

## FIELDS OF APPLICATIONS

**01**

DISTRIBUTION  
COMPONENTS



**02**

THERMAL  
POWER STATION



**03**

HEAT  
METERING



**04**

SOLAR  
SYSTEMS



**VALVES AND THERMOSTATIC  
HEADS FOR RADIATORS**  
PRODUCTS AND COMPONENTS

**LOCKSHIELDS AND  
CIRCULATION PUMP GROUPS**  
PRODUCTS AND COMPONENTS

**FLOW RATE AND TEMPERATURE  
CONTROL VALVES**  
PRODUCTS AND COMPONENTS

**WATER & GAS NETWORK**  
PRODUCTS AND COMPONENTS

**UNDERFLOOR HEATING  
SYSTEMS**  
PRODUCTS AND COMPONENTS

**SPARE PARTS**

**CENTRAL HEATING SYSTEMS  
(GAS, GAS-OIL AND BIO-FUEL)**  
PRODUCTS AND COMPONENTS

**SPARE PARTS**

**REGULATION  
AND CONTROL**  
PRODUCTS AND COMPONENTS

**SPARE PARTS**

**SOLAR  
SYSTEMS**  
PRODUCTS AND COMPONENTS

**SPARE PARTS**

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# A B O U T U S



**ICMA Spa** is a brand active since 1974 with a wide products range focused on heating, cooling and water distribution systems. The company was established as supplier of components for boiler rooms and has expanded its offer to include a range of new "Made in Italy" articles. The company's mission is to develop as a brand of reference for the market, through reliable products of superior quality at absolutely competitive prices.

## PRODUCT CERTIFICATIONS



## SYSTEM CERTIFICATION



All information concerning the certifications reported in the catalogue is indicative as subject to continuous updates and may also refer only to some models or some dimensions of the products. **ICMA Spa** excludes any kind of implicit or explicit liability related to irrelevant, obsolete or incomplete information. **ICMA Spa** reserves the right to make changes to the products and related technical data at any time and without notice.



# A

## VALVES AND THERMOSTATIC HEADS FOR RADIATOR



**A1** THERMOSTATIC HEADS

page 10



**A7** SINGLE PIPE MANUAL VALVES

page 28



**A2** VALVES WITH THERMOSTATIC OPTION FOR DOUBLE PIPE SYSTEMS

page 14



**A8** FITTINGS FOR COPPER, PEX-AL-PEX, PEX PIPE. RADIATOR ECCENTRICS, ELBOW FITTINGS, ROSETTE

page 29



**A3** DOUBLE SETTING THERMOSTATIC VALVES FOR DOUBLE PIPE SYSTEMS

page 17



**A9** SINGLE/DOUBLE PIPE DISTRIBUTORS FOR PANEL WITH BUILT-IN THERMOSTATIC GROUP

page 32



**A4** THERMOSTATIC KITS AND THERMOSTATIC VALVES FOR DOUBLE PIPE SYSTEMS

page 18



**A10** RADIATOR AIR VENTS

page 34



**A5** MANUAL VALVES AND LOCKSHIELDS FOR DOUBLE PIPE SYSTEMS

page 20



**A11** VALVES AND LOCKSHIELDS FOR DESIGN RADIATORS

page 35



**A6** FOUR-WAY VALVES WITH THERMOSTATIC OPTION FOR SINGLE PIPE AND DOUBLE PIPE SYSTEMS

page 25



**A12** CHROMED THERMOSTATIC HEADS AND ROSETTES WITH PIPE COVER

page 41

## APPLICATION OF VALVES AND THERMOSTATIC HEADS FOR RADIATORS

The application of thermostatic heads on ICMA thermostatic valves is the best independent, simple and low-cost solution to automatically adjust the temperature, only where and when needed.

ICMA thermostatic heads allow the temperature in the environment in which they are installed to be constant. The numbers on the handle represent the set temperature.

### THERMOSTATIC HEAD ART. 1100 CERTIFIED: UNI - EN215



#### TEMPERATURE REGULATED IN ° C



#### POSITION OF THE THERMOSTATIC HEAD

ICMA thermostatic heads do not require electricity; they are equipped with a liquid sensor with low thermal inertia and a coupling system to the valve body M28x1.5 (art. 1100) and M30x1.5 (art. 1101).

### TECHNICAL SPECIFICATIONS:

Minim. adjustment calibration (anti-freeze position):	ts min	7°C (●)
Max. adjustment calibration (position):	ts max	28°C (5)
Saving condition (position):		20°C (3)
Maximum working pressure:	PN	1000 KPa
Maximum differential pressure:	Δp	100 KPa
Nominal capacity "qm N" angle-straight:	qm N	190 Kg/h
Maximum working temperature:		110°C
Maximum storage temperature:		50°C
Hysteresis:	C	0.19 K
Authority:	a	0,9
Response time:	Z	20 min
Differential pressure influence:	D	0,25 K
Water temperature influence:	W	0,7 K
Use of the protection cap:		55°≈1K
Connection to thermostatic expansion valves:		M28x1,5 M30x1,5

