor
- Legnth 50 mm
- · Silicone cable length 3 m
- Well G 1/2" thread
- Maximum probe/regulator distance: 200 m (with a 2 x 0.75 mm² cable)

Immersion temperature probe

Code	Model	Description	Pack	Outer	Cat.
3502.00.02	STP	for KILMA SET 2	1	1	30.08

STP probe holder drain

Code	Pack	Outer	Cat.
3502.00.32	1	1	30.08



Series 3502.B

ETP probe for external temperature only.

- Sensitive element NTC
- ABS containerElectrical protection: IP65
- Maximum probe/regulator distance: 200 m (with a 2 x 0.75 mm² cable)
- Operating/storage temperature range: -30 \div +85°C
- Storage humidity range: 10÷90% (noncondensing)
- Built-in cable gland for cable diameter from 5 to
- Size (lxhxd) 45x45x25 mm (excluding the size of the cable gland)

Code	Model	Pack	Outer	Cat.
3502.00.12	ETP	1	1	30.08



Wall mounted.



Series 3503

Blind room temperature probe, suitable for installation with the most common recessed civil series.

Suitable for room temperature control.

- NTC temperature probe
- Takes up 1 position on the case body for installation. - 2-pole terminal.
- Connection via analogue input (on Kilma Set 2 regulator or expansion).
- Maximum probe/regulator distance: 200 m (with $a 2 \times 0.75 \, \text{mm}^2 \, \text{cable}$
- Operating/storage temperature range: -20 ÷ +50°C
- Storage humidity range: 10÷90% (noncondensing)

Code	Model	Pack	Outer	Cat.
3503.01.02*	TA	1	1	30.08
3503.80.02**	TA-80	1	1	30.08

st Recessed installation. For the full ordering code, see the table below with the "coding method for the compatibility of civil recessed series plates".
**Wall mounted.



Recessed/wall-mounted installation (two different versions). $Plate, basket \, and \, plugs \, not \, included \, in \, the \, supply.$





Blind room temperature and relative humidity combined probe, suitable for installation with the most common recessed civil series.

 $\label{thm:control} Suitable for room temperature and relative humidity control.$

- NTC temperature probe
- Temperature measurement with resolution and repeatability of 0.1 $^{\circ}\text{C}$
- Relative humidity measurement with resolution and repeatability of 0.1% RH
- Takes up 1 position on the case body for installation
- 12V DC power supply, removable 4-pole terminal for easy wiring
- Bus connection to the other system components
- Operating temperature range: -5 ÷ +45°C
- Storage temperature range: -20 \div +50 $^{\circ}\text{C}$
- Operating humidity range: 5÷90%
- Storage humidity range: 10÷90% (without condensation)

Code	Model	Pack	Outer	Cat.
3504.01.02*	THB	1	1	30.08
3504.80.02**	THB-80	1	1	30.08

*Recessed installation. For the full ordering code, see the table below with the "coding method for the compatibility of civil recessed series plates".

**Wall mounted.

(i)

Recessed/wall-mounted installation (two different versions). Plate, basket and plugs not included in the supply.



Series 3505

Room temperature and relative humidity combined probe with LED display, suitable for installation with the most common recessed civil series.

Suitable for room temperature and relative humidity control.

- Temperature measurement with resolution and repeatability of 0.1°C
- Relative humidity measurement with resolution and repeatability of 0.1% RH
- Takes up 2 positions on the case body for installation
- 12V DC power supply, removable 4-pole terminal for easy wiring
- $\bullet \ \ \mathsf{Bus}\,\mathsf{connection}\,\mathsf{to}\,\mathsf{the}\,\mathsf{other}\,\mathsf{system}\,\mathsf{components}$
- High readability LED display, in standby it switches to low brightness mode
- Operating temperature range: -5 ÷ +45°C
- Storage temperature range: -20 \div +50 $^{\circ}\text{C}$
- Operating humidity range: 5÷90%
- Storage humidity range: 10÷90% (without condensation)

Code	Model	Pack	Outer	Cat.
2505 01 02*	TUDLOd	1	1	20.00

* Recessed installation. For the full ordering code, see the table below with the "coding method for the compatibility of civil recessed series plates".



Plate, basket and plugs not included in the supply.



Series 3506

Blind room CO2 probe, suitable for installation with the most common recessed civil series.

Suitable for monitoring room air quality.

- Takes up 1 position on the case body for installation
- 12V DC power supply, removable 4-pole terminal for easy wiring
- Bus connection to the other system components

Code	Model	Pack	Outer	Cat.
3506.01.02*	VOC	1	-	30.08
3506.80.02**	VOC-80	1	1	30.08

*Recessed installation. For the full ordering code, see the table below with the "coding method for the compatibility of civil recessed series plates".

**Wall mounted.



Recessed/wall-mounted installation (two different versions). Plate, basket and plugs not included in the supply.





Kilma Set Touch Remote terminal for connection with Kilma Set 2 controllers, suitable for installation with the most common recessed civil series.

2.4" backlit touch screen display 12V DC power supply BUS connection to the other system components

Code	Model	Pack	Outer	Cat.
3507.01.02*	Kilma Set Touch	1	1	30.08
3507.80.02**	Kilma Set Touch-80	1	1	30.08

^{*}Recessed installation. For the full order code, see the table with the "coding method for the compatibility civil series plates for recessed installation" reported below – Article not compatible with JUNGLS SQUARE plate. Price not valid for BTICINOLIVING NOW series (request specific quotation).

^{**}Wall mounted.



 $Recessed/wall-mounted installation (two different versions). \\ Plate, basket and plugs not included in the supply. \\$



CODING METHOD FOR RECESSED DOMESTIC SERIES COVER PLATE COMPATIBILITY

The components of the SERIES 3503 - 3504 - 3505 - 3506 - 3507 system (room temperature probes and remote touch screen terminal) are designed for installation in line with the most common recessed domestic series. When placing the order, you must complete the code corresponding to the series of domestic cover plates provided for the housing unit to be combined as shown in the following table.