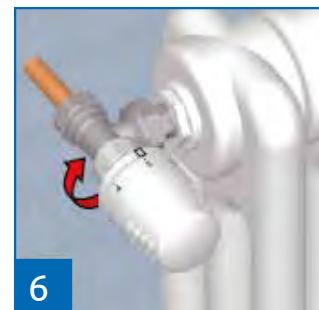
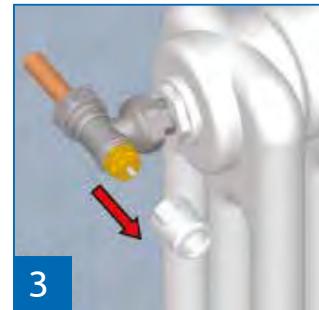
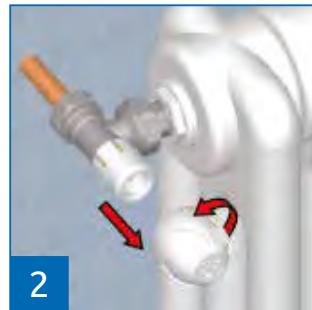
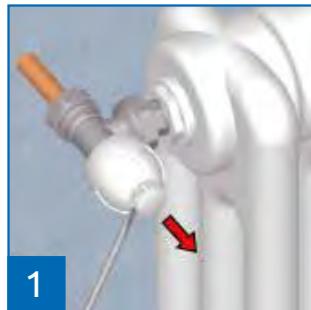


### SELECTION OF A THERMOSTATIC HEAD AND COMBINATION WITH A VALVE

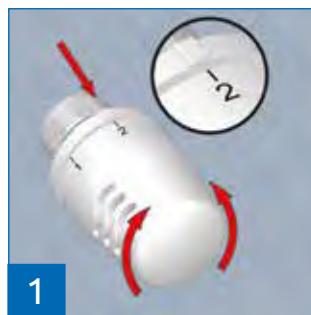
1) Detect the connection to the valve body. In the case of ICMA products you will find the connection specified in the description of each valve.

2) Check the place of use. If the temperature detection is affected by the presence of curtains, choose items 987 or 990

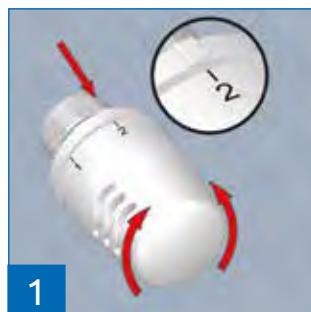
### INSTALLATION OF THERMOSTATIC HEADS



### TEMPERATURE BLOCKING



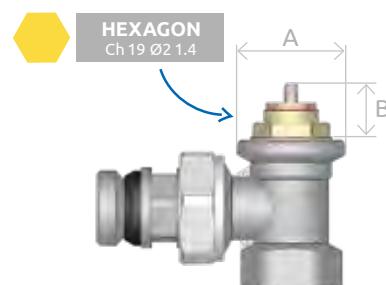
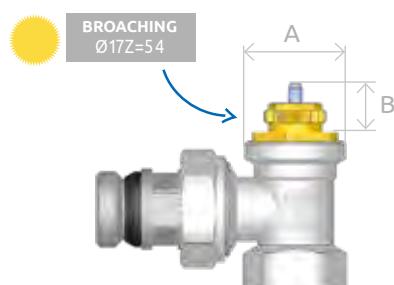
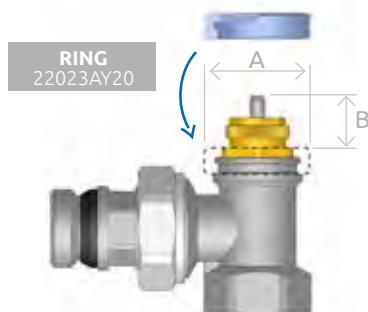
### TEMPERATURE RESTRICTION



## SELECTION OF A THERMOSTATIC HEAD AND COMBINATION WITH A VALVE

## COMPARISON OF THERMOSTATIC VALVE CONNECTIONS

Thermostatic valves with M30 connection allow the connection with "smart" thermostatic heads without the use of any adapter. Our M30 valves are compatible with all thermostatic heads of other manufacturers.



M28	
A	M28x1,5
B	14
STROKE B	3,5

M28	
A	M28x1,5
B	14
STROKE B	3,5

M30	
A	M30x1,5
B	15
STROKE B	3,5



ART.1100 - ART.1101

ART.	CONNECTION THREAD	CODE		
*1100	28X1,5	821100AC20	1	50
1101	30X1,5	821101AC20	1	50

Thermostatic head **with liquid sensor** for thermostatic valves for radiators. Temperature locking and limiting to a desired value with a forked pin system (see instructions on page 11). Hysteresis 0,19°C; Room temperature setting range T = 7-28°C.



ART. 987 - ART. 990

ART.	CONNECTION THREAD	CODE		
987	28X1,5	82987AC20	1	20
990	30X1,5	82990AC20	1	20

Thermostatic head with remote liquid sensor for radiators. To be used when it is necessary to feel the temperature far from the radiator. Temperature locking and limiting device on a desired value. Both operations can be done without tools (see instructions on page 11). Capillary length 2 mt. Hysteresis 0,3°C; Room temperature setting range T = 7-28°C.



ART. 64

ART.	VALVE CONNECTION	HEAD CONNECTION	CODE	
64	M28X1,5	M30x1,5	22064AZ06	1

Ring for thermostatic valves with M28 connection thread to match with "smart" thermostatic heads with M30 connection thread.

**FORKED PIN**

CODE	
111100AC20	1

Forked pin for art. 1100 e 1101 (see instructions on page 11).

**ART. 999**

ART.	CODE		
999	82999AC20	1	50

Tamper-proof shell for thermostatic heads art. 987-990-994-995-991-992 997. Provided with special screws. It can be operated with the special tightening key, only. One key free of charge every 50 pieces.

**ART. 1095**

ART.	CODE		
1095	821095AC20	1	50

Thermostatic head ICMA M30x1,5 (Art. 821101AC20) + connecting ring for CALEFFI® thermostatic valves.

**ART. 1097**

ART.	CODE		
1097	821097AC20	1	50

Thermostatic head ICMA M30x1,5 (Art. 821101AC20) + connecting ring for FAR® thermostatic valves.



Copper	1141	3/8"	1/2"
Multilayer	S-1K [m3/h]	0,33	0,5
Pe-x	S-2K [m3/h]	0,55	0,7
Kvs [m3/h]	1,05	1,35	

LEFT  
VERSIONRIGHT  
VERSION

ART. 1141



1142	3/8"	1/2"
S-1K [m3/h]	0,33	0,5
S-2K [m3/h]	0,55	0,7
Kvs [m3/h]	1,05	1,35

LEFT  
VERSIONRIGHT  
VERSION

Iron pipe

ART. 1142

ART.	SIZE	FITTING THREAD	VERSION	CODE	8	10	
1141	3/8"	24x1,5	RIGHT	821141ACD06	1	10	
1141	3/8"	24x1,5	LEFT	821141ACS06	1	10	
1141	1/2"	24x1,5	RIGHT	821141ADD06	1	10	
1141	1/2"	24x1,5	LEFT	821141ADS06	1	10	

**Double angle valve** with thermostatic option for copper, multilayer and pe-x piping and with antileakage radiator connection. Choose **thermostatic and electrothermic actuators with 28x1,5 connection thread**. Ideal for radiators installation in case of limited space. Right and left version. For installation of electrothermic actuators use connection ring art. 22023AY20.



Copper	840-842-852	3/8"	1/2"
Multilayer	S-1K [m3/h]	0,33	0,33
Pe-x	S-2K [m3/h]	0,6	0,6
Kvs [m3/h]	2,11	2,21	

ART. 840 | 842 | 852

ART.	SIZE	FITTING THREAD	CODE	8	10	
840	3/8"	24x1,5	82840AC06	20	100	
840	1/2"	24x1,5	82840AD06	20	100	
842	3/8"	1/2"	82842AC06	20	100	
842	1/2"	1/2"	82842AD06	20	100	
852	3/8"	3/4"	82852AC06	20	100	
852	1/2"	3/4"	82852AD06	20	100	

**Angle valve** with thermostatic option. For copper, Pex-Al-Pex, pex piping. With anti-leakage radiator union. Choose **thermostatic and electrothermic actuators with 28x1,5 connection thread**. For installation of electrothermic actuators use connection ring art. 22023AY20.



Iron pipe

844	3/8"	1/2"	3/4"
S-1K [m3/h]	0,33	0,33	0,33
S-2K [m3/h]	0,6	0,6	0,6
Kvs [m3/h]	2,11	2,21	2,53

ART. 844

ART.	SIZE	CODE	8	10	
844	3/8"	82844AC06	20	100	
844	1/2"	82844AD06	20	100	
844	3/4"	82844AE06	10	50	

**Angle valve** with thermostatic option. For iron piping. With anti leakage radiator union. Choose thermostatic and electrothermic actuators with 28x1,5 connection thread. For installation of electrothermic actuators use connection ring art. 22023AY20.



1142	3/8"	1/2"
S-1K [m3/h]	0,33	0,5
S-2K [m3/h]	0,55	0,7
Kvs [m3/h]	1,05	1,35

LEFT  
VERSIONRIGHT  
VERSION

Iron pipe

ART. 1142

ART.	SIZE	VERSION	CODE	8	10	
1142	3/8"	RIGHT	821142ACD06	1	10	
1142	3/8"	LEFT	821142ACS06	1	10	
1142	1/2"	RIGHT	821142ADD06	1	50	
1142	1/2"	LEFT	821142ADS06	1	10	

**Double angle valve** with thermostatic option for copper piping and with anti-leakage radiator connection. Choose **thermostatic and electrothermic actuators with 28x1,5 connection thread**. Ideal for radiators installation in case of limited space. Right and left version. For installation of electrothermic actuators use connection ring art. 22023AY20.



Copper	841-843	3/8"	1/2"
Multilayer	S-1K [m3/h]	0,33	0,33
Pe-x	S-2K [m3/h]	0,6	0,6
Kvs [m3/h]	1,12	1,58	1,77

ART. 841 | 843

ART.	SIZE	FITTING THREAD	CODE	8	10	
841	3/8"	24X1,5	82841AC06	20	100	
841	1/2"	24X1,5	82841AD06	20	100	
843	3/8"	1/2"	82843AC06	20	100	
843	1/2"	1/2"	82843AD06	20	100	

**Straight valve** with thermostatic option. For copper, Pex-Al-Pex, pex piping. With anti-leakage radiator union. Choose **thermostatic and electrothermic actuators with 28x1,5 connection thread**. For installation of electrothermic actuators use connection ring art. 22023AY20.