DOMESTIC SERIES TYPE	CODE COMPLETION
VIMAR PLANA SILVER	XXXX.01.02
VIMAR PLANA WHITE	XXXX.02.02
VIMAR IDEA WHITE	XXXX.03.02
VIMAR IDEA BLACK	XXXX.04.02
VIMAR EIKON WHITE	XXXX.05.02
VIMAR EIKON BLACK	XXXX.06.02
VIMAR EIKON NEXT	XXXX.07.02
VIMAR EIKON WHITE EVO	XXXX.05.12
VIMAR EIKON BLACK EVO	XXXX.06.12
VIMAR EIKON NEXT EVO	XXXX.07.12
VIMAR ARKE' WHITE	XXXX.50.02
VIMAR ARKE' BLACK	XXXX.51.02
VIMAR ARKE' METAL	XXXX.52.02
VIMAR ARKÉ WHITE FIT	XXXX.50.12
VIMAR ARKÉ BLACK FIT	XXXX.51.12
VIMAR ARKÉ METAL FIT	XXXX.52.12
VIMAR LINEA WHITE*	XXXX.57.12
VIMAR LINEA BLACK*	XXXX.58.12
VIMAR LINEA HEMP*	XXXX.59.12
BTICINO INTERNATIONAL BLACK (BTICINO LIVING LIGHT BLACK)	XXXX.10.02
BTICINO LIVING LIGHT WHITE	XXXX.11.02
BTICINO LIVING NOW WHITE	XXXX.17.02
BTICINO LIVING NOW BLACK	XXXX.18.02
BTICINO LIVING NOW SAND	XXXX.19.02
BTICINO AXOLUTE WHITE	XXXX.12.02
BTICINO AXOLUTE BLACK	XXXX.13.02
BTICINO MATIX WHITE	XXXX.14.02
BTICINO MATIX IVORY	XXXX.19.12
BTICINO MATIX GO WHITE	XXXX.48.02
BTICINO MATIX GO GREY	XXXX.49.02
BTICINO LIVING LIGHT TECH	XXXX.15.02
BTICINO AXOLUTE SILVER	XXXX.16.02
BTICINO INTERNATIONAL BLACK AIR (BTICI- NO LIVING LIGHT BLACK AIR)	XXXX.10.12
BTICINO LIVING LIGHT WHITE AIR	XXXX.11.12

^{*} Not available for THB Led probe (3505xxxx)

COMPLETE ORDER CODE



SERIES FIELD

DOMESTIC SERIES TYPE

(refer to the table below for the expected completion code)

DOMESTIC SERIES TYPE	CODE COMPLETION
BTICINO AXOLUTE WHITE AIR	XXXX.12.12
BTICINO AXOLUTE BLACK AIR	XXXX.13.12
BTICINO LIVING LIGHT TECH AIR	XXXX.15.12
BTICINO AXOLUTE SILVER AIR	XXXX.16.12
GEWISS SYSTEM WHITE	XXXX.20.02
GEWISS SYSTEM BLACK	XXXX.25.02
GEWISS PLAYBUS BLACK	XXXX.21.02
GEWISS CHORUS WHITE	XXXX.22.02
GEWISS CHORUS BLACK	XXXX.23.02
GEWISS CHORUS TITANIUM	XXXX.24.02
GEWISS CHORUS GLOSSY WHITE	XXXX.22.02
GEWISS CHORUS OPAQUE WHITE	XXXX.27.02
ABB MYLOS WHITE	XXXX.30.02
ABB MYLOS BLACK	XXXX.31.02
ABB CHIARA WHITE	XXXX.32.02
LEGRAND VELA BLACK	XXXX.40.02
LEGRAND VELA WHITE	XXXX.41.02
AVE LIFE BLACK	XXXX.61.02
AVE DOMUS 44 WHITE	XXXX.62.02
AVE SYSTEM 45 NEUTRAL WHITE GLOSSY*	XXXX.63.02
AVE TEKLA BLACK (OPAQUE) SYSTEM 44	XXXX.64.02
AVE ALLUMIA SILVER GREY	XXXX.65.02
AVE LIFE BLACK (GLOSSY) SYSTEM 44	XXXX.66.02
AVE DOMUS CLASS IVORY SYSTEM 44	XXXX.68.02
URMET NEA ALUMINIUM KARBON	XXXX.70.02
URMET NEA ALUMINIUM SATIN FINISH	XXXX.71.02
URMET NEA WHITE OPAQUE	XXXX.72.02
URMET NEA ANTHRACITE BLACK	XXXX.73.02
JUNG LS SQUARE ALPINE WHITE**	XXXX.00.02
JUNG LS SQUARE ALPINE BLACK**	XXXX.00.12
JUNG LS SQUARE LIGHT GREY**	XXXX.00.22
WALL-MOUNTED IN BOX 80X120	XXXX.80.02

 $\textbf{Example:} \ \, \textbf{If you need to order the SERIES 3504 temperature only room probe compatible with the VIMAR PLANA SILVER domestic series, the code to order will be $3504.01.02$$

NOTE: The cover plate/basket and blind caps are not included in the supply.

^{**} Not available for remote touch screen display (3507xxxx)



Kilma Set Touch 2.0 Touch screen with integrated WiFi to be used coupled to Kilma Set 2 regulator

4.3" backlit touch screen display.

12V DC power supply

BUS connection to the other system components.

Integrated relative humidity temperature sensor.

Code	Model	Pack	Cat.
3508.80.12	Kilma Set Touch 2.0	1	30.08

(i)

Wall-mounted or to cover box recessed series 503. Includes Wi-Fi modem, to access the remote management portal.



Series 3509.A

Gateway to connect the Kilma Set 2 regulator with home automation systems based on EIB/KNX standards (Konnex).

The bus can be used to:
Turn on/off the entire system, individual zones or groups of zones;
Read/edit the zone setpoint values;
Read/edit how the clocks work;
Read the temperature and humidity of all the

Option of configuring the interface via the software.

Code	Pack	Outer	Cat.
3509.00.02	1	1	30.08



Seriess 3509.B

$\label{lem:module} \textbf{Module for remote control with Ethernet} \\ \textbf{/LAN technology}$

 $\label{lem:module to connect Kilma Set 2 systems to the remote control portal with Ethernet/LAN technology.$

- Fixing with ø 3.4 mm holes
- Power supply 5-36 VDC, max absorption 325 mA
- Supplied with a magnetic base antenna and a kit of connection cables

Code	Pack	Outer	Cat.
3509.00.12	1	1	30.08



Seriess 3509.C

Module for remote control with GSM/GPRS technology.