Iron pipe

845	3/8"	1/2"	3/4"
S-1K [m3/h]	0,33	0,33	0,33
S-2K [m3/h]	0,6	0,6	0,6
Kvs [m3/h]	1,12	1,58	1,77

ART. 845

ART.	SIZE	CODE	8	10	
845	3/8"	82845AC06	20	100	
845	1/2"	82845AD06	20	100	
845	3/4"	82845AE06	10	50	

**Straight valve** with thermostatic option. For iron piping. With anti-leakage radiator union. Choose **thermostatic and electrothermic actuators with 28x1,5 connection thread**. For installation of electrothermic actuators use connection ring art. 22023AY20.

## VALVES WITH THERMOSTATIC OPTION FOR DOUBLE PIPE



Copper  
Multilayer  
Pe-x

970-972-966	3/8"	1/2"
S-1K [m3/h]	0,33	0,33
S-2K [m3/h]	0,6	0,6
Kvs [m3/h]	2,11	2,21

ART. 970 | 972 | 966

ART.	SIZE	FITTING THREAD	CODE	Box	Carton
970	3/8"	24X1,5	82970AC06	10	50
970	1/2"	24X1,5	82970AD06	10	50
972	3/8"	1/2"	82972AC06	10	50
972	1/2"	1/2"	82972AD06	10	50
966	1/2"	3/4"	82966AD06	10	50

**Angle valve** with thermostatic option. For copper, Pex-Al-Pex, Pex piping. With antileakage radiator union. Choose **thermostatic heads and electrothermic actuators with 28x1,5 connection thread**.

971-973-967	3/8"	1/2"
S-1K [m3/h]	0,33	0,33
S-2K [m3/h]	0,6	0,6
Kvs [m3/h]	1,12	1,58

ART. 971 | 973 | 967



Copper  
Multilayer  
Pe-x

ART.	SIZE	FITTING THREAD	CODE	Box	Carton
971	3/8"	24X1,5	82971AC06	10	50
971	1/2"	24X1,5	82971AD06	10	50
973	3/8"	1/2"	82973AC06	10	50
973	1/2"	1/2"	82973AD06	10	50
967	1/2"	3/4"	82967AD06	10	50

**Straight valve** with thermostatic option. For copper, Pex-Al-Pex, Pex piping. With anti-leakage radiator union. Choose **thermostatic heads and electrothermic actuators with 28x1,5 connection thread**.



Eurovent Certita  
028

974	3/8"	1/2"	3/4"
S-1K [m3/h]	0,33	0,33	0,33
S-2K [m3/h]	0,6	0,6	0,6
Kvs [m3/h]	2,11	2,21	2,53

ART. 974

ART.	SIZE	CODE	Box	Carton
974	3/8"	82974AC06	10	50
*974	1/2"	82974AD06	10	50
974	3/4"	82974AE06	10	50

**Angle valve** with thermostatic option. For iron piping. With anti-leakage radiator union. Choose **thermostatic heads and electrothermic actuators with 28x1,5 connection thread**.



Eurovent Certita  
028

845	3/8"	1/2"	3/4"
S-1K [m3/h]	0,33	0,33	0,33
S-2K [m3/h]	0,6	0,6	0,6
Kvs [m3/h]	1,12	1,58	1,77

ART. 975

ART.	SIZE	CODE	Box	Carton
975	3/8"	82975AC06	10	50
*975	1/2"	82975AD06	10	50
975	3/4"	82975AE06	10	50

**Straight valve** with thermostatic option. For iron piping. With anti-leakage radiator union. Choose **thermostatic heads and electrothermic actuators with 28x1,5 connection thread**.



Copper  
Multilayer  
Pe-x

869	1/2"
S-1K [m3/h]	0,11
S-2K [m3/h]	0,42

ART. 869

ART.	SIZE	FITTING THREAD	CODE	Box	Carton
869	1/2"	1/2"	81869AD06	10	50

**Inverse angle** valve with thermostatic option. For cooper, Pex-Al-Pex, Pex piping. With antileakage radiator unit. Choose **thermostatic heads and electrothermic actuators with 28x1,5 connection thread**.



**Copper**  
**Multilayer**  
**Pex**

770-772	3/8"	1/2"
S-1K [m3/h]	0,33	0,33
S-2K [m3/h]	0,6	0,6
Kvs [m3/h]	2,11	2,21

**ART. 770 | 772**



**Copper**  
**Multilayer**  
**Pex**

771-773	3/8"	1/2"
S-1K [m3/h]	0,33	0,33
S-2K [m3/h]	0,6	0,6
Kvs [m3/h]	1,12	1,58

**ART. 771 | 773**

ART.	SIZE	FITTING THREAD	CODE	Box	Carton
770	3/8"	24X1,5	82770AC06	10	50
770	1/2"	24X1,5	82770AD06	10	50
772	3/8"	1/2"	82772AC06	10	50
772	1/2"	1/2"	82772AD06	10	50

Single setting thermostatic **angle valve**. For copper, Pex-Al-Pex, Pex piping. Choose thermostatic and electrothermic actuators with 28x1,5 connection thread.



**Iron pipe**

**ART. 774 | 774+940**



**Iron pipe**

**ART. 775 | 775+940**

ART.	SIZE	CODE	Box	Carton
774	3/8"	82774AC06	10	50
*774	1/2"	82774AD06	10	50
774	3/4"	82774AE06	10	50
*774+940	1/2"	82774AD06 940	10	50
774+940	3/4"	82774AE06 940	10	50

Single setting thermostatic **angle valve**. For iron piping. Choose thermostatic heads and electrothermic actuators with 28x1,5 connection thread.



764	3/8"	1/2"	3/4"
S-1K [m3/h]	0,33	0,33	0,33
S-2K [m3/h]	0,6	0,6	0,6
Kvs [m3/h]	2,11	2,21	2,53

**Iron pipe**

**ART. 764 - ART. 764+940**



765	3/8"	1/2"	3/4"
S-1K [m3/h]	0,33	0,33	0,33
S-2K [m3/h]	0,6	0,6	0,6
Kvs [m3/h]	1,12	1,58	1,77

**Iron pipe**

**ART. 765 - ART. 765+940**

ART.	SIZE	CODE	Box	Carton
764	1/2"	82764AD06	10	50
764	3/4"	82764AE06	10	50
764+940	1/2"	82764AD06 940	10	50
764+940	3/4"	82764AE06 940	10	50

Single setting thermostatic **angle valve** for iron piping. Choose thermostatic heads and electrothermic actuators with 30x1,5 connection thread.

ART.	SIZE	CODE	Box	Carton
765	1/2"	82765AD06	10	50
765	3/4"	82765AE06	10	50
765+940	1/2"	82765AD06 940	10	50
765+940	3/4"	82765AE06 940	10	50

Single setting thermostatic **straight valve** for iron piping. Choose thermostatic heads and electrothermic actuators with 30x1,5 connection thread.

**PRE-SETTING VALVES WITH THERMOSTATIC OPTION CAN CARRY OUT SIMULTANEOUS SEVERAL FUNCTIONS:**

1. intercepting the heat transfer fluid | 2. Pre-setting for heating components in heating systems

PRE-SETTING VALUES		1/2"	3/8"	1/2"	3/8"	1/2"
Kv [m³/h]	3/8" - STRAIGHT	0,07	0,16	0,28	0,46	1,05
Kv [m³/h]	3/8" - ANGLE	0,07	0,16	0,28	0,46	1,35
Kv [m³/h]	1/2" - STRAIGHT	0,07	0,16	0,28	0,46	1,30
Kv [m³/h]	1/2" - ANGLE	0,07	0,16	0,28	0,46	1,45
Kv [m³/h]	3/4" - STRAIGHT	0,24	0,40	0,72	1,12	1,55
Kv [m³/h]	3/4" - ANGLE	0,24	0,32	0,46	0,62	1,81



776	3/8"	1/2"
S-1K [m³/h]	0,3	0,55
S-2K [m³/h]	0,55	0,3
Kvs [m³/h]	1,35	1,45

**ART. 776**

ART.	SIZE	FITTING THREAD	CODE	10	50	
776	3/8"	24x1,5	82776AC06	10	50	
776	1/2"	24x1,5	82776AD06	10	50	

Pre-setting **angle valve** with thermostatic option for copper, Pex-Al-pex, pex piping with antileakage radiator union. **Choose thermostatic and electrothermic actuators with 30x1,5 connection thread.**



777	3/8"	1/2"
S-1K [m³/h]	0,3	0,55
S-2K [m³/h]	0,55	0,3
Kvs [m³/h]	1,05	1,03

**ART. 777**

ART.	SIZE	FITTING THREAD	CODE	10	50	
777	3/8"	24x1,5	82777AC06	10	50	
777	1/2"	24x1,5	82777AD06	10	50	

Pre-setting **straight valve** with thermostatic option for copper, Pex-Al-pex, pex piping with anti-leakage radiator union. **Choose thermostatic and electrothermic actuators with 30x1,5 connection thread.**



778	3/8"	1/2"	3/4"
S-1K [m³/h]	0,3	0,55	0,55
S-2K [m³/h]	0,55	0,3	0,3
Kvs [m³/h]	1,35	1,45	1,81

**Iron pipe**

**ART. 778**

ART.	SIZE	CODE	10	50	
778	3/8"	82778AC06	10	50	
778	1/2"	82778AD06	10	50	
778	3/4"	82778AE06	10	50	

Pre-setting **angle valve** with thermostatic option for iron piping with anti-leakage radiator union. **Choose thermostatic and electrothermic actuators with 30x1,5 connection thread.**



779	3/8"	1/2"	3/4"
S-1K [m³/h]	0,3	0,55	0,55
S-2K [m³/h]	0,55	0,3	0,3
Kvs [m³/h]	1,05	1,3	1,55

**ART. 779**

ART.	SIZE	CODE	10	50	
779	3/8"	82779AC06	10	50	
779	1/2"	82779AD06	10	50	
779	3/4"	82779AE06	10	50	

Pre-setting **straight valve** with thermostatic option for iron piping with anti-leakage radiator union. **Choose thermostatic and electrothermic actuators with 30x1,5 connection thread.**