 $Module \ to \ connect \ Kilma\ Set\ 2 \ systems\ to\ the \\ remote \ control\ portal\ with\ GSM/GPRS\ technology.$

Fixing with ø 3.4 mm holes Power supply 5-36V DC, max absorption 325 mA Supplied with a magnetic base antenna and a kit of connection cables

Code	Pack	Outer	Cat.
3509.00.22	1	1	30.08



Series 3509.D

Interface to connect the boards to supervision systems (BMS) through Modbus over TCP or Modbus over 485 protocols.

Fixing to DIN rail 12V dc power supply Operating temperature range: $-5 \div +45^{\circ}\text{C}$ Storage temperature range: $-20 \div +50^{\circ}\text{C}$ Storage humidity range: $10 \div 90\%$ (without condensation)

$Supervision\,interface\,for\,Modbus\,over\,TCP/IP\,system$

Code	Pack	Outer	Cat.
3509.00.32	1	1	30.08

Supervision interface for Modbus over 485 system (RTU protocol)

Code	Pack	Outer	Cat.
3509.00.42	1	1	30.08



Series 5897.A

KILMA AIR TOUCH Touch screen display for renewal unit control

4.3" backlit touch screen display.
Wall-mounted to cover box 503.
12V DC power supply
Mod-BUS interface, RS485 port.
Integrated relative humidity and temperature sensor.
Dimensions (LXHXD): 121x87x19mm

Certifications:

CE

Code	Model	Description	Pack	Outer	Cat.
5897.30.15	AIRTOUCH_TH	Basic model	1	1	30.08



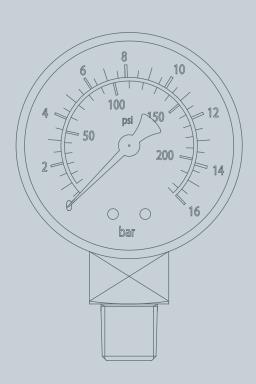
Power supply 12V DC included. It can only be used with the fresh air units with heat recovery from the RBM Airflat range.





GROUP		CATEGORY		LINE	
60. Service	336	60.01 Service	337	Spare parts	338

06. SERVICE



60. SERVICE

60.01 SERVICE 337

Spare parts



Radial pressure gauge.

Pressure gauge for pressure reducing valves and self-cleaning filters.

Code	Measure	Scale (bar)	Pack	Outer	Cat.
1213.005	1/4" - Ø 50	0 ÷ 16	1	280	60.01

^{*}Spare part for self-cleaning filter series 126



Series 8188

Radial pressure gauge for Filler feeder series 39 – 3153

Pressure gauge for automatic Filler feeders.

Code	Measure	Scale (bar)	Pack	Outer	Cat.
8188.005*	1/8" - Ø 40	0 ÷ 4	1	1	60.01

^{*}Pressure gauge for Filler feeder series 39 – 3153



Series 2549

$\label{eq:Axial pressure gauge with red index.}$

Pressure gauge for standards safety relief valves.

Code	Measure	Scale (bar)	Pack	Outer	Cat.
2549.005	1/4" - Ø 50	0 ÷ 4	1	1	60.01
2574.005	1/4" - Ø 50	0 ÷ 10	1	1	60.01



Series 380

Adjustable contact thermostat with spring-loaded pipe clamp.

- Temperature range +20 +90°C
- Differential 8±3K
- Electrical protection rating IP30
- Thermal gradient <1K/min.
 Maximum head temperature 80°C
 Storage temperature -15 +60°C
- Contact capacity 16(2.5)A 250V 2.5A 250V
- M20x1.5 fairlead
- Installation on piping

Code	Pack	Outer	Cat.
380.00.02	1	1	60.01



Series 383

Immersion thermostat with manual reset.

- Triggering temperature (fixed setting): Min. 50 - Max. 120°C
- Fixed setting 100°C
- Triggering tolerance +0/-6°C
 Control head temperature limit 85°C
- $\bullet \ \ \mathsf{Electrical} \ \mathsf{protection} \ \mathsf{rating} \ \mathsf{IP43}$
- 1/2" conduit connection
- Contact capacity 16(4)A 250V

Certifications:

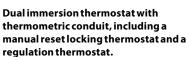
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Code	Pack	Outer	Cat.
383.00.02	1	1	60.01



 $Spare\ part\ for\ 3603\ Series\ RBM\ instrument\ holder\ manifold$





- Operating range: Min. 0 Max. 120°C
- $\bullet \ \, \text{Triggering tolerance:} \\ \text{Min.} \\ \text{T} \\ \pm 6^{\circ} \text{C} \\ \\ \text{Max} \\ \text{T} \\ \pm 4^{\circ} \text{C}$
- Triggering temperature (fixed setting): Min. 50
 Max. 120°C
- Fixed setting 100°C
- Triggering tolerance +0/-6°C
- Control head temperature limit 85°C
- Electrical protection rating IP43
- Contact capacity 16(4)A 250V

Code	Pack	Outer	Cat.
382.00.02	1	1	60.01



 $Accessory for 3603\,Series\,RBM\,instrument\,holder\,manifold$



Series 625

Safety pressure switch, used to protect, command and control pressure in heating systems.

- Setting range 2 5.5 bar
- Minimum differential for reset 0.6 bar
- Maximum sensitive element pressure: 7 bar
- Maximum controlled fluid temperature 120°C
- Allowed pressure switch body temperature: -35

 +80°C
- Electrical protection rating IP44
- G 1/2"F connection with dome

Certifications:

PED

Code	Measure	Calibration (bar)	Pack	Outer	Cat.
625.02.00	1/2"	2 ÷ 5,5	1	1	60.01



Spare part for 3603 Series RBM instrument holder manifold



Series 2240

Low pressure switch with manual reset, used to command and control pressure in heating systems.

- Setting range 0.5 2.5 bar
- Minimum differential for reset 0.5 bar
- Factory setting 0.5 bar
- Maximum sensitive element pressure 6 bar
- Maximum controlled fluid temperature 120 °C
- Allowed pressure switch body temperature: -35

 +80°C
- $\bullet \ \ \mathsf{Electrical} \ \mathsf{protection} \ \mathsf{rating} \ \mathsf{IP44}$
- G 1/2"F connection with dome

Code	Measure	Calibration (bar)	Pack	Outer	Cat.
2240.02.00	1/2"	0,5 ÷ 2,5	1	1	60.01



 $Spare\ part\ for\ 3603\ Series\ RBM\ instrument\ holder\ manifold$



Series 636

Thermometer. Compliant with INAIL requirements.