**ART. 795**

ART.	SIZE	CODE	1	
795	1/2"	82795AD05	1	

Thermostatic insert with pre-setting 1/2" for steel panels. **M30x1,5 thermostatic head connection.**

## THERMOSTATIC KIT



**Copper  
Multilayer**  
**Pe-x**

ART. KIT A | KIT B

ART.	SIZE	FITTING THREAD	CODE	Box	Box	
KIT A	3/8"	24X1,5	82KITAAC061100	1	20	
KIT A	1/2"	24X1,5	82KITAAD061100	1	20	
KIT B	3/8"	1/2"	82KITBAC061100	1	20	
KIT B	1/2"	1/2"	82KITBAD061100	1	20	

Thermostatic kit consisting of **M28** thermostatic head with liquid sensor, **angle valve** with thermostatic option and lock-shield with anti-leakage radiator union. For Copper, Pex-Al-Pex, pex piping.

KIT Composition	Kit A	Kit B
Thermostatic head	Art. 1100	Art. 1100
Valve	Art. 840	Art. 842
Lockshield	Art. 839	Art. 837

**Iron pipe**

ART. KIT E

ART.	SIZE	CODE	Box	Box
KIT E	3/8"	82KITEAC061100	1	20
KIT E	1/2"	82KITEAD061100	1	20
KIT E	3/4"	82KITEAE061100	1	20

Thermostatic kit consisting of **M28** thermostatic head with liquid sensor, **angle valve** with thermostatic option and lock-shield with anti-leakage radiator union. For iron piping.

KIT Composition	Kit E
Thermostatic head	Art. 1100
Valve	Art. 844
Lockshield	Art. 952



**Copper  
Multilayer**  
**Pe-x**

ART. KIT C | KIT D

ART.	SIZE	FITTING THREAD	CODE	Box	Box	
KIT C	3/8"	24X1,5	82KITCAC061100	1	20	
KIT C	1/2"	24X1,5	82KITCAD061100	1	20	
KIT D	3/8"	1/2"	82KITDAC061100	1	20	
KIT D	1/2"	1/2"	82KITDAD061100	1	20	

Thermostatic kit consisting of **M28** thermostatic head with liquid sensor, **straight valve** with thermostatic option and lock-shield with anti-leakage radiator union. For Copper, Pex-Al-Pex, pex piping.

KIT Composition	Kit C	Kit D
Thermostatic head	Art. 1100	Art. 1100
Valve	Art. 841	Art. 843
Lockshield	Art. 835	Art. 833

**Iron pipe**

ART. KIT F

ART.	SIZE	CODE	Box	Box
KIT F	3/8"	82KITFAC061100	1	20
KIT F	1/2"	82KITFAD061100	1	20
KIT F	3/4"	82KITFAE061100	1	20

Thermostatic kit consisting of **M28** thermostatic head with liquid sensor, **straight valve** with thermostatic option and lock-shield with anti-leakage radiator union. For iron piping.

KIT Composition	Kit F
Thermostatic head	Art. 1100
Valve	Art. 845
Lockshield	Art. 955



**Iron pipe**

**ART. KIT G | KIT I**

ART.	SIZE	CODE		
KIT G	1/2"	82KITGAD061100	1	20
KIT G	3/4"	82KITGAE061100	1	20
KIT I	3/8"	82KITIAC061100	1	20
KIT I	1/2"	82KITIAD061100	1	20
KIT I	3/4"	82KITIAE061100	1	20

Thermostatic kit consisting of **M28** thermostatic head with liquid sensor, **angle valve** with thermostatic option and lock-shield. For iron piping.

KIT Composition		Kit G	Kit I
Thermostatic head	Art. 1100	Art. 1100	
Valve	Art. 774 940	Art. 774	
Lockshield	Art. 805 940	Art. 805	



**Iron pipe**

**ART. KIT H | KIT L**

ART.	SIZE	CODE		
KIT H	1/2"	82KITHAD061100	1	20
KIT H	3/4"	82KITHAE061100	1	20
KIT L	3/8"	82KITLAC061100	1	20
KIT L	1/2"	82KITLAD061100	1	20
KIT L	3/4"	82KITLAE061100	1	20

Thermostatic kit consisting of **M28** thermostatic head with liquid sensor, **straight valve** with thermostatic option and lock-shield. For iron piping.

KIT Composition		Kit H	Kit L
Thermostatic head	Art. 1100	Art. 1100	
Valve	Art. 775 940	Art. 775	
Lockshield	Art. 815 940	Art. 815	



**Copper  
Multilayer  
Pe-x**

**ART. KIT M**

ART.	SIZE	FITTING THREAD	CODE		
KIT M	3/8"	1/2"	82KITMAC061100	1	20
KIT M	1/2"	1/2"	82KITMAD061100	1	20

Thermostatic kit consisting of **M28** thermostatic head with liquid sensor, **angle valve** with thermostatic option and lock-shield. For Copper, Pex-Al-Pex, pex piping.

KIT Composition		Kit M
Thermostatic head	Art. 1100	
Valve	Art. 772	
Lockshield	Art. 827 1/2"	



**Iron pipe**

**ART. KIT N**

ART.	SIZE	CODE		
KIT N	1/2"	82KITNAD061100	1	20

Thermostatic kit consisting of **M28** thermostatic head with liquid sensor, inverse **angle valve** with thermostatic option and lock-shield with anti-leakage radiator union. For iron piping.

KIT Composition		Kit N
Thermostatic head	Art. 1100	
Valve	Art. 878 940	
Lockshield	Art. 805 940	



**Iron pipe**

**ART. KIT O**

ART.	SIZE	CODE		
KIT O	1/2"	82KITOAD061101	1	20
KIT O	3/4"	82KITOAE061101	1	20

Thermostatic kit consisting of **M30** thermostatic head with liquid sensor, **angle valve** with thermostatic option and lock-shield with anti-leakage radiator union. For iron piping.

KIT Composition		Kit O
Thermostatic head	Art. 1101	
Valve	Art. 764 940	
Lockshield	Art. 805 940	



**Iron pipe**

**ART. KIT P**

ART.	SIZE	CODE		
KIT P	1/2"	82KITPAD061101	1	20
KIT P	3/4"	82KITPAE061101	1	20

Thermostatic kit consisting of **M30** thermostatic head with liquid sensor, **straight valve** with thermostatic option and lock shield with anti-leakage radiator union. For iron piping.

KIT Composition		Kit P
Thermostatic head	Art. 1101	
Valve	Art. 765 940	
Lockshield	Art. 815 940	



**Copper  
Multilayer  
Pe-x**

**ART. 846 | 847**

ART.	SIZE	FITTING THREAD	CODE	20	100	
846	3/8"	24X1,5	82846AC06	20	100	
846	1/2"	24X1,5	82846AD06	20	100	
847	3/8"	1/2"	82847AC06	20	100	
847	1/2"	1/2"	82847AD06	20	100	

Single setting manual **angle valve**. For copper, Pex-Al-Pex and Pex piping. Double sealing on the spindle with o-ring and PTFE gasket and on the valve seat. With anti-leakage radiator unit.



**Copper  
Multilayer  
Pe-x**

**ART. 848 | 849**

ART.	SIZE	FITTING THREAD	CODE	20	100	
848	3/8"	24X1,5	82848AC06	10	50	
848	1/2"	24X1,5	82848AD06	10	50	
849	3/8"	1/2"	82849AC06	10	50	
849	1/2"	1/2"	82849AD06	10	50	

Single setting manual **straight valve**. For copper, Pex-Al-Pex and Pex piping. Double sealing on the spindle with o-ring and PTFE gasket and on the valve seat. With anti-leakage radiator unit.



**Iron pipe**

**ART. 850**

ART.	SIZE	CODE	20	100	
850	3/8"	82850AC06	20	100	
850	1/2"	82850AD06	20	100	
850	3/4"	82850AE06	20	100	

Single setting manual **angle valve**. For iron piping. Double sealing on the spindle with o-ring and PTFE gasket and on the valve seat. With anti-leakage radiator unit.



**Iron pipe**

**ART. 851**

ART.	SIZE	CODE	20	100	
851	3/8"	82851AC06	10	50	
851	1/2"	82851AD06	10	50	
851	3/4"	82851AE06	10	50	

Single setting manual **straight valve**. For iron piping. Double sealing on the spindle with o-ring and PTFE gasket and on the valve seat. With anti-leakage radiator unit.



**Copper  
Multilayer  
Pe-x**

**ART. 921 | 941**

ART.	SIZE	FITTING THREAD	CODE	20	100	
921	3/8"	24X1,5	82921AC06	20	100	
921	1/2"	24X1,5	82921AD06	20	100	
941	3/8"	1/2"	82941AC06	20	100	
941	1/2"	1/2"	82941AD06	20	100	

Single setting manual **angle valve**. For copper, Pex-Al-Pex and Pex piping. Double sealing on the spindle with o-ring and PTFE gasket and on the valve seat. With anti-leakage radiator union.



**Copper  
Multilayer  
Pe-x**

**ART. 924 | 944**

ART.	SIZE	FITTING THREAD	CODE	20	100	
924	3/8"	24X1,5	82924AC06	10	50	
924	1/2"	24X1,5	82924AD06	10	50	
944	3/8"	1/2"	82944AC06	10	50	
944	1/2"	1/2"	82944AD06	10	50	

Single setting manual **straight valve**. For copper, Pex-Al-Pex and Pex piping. Double sealing on the spindle with o-ring and PTFE gasket and on the valve seat. With anti-leakage radiator union.



Iron pipe

ART. 951

ART.	SIZE	CODE			
951	3/8"	82951AC06	20	100	
951	1/2"	82951AD06	20	100	
951	3/4"	82951AE06	20	100	

Single setting manual **angle valve**. For iron piping. Double sealing on the spindle with o-ring and PTFE gasket and on the valve seat. With anti-leakage radiator union.

Copper  
Multilayer  
Pe-x

ART. 836 | 838

ART.	SIZE	FITTING THREAD	CODE			
836	3/8"	1/2"	82836AC06	20	100	
836	1/2"	1/2"	82836AD06	20	100	
838	3/8"	24X1,5	82838AC06	20	100	
838	1/2"	24X1,5	82838AD06	20	100	

Single setting **angle valve**. For copper, Pex-Al-Pex and Pex piping. With anti-leakage radiator union.