- Scale 0-120°C
- Precision class 2
- G 1/2" radial connection

Code	Measure	Scale (°C)	Pack	Outer	Cat.
636.00.50	1/2"	0 ÷ 120	2	1	60.01



Spare part for 3603 Series RBM instrument holder manifold Well included in supply





Radial pressure gauge. Compliant with INAIL requirements.

• G 1/4" radial connection

Code	Measure	Scale (bar)	Pack	Outer	Cat.
626.02.00	1/4"	0 ÷ 4	1	1	60.01
626.02.10*	1/4"	0 ÷ 6	1	1	60.01
626.02.20	1/4"	0 ÷ 10	1	1	60.01

 $^{* \}textit{Pressure gauge supplied with the instrument holder manifold} \\$

(i)

 $Spare\ part\ for\ 3603\ Series\ RBM\ instrument\ holder\ manifold$



Series 3604

 $\label{lem:control} \textbf{Control probe holder for thermometer.} \\ \textbf{Compliant with INAIL requirements.}$

• G 1/2" threaded connection

Code	Measure	Pack	Outer	Cat.
3604.04.02	1/2"	1	1	60.01



 $Spare\ part\ for\ 3603\ Series\ RBM\ instrument\ holder\ manifold$



Series 891

Spare float unit for "Vasa" - "VasaTre" automatic air vent valves.

Including:

- Cap complete with float;
- Lever;
- Rod;
- Protection cap;
- Plastic protection cap, with venting holes.

Code	Measure	Pack	Outer	Cat.
891.00.00	U	10	10	60.01

U = Universal



Series 875.A

Complete cap unit for thermostatically controlled valves.

Code	Pack	Outer	Cat.
87.50.03*	1	1	60.01
3517.00.02**	1	1	60.01

^{*}Brass cap unit suitable for valve size 3/8" - 1/2" - 3/4"

**Brass cap unit suitable for valve size 1"







761 series

 $Complete\,cap\,unit\,for\,valves\,with$ thermostatic option with preadjustment.

6 adjustment positions. Brass cap unit suitable for valve size 3/8" - 1/2" -

Code	Pack	Outer	Cat.
761.30.13	1	1	60.01



Series 426

Nut and spherical fitting for iron and copper valves, with O-Ring.

Code	Measure	Pack	Outer	Cat.
4260.13	3/8"	1	1	60.01
4290.13	1/2"	1	1	60.01



Series 3518

 $Kit\,with\,nut, spherical\,fitting\,and\,probe$ for series 3101 thermostatic single/ double pipe valves.

Kit inclusive of:

- Nut;

- Nut;
 Spherical fitting;
 Flat seat gasket;
 Probe guide;
 L110 mm standard length probe.

Code	Measure	Pack	Outer	Cat.
3518.04.02	1/2"	1	1	60.01
3518.05.02	3/4"	1	1	60.01
3518.06.02	1"	1	1	60.01
1011.10.05*	1" SX	1	1	60.01

^{*} Stem only



Series 307

Wrench for spherical fittings.

Code	Measure	Descrip- tion	Figure	Pack	Outer	Cat.
307.00.00	3/8" - 1/2"	-	1	5	5	60.01
307.00.10	-	Monoflux - Uniflux	2	1	1	60.01



1016 series

New hand wheel for thermostatically controlled valve.

Code	Measure	Pack	Outer	Cat.
1016.60.03	U	1	1	60.01

U = Universal





Series 3097

 $Hand \, wheel \, for \, thermostatically \,$ controlled valve.

Code	Measure	Pack	Outer	Cat.
309.70.03	U	1	1	60.01

U = Universal



Series 2587

Hand wheel for manual valve.

Hand wheel for manual valve, white version

Code	Measure	Pack	Outer	Cat.
2587.003	3/8" - 1/2"	1	1	60.01
2587.093	3/8" - 1/2"	1	1	60.01
3310.13	3/4"	1	1	60.01
3320.13	1"	1	1	60.01
3330.13	1"1/4	1	1	60.01

Hand wheel for manual valve, chrome-plated version

Code	Measure	Pack	Outer	Cat.
2587.053	3/8" - 1/2"	1	1	60.01
2587.083	3/8" - 1/2"	1	1	60.01

Hand wheel for manual Jet-line valve, white version

Code	Measure	Pack	Outer	Cat.
3512.005	3/8" - 1/2"	1	1	60.01



Series 2711

Cap for lockshield valve.

Cap for lockshield valve, white version

Code	Measure	Pack	Outer	Cat.
2711.005	3/8" - 1/2"	1	1	60.01
2711.095	3/8" - 1/2"	1	1	60.01
3511.005	3/4" - 1" - 1"1/4	1	1	60.01

Cap for lockshield valve, chrome-plated version

Code	Measure	Pack	Outer	Cat.
2711.055	3/8" - 1/2"	1	1	60.01
2711.085	3/8" - 1/2"	1	1	60.01

Cap for Jet-line lockshield valve, white version

Code	Measure	Pack	Outer	Cat.
3511.005	3/4" - 1" - 1"1/4	1	1	60.01



Series 2440

Complete adjustment unit for "Mono-Zona" 433 series manifold zone valve

Code	Pack	Outer	Cat.
244.00.13	1	1	60.01





Series 2343.B

 ${\bf Cap\,unit\,plus\,screw\,for\,zone\,valves.}$

Code	Measure	Pack	Outer	Cat.
234.30.03	U	1	1	60.01

U = Universal



Series 8780.A

 $1/2"\,screw\,unit\,to\,be\,adjusted\,with\,butterfly\,handwheel.$

 $For Domestic Monoblock \, D. S. \, manifold \,$

Code	Measure	Figure	Pack	Outer	Cat.
878.00.05	1/2"	1	1	1	60.01



Series 8780.B

 $1/2" screw \, unit \, with \, screw driver \, \\ adjustment.$

 $For Domestic Monoblock \, D. S. \, manifold \,$

Code	Pack	Outer	Cat.
878.00.15	1	1	60.01



Series 929

Complete plastic box for the Domestic Monoblock D.S. manifold

$Domestic\,Monoblock\,D.S.\,water\,system\,manifold\,box\,5+3\,branches$

Code	Model	Pack	Outer	Cat.
9290.00.03*	CFF	1	1	60.01
9290.00.13**	CCF	1	1	60.01

^{*}Part specific for manifold code 967.00.00

$Domestic\,Monoblock\,D.S.\,water\,system\,manifold\,box\,6+4\,branches$

Code	Model	Pack	Outer	Cat.
9290.00.53*	CFF	1	1	60.01
9290.00.63**	CCF	1	1	60.01

 $^{* \}textit{Part specific for manifold code 903.00.50}$



Series 2155

Screw for closing plastic box cover

Code	L (mm)	Pack	Outer	Cat.
215.50.35	35	1	1	60.01
215.50.05	60	1	1	60.01



^{**} Part specific for manifold code 967.00.10

^{**} Part specific for manifold code 903.00.60



Complete cartridge for RinoxPlus M RinoxPlusSmart M diaphragm pressure reducing valve.

Code	Measure	Pack	Outer	Cat.
8167.003	1/2" - 3/4"	1	1	60.01
8201.003	1"	1	1	60.01
8202.003	1"1/4	1	1	60.01
8203.003	1"1/2 - 2"	1	1	60.01



Series 7367

Filter for RinoxPlus M and RinoxPlusSmart M diaphragm pressure reducing valve.

Code	Measure	Pack	Outer	Cat.
7367.005	1/2" - 3/4"	1	1	60.01
7387.005	1"	1	1	60.01
7401.005	1"1/4	1	1	60.01
7403.005	1"1/2 - 2"	1	1	60.01



Series 8454

Cartridge for automatic flow control valve.

Manual cartridge.

Code	Colour	Flow rate (m³/h)	Pack	Outer	Cat.
845.40.05	В	0,100 - 0,412	1	1	60.01
845.40.15	G	0,157 - 0,609	1	1	60.01
845.40.25	RW	0,275 - 0,825	1	1	60.01
845.40.55	RG	0,406 - 1,270	1	1	60.01

B = Black G = Green RW = Red - b. white RG = Red - b. grey



Series 8455

Cartridge for pressure independent control valve.

 $Cartridge\,can\,be\,motorised.$

Code	Colour	Flow rate (m³/h)	Pack	Outer	Cat.
845.50.05	G	0,057 - 0,575	1	1	60.01
845.50.55	В	0,064 - 1,110	1	1	60.01

G = O.R. Grey B = O.R. Black





Cartridge for differential pressure control and regulating valve.

Code	DP (kPa)	Flow rate (m³/h)	Pack	Outer	Cat.
885.20.25	20	0,050 - 0,960	1	1	60.01
885.20.35	30	0,050 - 1,419	1	1	60.01



Series 3238

Adaptor ring nut connection M28x1.5 / M30x1.5 to couple thermostatic head.

Code	Pack	Outer	Cat.
3238.00.02	1	1	60.01



Spare part for Fixed Point (FR) DN25 booster module



Series 590.B

Thermostatic control for fixed point mixing units and zone modules.

 Temperature adjustment range: 25-52 °C (Model TL50) / 40-70 °C (Model TL70S)

Code	Model	Pack	Outer	Cat.
590.00.50*	TL50	1	1	60.01
3218.00.12*	TL70 M	1	1	60.01
3218.00.02**	TL70 S	1	1	60.01

*Connection M30x1.5

**Connection M28x1.5



Spare part for Fixed Point (FR) DN25 booster module Specific accessory for Micromega MIX series 3240.





Series 3244

Safety thermostat.

Code	Pack	Outer	Cat.
3244.00.02	1	1	60.01

(i)

Spare part for Fixed Point (FR) DN25 booster module



Series 8519

Cartridge for MG1 magnetic sludge remover filter.

$Cartridge for MG1\ magnetic\ sludge\ remover\ filter\ (800\ \mu m)$

Code	Measure	Pack	Outer	Cat.
851.90.15	3/4"	1	1	60.01

Cartridge for MG1 magnetic sludge remover filter (400 μm)

Code	Measure	Pack	Outer	Cat.
851.90.35	3/4"	1	1	60.01







Cartridge for line filter.

Cartridge for line filter (800 μm)

Code	Measure	Pack	Outer	Cat.
1041.005	3/8" - 1/2"	1	1	60.01
9290.05	3/4"	1	1	60.01
9590.05	1"	1	1	60.01
9300.05	1"1/4	1	1	60.01
9310.05	1"1/2 - 2"	1	1	60.01
1156.003	2"1/2-3"-4"	1	1	60.01

Cartridge for line filter (300 μm)

Code	Measure	Pack	Outer	Cat.
1041.015	3/8" - 1/2"	1	1	60.01
9290.15	3/4"	1	1	60.01
9590.15	1"	1	1	60.01
9300.15	1"1/4	1	1	60.01
9310.15	1"1/2 - 2"	1	1	60.01
1156.013	2"1/2 - 3" - 4"	1	1	60.01

Cartridge for line filter (100 μm)

_				
Code	Measure	Pack	Outer	Cat.
1041.055	3/8" - 1/2"	1	1	60.01
9290.55	3/4"	1	1	60.01
9590.55	1"	1	1	60.01
9300.55	1"1/4	1	1	60.01
9310.55	1"1/2 - 2"	1	1	60.01

Cartridge for line filter (50 μm)

Code	Measure	Pack	Outer	Cat.
1041.025	3/8" - 1/2"	1	1	60.01
9290.25	3/4"	1	1	60.01
9590.25	1"	1	1	60.01
9300.25	1"1/4	1	1	60.01
9310.25	1"1/2 - 2"	1	1	60.01
1156.023	2"1/2-3"-4"	1	1	60.01

Spare part for line filters Series 3 - 4.





Series 6065Cartridge for Y-shaped filter.

Cartridge for Y-shaped filter (800 μm)

Code	Measure	Pack	Outer	Cat.
606.50.05	1/2"	1	1	60.01
606.20.05	3/4"	1	1	60.01
605.90.05	1"	1	1	60.01
606.80.05	1"1/4	1	1	60.01
607.10.05	1"1/2	1	1	60.01
607.40.05	2"	1	1	60.01

Cartridge for Y-shaped filter (300 μ m)

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Code	Measure	Pack	Outer	Cat.
606.50.15	1/2"	1	1	60.01
606.20.15	3/4"	1	1	60.01
605.90.15	1"	1	1	60.01
606.80.15	1"1/4	1	1	60.01
607.10.15	1"1/2	1	1	60.01
607.40.15	2"	1	1	60.01

Cartridge for Y-shaped filter (100 μm)

		•		
Code	Measure	Pack	Outer	Cat.
606.50.55	1/2"	1	1	60.01
606.20.55	3/4"	1	1	60.01
605.90.55	1"	1	1	60.01
606.80.55	1"1/4	1	1	60.01
607.10.55	1"1/2	1	1	60.01
607.40.55	2"	1	1	60.01

Spare part for Y-shaped filter Series 858.



349



Series 1171

Self-cleaning filter cartridge.

$Cartridge for self-cleaning filter (800\,\mu\text{m})$

Code	Measure	Pack	Outer	Cat.
1171.003	3/8" - 1/2"	1	1	60.01
1172.003	3/4"	1	1	60.01
1173.003	1"	1	1	60.01
1200.003	1"1/4	1	1	60.01
1201.003	1"1/2 - 2"	1	1	60.01
1215.003	2"1/2-3"-4"	1	1	60.01

Self-cleaning filter cartridge (300 µm)

Code	Measure	Pack	Outer	Cat.
1171.013	3/8" - 1/2"	1	1	60.01
1172.013	3/4"	1	1	60.01
1173.013	1"	1	1	60.01
1200.013	1"1/4	1	1	60.01
1201.013	1"1/2 - 2"	1	1	60.01
1215.013	2"1/2 - 3" - 4"	1	1	60.01

$Self-cleaning filter cartridge (100\,\mu m)$

Code	Measure	Pack	Outer	Cat.
1171.023	3/8" - 1/2"	1	1	60.01
1172.023	3/4"	1	1	60.01
1173.023	1"	1	1	60.01
1200.023	1"1/4	1	1	60.01
1201.023	1"1/2 - 2"	1	1	60.01
1215.023	2"1/2 - 3" - 4"	1	1	60.01

Spare part for self-cleaning filter Series 126.



Series 3696

Metal cover and frame for unit boxes Kilma-Evo, Kilma-Econblock, Kilma-Basic2 and Kilma-Easy2.

\$\$\$

Code	LxH (mm)	Pack	Outer	Cat.
3696.80.52	800 x 580	1	1	60.01
3696.10.52	1000 x 580	1	1	60.01
3696.12.52	1200 x 580	1	1	60.01

(i) Spare part for box series 9241





Series 2606.B

Plastic cover for BOX1 boxes.

Code	LxH (mm)	Pack	Outer	Cat.
2606.40.00	400 x 500	1	1	60.01
2606.60.00	600 x 500	1	1	60.01
2606.80.00	800 x 500	1	1	60.01
2606.10.00	1000 x 500	1	1	60.01

(i)

Use 5 plastic screws series 2155 to fasten cover (see page 343)



Series 2261

Plastic cover for Quickbox boxes.

Code	LxH (mm)	Pack	Outer	Cat.
2261.55.02	550 x 450	1	1	60.01
2261.70.02	700 x 450	1	1	60.01
2261.85.02	850 x 450	1	1	60.01

(i)

Use 6 plastic screws series 2155 to fasten cover.



Series 4566

${\bf Mixing\,unit\,with\,by-pass.}$

For Kilma-Evo-RF and Kilma-Evo-RM control units.

Code	Pack	Outer	Cat.
456.60.03	1	1	60.01



Series 875.B

Cap group and rod/ring nut group.

For mixing unit code 4566.003

Cap group

Code	Pack	Outer	Cat.
87.50.33	1	1	60.01

Rod/ring nut group

Code	Pack	Outer	Cat.
462.20.03	1	1	60.01



Cap group





Modulating actuator.

For Kilma-Evo-RM control unit.

• 24V AC 0-10V power supply

Code	Pack	Outer	Cat.
804.10.05	1	1	60.01

Tober

To be matched with mixing unit code 4566.003



Series 373.B

Modulating actuator.

For Kilma-Evo-RM control unit.

- 230V AC power supply
- 4W consumption
- Frequency 50Hz
- Electric protection IP42
- Operating temperature -5 ÷ +60 °C
- Triggering time 240 seconds

Certifications:



Code	Раск	Outer	Cat.	
373.00.20	1	1	60.01	



Series 3612

Digital electronic temperature controller with climatic compensation function.

For Kilma-Evo-RM - Kilma Basic 2 control unit.

Certifications:

 ϵ

Code	Model	Pack	Outer	Cat.
3612.00.02	Kilma EVO2 HC	1	1	60.01



Series 2001

Fixed-point electrical unit.

 $\label{lem:electric} Electric control unit for electrical power supply of the thermostat, the pump and the safety thermostat;$

contact without power supply (potential-free contact).

 $Including\ housing\ box, pump\ connection\ cable\\ and\ safety\ thermost at\ connection.$

Certifications:

CE

Code	Model	Pack	Outer	Cat.
2001.00.00*	Without Microprocessor	1	1	60.01
2001.00.60**	With Microprocessor	1	1	60.01

^{*} Suitable for polymer Econblock RF control units. Suitable for RF copper control units and sub-control units.





Fixed-point electrical board.

 $Electrical\,circuit\,for\,the\,thermostat, pump, safety$ thermostat power supply connection; freevoltage contact (potential-free contact).

Certifications:

 ϵ

Code	Model	Pack	Outer	Cat.
577.00.02*	Without Microprocessor	1	1	60.01
577.00.12**	With Microprocessor	1	1	60.01

* Suitable for polymer Econblock RF control units.Suitable for RF copper control units and sub-control units.



Series 4021.B

 ${\bf Safety\,thermostat\,and\,connector\,for}$ $safety\,thermost at\,connection.$

Well insertion. Bimetallic type.

• Tripping temperature 55 °C

Code	Model	Pack	Outer	Cat.
402.10.15*	Thermostat	1	1	60.01
480.00.02**	Thermostat	1	1	60.01
265.90.05	Connector	1	1	60.01



Series 3404.B

1/2" probe holder well with copper conduit.

For Kilma-Evo-RM control unit.

Code	Pack	Outer	Cat.
340.40.05	1	1	60.01



Series 2448

1/2" probe holder well with copper conduit for TL50 thermostatic head.

 $For Kilma-Evo/Econblock\,RF\,control\,unit.$

Code	Pack	Outer	Cat.
244.80.23	1	1	60.01



Series 303

 $Two\,dial\,thermometers\,complete\,with$ thermowell.

- Thermometer scale $0 \div 80^{\circ}C$
- G1/2" connection (UNI-EN-ISO 228)

Code	Measure	Pack	Outer	Cat.
303.04.00	Ø 40	1	1	60.01



^{*} Suitable for polymer Econblock RF control units. ** Suitable for RM / RF copper control units and sub-control units.





Series 875.C

Complete cap unit for valves with thermostatic option and compact brass and polymer manifolds.

$Complete \, cap \, unit for \, thermostatically \, controlled \, valves$

Code	Pack	Outer	Cat.
87.50.23	1	1	60.01

Can be used for a 1-way manifold.

Cap group

Code	Pack	Outer	Cat.
87.50.73	1	1	60.01

Can be used for 2,3,4 and 5-way manifolds.

Rod/ring nut group

Code	Pack	Outer	Cat.
911.90.03	1	1	60.01

Can be used for 2,3,4 and 5-way manifolds.



Series 2250

Flow meter with lockshield valve function and flow rate indicator.

- Temperature range 0 80 $^{\circ}$ C
- Max operating pressure 10 Bar

Code	Adjustment (I/ min)	Pack	Outer	Cat.
2250.00.02	1 ÷ 2	10	10	60.01
2250.00.12*	1 ÷ 4	10	10	60.01
2250.00.22	0 ÷ 2,5	10	10	60.01

 $[*]Flow\,meter\,provided\,with\,pre-assembled\,kits$



Series 1528

Pair of polymer brackets for offset fixing of polymer manifolds, complete with collar series 1410.

Centre distance 220 mm

Code	Pack	Outer	Cat.
1528.06.00	1	1	60.01



For pipes to be assembled with no overlaps.
Suitable with housing boxes series 2606.
Standard in polymer compact manifolds 1410 series.



Series 1000

Pair of polymer brackets for aligned fixing of polymer anti-condensation 1002 series manifolds, complete with collar.

Centre distance 220 mm

Code	Pack	Outer	Cat.
1000.06.00	1	1	60.01



Suitable with housing boxes series 2606. Standard in polymer compact manifolds 1002 series.





Pair of polymer brackets for offset fixing of polymer manifolds, complete with compact brass collar series 2028.

• Centre distance 220 mm

Code	Pack	Outer	Cat.
792.06.00	1	1	60.01

For pipes to be assembled with no overlaps.
Suitable with housing boxes series 2606.
Standard in brass compact polymer manifolds 2028 series.



Series 810

Pair of polymer brackets for aligned fixing of polymer manifolds, complete with collar series.

• Centre distance 220 mm

Code	Pack	Outer	Cat.
810.06.00	1	1	60.01

Brackets used to assemble Kilma control units. Brass manifolds aligned fixing.



Series 8629

Thermometer with collar for brackets for 1410 - 2028 and 608 series manifold kits.

• Thermometer scale $0 \div 80^{\circ}C$

Code	Pack	Outer	Cat.
862.90.05	1	1	60.01



Series 829.A

Multi-way compact manifold complete with valves with thermostatic option and hand wheel.

- Temperature range 0 100 °C
- Max operating pressure 10 Bar

Code	Measure	Ways	Pack	Outer	Cat.
829.26.30	1"	2	1	1	60.01
829.06.30	1"	3	1	1	60.01
830.06.30	1"	4	1	1	60.01
831.06.30	1"	5	1	1	60.01
832.06.30	1"	6	1	1	60.01
834.06.30	1"	8	1	1	60.01
835.06.30	1"	9	1	1	60.01
836.06.30	1"	10	1	1	60.01
837.06.30	1"	11	1	1	60.01
837.12.30	1"	12	1	1	60.01
837.13.30	1"	13	1	1	60.01

 $\label{lem:connections} Centre distance connections through 50 mm \ distribution \ -EUROCONUS \ G3/4" \ UNI-EN-ISO \ 228 \ threading$





Series 829.B

Multi-way compact manifold, complete with micrometric lockshield regulating valves with graduated hand wheel.

- Temperature range 0 100 $^{\circ}$ C
- Max operating pressure 10 Bar

Code	Measure	Ways	Pack	Outer	Cat.
829.26.10	1"	2	1	1	60.01
829.06.10	1"	3	1	1	60.01
830.06.10	1"	4	1	1	60.01
831.06.10	1"	5	1	1	60.01
832.06.10	1"	6	1	1	60.01
833.06.10	1"	7	1	1	60.01
834.06.10	1"	8	1	1	60.01
835.06.10	1"	9	1	1	60.01
836.06.10	1"	10	1	1	60.01
837.06.10	1"	11	1	1	60.01
837.12.10	1"	12	1	1	60.01
837.13.10	1"	13	1	1	60.01

Centre distance connections through 50mm distribution - EUROCONUS G3/4" UNI-EN-ISO 228 threading



Series 829.C

Compact manifold, multi-way, complete with flow meters, with lockshield valve and flow indicator function.

- Temperature range 0 80 °C
- Max operating pressure 10 Bar

Code	Measure	Ways	Pack	Outer	Cat.
829.26.00	1"	2	1	1	60.01
829.06.00	1"	3	1	1	60.01
830.06.00	1"	4	1	1	60.01
831.06.00	1"	5	1	1	60.01
832.06.00	1"	6	1	1	60.01
833.06.00	1"	7	1	1	60.01
834.06.00	1"	8	1	1	60.01
835.06.00	1"	9	1	1	60.01
836.06.00	1"	10	1	1	60.01
837.06.00	1"	11	1	1	60.01
837.12.00	1"	12	1	1	60.01
837.13.00	1"	13	1	1	60.01

Centre distance connections through 50mm distribution - EUROCONUS G3/4" UNI-EN-ISO 228 threading



Series 67.E

$Ball\,valve\,kit\,for\,full\,bore\,manifolds.$

Knob operated complete with immersion thermometer with removable rear bulb, MF connections, with OR seal fitting.
Suitable for water, water+glycol.

- Operating temperature with water -20 +120 °C
- Thermometer scale 0 +80 °C

Certifications:



Code	Measure	Pack	Outer	Cat.
67.06.30	1"	1	1	60.01



 $Fitting\,with\,OR\,seal\,connection.$





Series 450.B

Air and water manual discharge terminal unit.

Brass and polymer manifolds kits standard installation.

 Pressure gauge holder connection G 1/8" (for RBM Ø 40 radial pressure gauge - scale 0 - 16 bar - Code 7469.005)

Code	Measure	Pack	Outer	Cat.
450.06.50	1"	1	1	60.01



Series 449

Air and water manual discharge terminal.

Standard installation on delivery line of brass and polymer manifold kits.

 Pressure gauge holder connection G 1/8" (for RBM Ø 40 radial pressure gauge - scale 0 - 16 bar - Code 7469.005)

Code	Measure	Pack	Outer	Cat.
449.06.50	1"	1	1	60.01



Series 221

Ball discharge cock, with hose connection and rotating cap.

• Threaded connection M UNI-EN-ISO 228

Code	Measure	Pack	Outer	Cat.
221.04.00	1/2"	10	10	60.01



General Terms of sale

Scope

These sales terms apply to all the products shown in the price list sold by R.B.M. spa or by other companies of the R.B.M. Group (hereafter "R.B.M."). Should these terms and conditions not be consistent with the terms and conditions agreed in individual sales contracts concluded between R.B.M. and its customers, the latter will prevail. R.B.M. will not be bound by the customer's general purchase terms (hereafter "CGA") regardless of them being mentioned or included in the orders or in any other documentation coming from the customer, unless expressly accepted in writing by R.B.M. R.B.M. reserves the right to add, change or eliminate any of the provisions included in these sales terms and these additions, changes or cancellations will apply to all orders made by the customer, starting from the day following the date when the relevant notification concerning the new sales terms was made to him.

Orders

All orders are considered as bookings and do not result in a commitment for R.B.M. to deliver the goods ordered either partially or totally.

Prices

Unless agreed otherwise, the prices valid on the date of the order will apply. The prices refer to goods supplied ex works in Nave Incoterms 2020. Packaging costs are at the purchaser's expense.

Deliveries

Usual conditions: prompt delivery, if in stock. Special terms: to be defined from time to time. The seller is not liable to pay compensation for direct damage resulting from delayed deliveries.

Transport

Goods always travel at the purchaser's risk even when they are delivered carriage free to their destination according to special agreements.

Payments

Unless agreed otherwise, payments are considered as settled on the date of receipt of the invoice. Payments are due within the deadlines agreed, even when the goods arrive late and in the case of malfunctioning, partial and total loss during transport and when the purchaser does not collect the goods for which collection on his side has been agreed. In the case of non-payment, 10 days after the submittal of the invoice or after the deadline established, the seller will be entitled to issue a sight draft and to debit the relevant costs. Furthermore, after the deadline established has been exceeded, interest will be calculated at the rate established in Decree Law 231/2002.

Tolerances

Wear tolerances both on finished products and on their individual elements they consist of, are admitted.

Suspension of orders

45 days after the delivery date established has been exceeded the purchaser will be entitled to request the cancellation of the order. The relevant notification must be made by registered letter and no rights will arise from the cancellation. If the seller establishes that the purchaser has difficulties settling payments, he/she will be entitled to suspend or delay further deliveries after the agreed payment deadlines.

Returns

Returns will be accepted only with our prior authorization and must be only DAP (Nave) Incoterms 2020.

Complaints and Claims

Complaints concerning the quantity or quality of the goods supplied must be notified by the purchaser to the seller within 8 days after receiving the goods.

Modifications

R.B.M. reserves the right to make all the changes it may deem necessary to the Products without prior notice.

Applicable law and Jurisdiction

The sales terms and each individual sales contract will be regulated and interpreted according to Italian Law, unless otherwise agreed in writing between R.B.M. and the Customer. All disputes resulting from or connected with, these sale terms and/or individual sales contracts are subject to the exclusive jurisdiction of the Court of Brescia.

However, R.B.M. reserves the right to start legal action also as plaintiff in the customer's country, either in Italy or abroad.

Code of Ethics

The customer declares that they have viewed and carefully read the RBM Code of Ethics, available on the website [https://rbm. eu/storage/app/media/documenti/ RBM_Codice_Etico_IT_ott2023.pdf] and undertake to comply with its contents.

R.B.M. spa

Quality certificate

At R.B.M. raw materials undergo rigorous checks. We guarantee a careful product selection and use cutting-edge manufacturing techniques.

Manufacturer's liability for damage from defective products.

DURATION

R.B.M. is liable for the system for 10 years from its sale within the limits and conditions as per art. 114 and ss. Legislative Decree 06.09.2005 n. 206 . The replacement or repair of the Product or of one of its components does not extend the duration, which remains unchanged.

THE SERVICE PROVIDED BY R.B.M.

The service covers the damages that R.B.M. is required to pay for compensation as civilly liable by law for material damage and/or bodily harm accidentally caused to third parties due to a defect of the products, after their delivery to third parties and thereby benefiting from third-party liability insurance on products with ceiling of €10m for each accident and for year. Expenses for product replacements and repairs, costs for inquiries by anyone not authorised beforehand by RBM, property damage deriving from non-compliance of the product with its intended use, damage caused by the infringement of patents and/or trademarks, and penalties are excluded.

LIABILITY OPERABILITY AND EFFECT

An essential condition is to ensure that the installation of the product has been carried out according to the provisions for the design, installation and operation of the system, which must be installed by a specialised heating and plumbing installer. Furthermore, the product must be installed in accordance with applicable laws and the highest professional standards and the installer must provide a system certification. Finally, the instructions and warnings for the use and maintenance of the system must be complied with.

EXCLUSIONS

R.B.M. shall not be liable in case of damage or malfunctions that are due, among other reasons, to facts and faults not attributable to the manufacturer and in any case to the following causes:

- use of non-original parts and/or products and/or components and accessories or not recommended by R.B.M.;
- failure to comply with rules, regulations, use;
- installation defects or failure to take the necessary precautions to ensure execution to a professional standard;

- maintenance defects, negligence and careless use;
- failure to comply with the instructions and warnings provided by R.B.M. and/or by the installer;
- tampering, maintenance in general, work by unauthorised personnel;
- anomalous use, use of aggressive liquids or otherwise unsuitable for correct storage and use;
- damage caused by incorrect or avoidable work in the attempt to remedy the defect;
- anomalies or malfunction of non-R.B.M components;
- corrosion, encrustations or failures caused by stray currents, condensation, aggressive or acid water, descaling treatments carried out incorrectly, lack of water, sludge deposits or limescale;
- accidents, force majeure such as frost, overheating, fires, natural events (hail, tornadoes, lightning, floods, earthquakes), etc.;
- hydraulic and/or electrical systems that do not comply with current standards.

Technical work to eliminate the above defects and resulting damage must be agreed with R.B.M., which reserves the right to accept or refuse the assignment. In any case, it must be specifically agreed upon and according to the workers or best rates or quotes for the work to be carried out.

RBM

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