Copper  
Multilayer  
Pe-x

ART. 826

ART.	SIZE	FITTING THREAD	CODE			
826	3/8"	1/2"	82826AC06	20	100	
826	1/2"	24x1,5	82826AD06	20	100	

Single setting **angle valve**. Radiator union with o-ring. For copper, Pex-Al-Pex, Pex piping.



Iron pipe

ART. 802

ART.	SIZE	CODE			
802	3/8"	82802AC06	1	50	
802	1/2"	82802AD06	1	50	
802	3/4"	82802AE06	1	50	

Single setting **angle valve**. Radiator union with o-ring. For iron piping.



Iron pipe

ART. 954

ART.	SIZE	CODE			
954	3/8"	82954AC06	10	50	
954	1/2"	82954AD06	10	50	
954	3/4"	82954AE06	10	50	

Single setting manual **straight valve**. For iron piping. Double sealing on the spindle with o-ring and PTFE gasket and on the valve seat. With anti-leakage radiator union.

Copper  
Multilayer  
Pe-x

ART. 832 | 834

ART.	SIZE	FITTING THREAD	CODE			
832	3/8"	1/2"	82832AC06	20	100	
832	1/2"	1/2"	82832AD06	20	100	
834	3/8"	24x1,5	82834AC06	20	100	
834	1/2"	24x1,5	82834AD06	20	100	

Single setting **straight valve**. For copper, Pex-Al-Pex and Pex piping. With anti-leakage radiator union.

Copper  
Multilayer  
Pe-x

ART. 828

ART.	SIZE	FITTING THREAD	CODE			
828	3/8"	1/2"	82828AC06	20	100	
828	1/2"	24x1,5	82828AD06	20	100	

Single setting **straight valve**. Radiator union with o-ring. For copper, Pex-Al-Pex, Pex piping.



Iron pipe

ART. 812

ART.	SIZE	CODE			
812	3/8"	82812AC06	1	50	
812	1/2"	82812AD06	1	50	
812	3/4"	82812AE06	1	50	

Single setting **straight valve**. Radiator union with o-ring. For iron piping.



Copper  
Multilayer  
Pe-x

ART. 804

ART.	SIZE	FITTING THREAD	CODE			
804	3/8"	1/2"	82804AC06	1	50	
804	1/2"	1/2"	82804ADAD	1	50	
804	1/2"	24x1,5	82804AD06	1	50	

Single setting **angle valve**. Radiator union with o-ring. For copper, Pex-Al-Pex, Pex piping.



Iron pipe

ART. 803 | 803+940

ART.	SIZE	CODE			
803	3/8"	82803AC06	1	50	
803	1/2"	82803AD06	1	50	
803	3/4"	82803AE06	1	50	
803+940	1/2"	82803AD06 940	1	50	
803+940	3/4"	82803AE06 940	1	50	

Single setting **angle valve**. For iron piping. Available also with anti-leakage radiator connection.



Copper

ART. 161

ART.	SIZE	CODE			
161	1/2"x15	82161GE06	20	100	

Single setting valve with welding connection. **Angle**. Radiator union with o-ring. For copper piping.



Copper  
Multilayer  
Pe-x

ART. 814

ART.	SIZE	FITTING THREAD	CODE			
814	3/8"	1/2"	82814AC06	1	50	
814	1/2"	24x1,5	82814AD06	1	50	

Single setting **straight valve**. Radiator union with o-ring. For copper, Pex-Al-Pex, Pex piping.



Iron pipe

ART. 813 | 813+940

ART.	SIZE	CODE			
813	3/8"	82813AC06	1	50	
813	1/2"	82813AD06	1	50	
813	3/4"	82813AE06	1	50	
813+940	1/2"	82813AD06 940	1	50	
813+940	3/4"	82813AE06 940	1	50	

Single setting **straight valve**. For iron piping. Available also with anti-leakage radiator connection.

## MANUAL VALVES AND LOCKSHIELDS FOR DOUBLE PIPE SYSTEMS



**Copper**  
**Multilayer**  
**Pe-x**

ART. 1144

ART.	SIZE	FITTING THREAD	VERSION	CODE	1	10	
1144	3/8"	24x1,5	RIGHT	821144ACD06	1	10	
1144	3/8"	24x1,5	LEFT	821144ACS06	1	10	
1144	1/2"	24x1,5	RIGHT	821144ADD06	1	10	
1144	1/2"	24x1,5	LEFT	821144ADS06	1	10	

**Double angle** lockshield for copper, multilayer and pe-x piping and with anti-leakage radiator connection. Right or left version.



**Copper**  
**Multilayer**  
**Pe-x**

ART. 1145



**LEFT VERSION**    **RIGHT VERSION**

**Iron pipe**

ART. 1145

ART.	SIZE	VERSION	CODE	1	10	
1145	3/8"	RIGHT	821145ACD06	1	10	
1145	3/8"	LEFT	821145ACS06	1	10	
1145	1/2"	RIGHT	821145ADD06	1	10	
1145	1/2"	LEFT	821145ADS06	1	10	

**Double angle** lockshield for iron piping and with anti-leakage radiator connection. Right or left version.



**Copper**  
**Multilayer**  
**Pe-x**

ART. 922 | 942



**Copper**  
**Multilayer**  
**Pe-x**

ART. 925 | 945

ART.	SIZE	FITTING THREAD	CODE	1	10	
922	3/8"	24X1,5	82922AC06	20	100	
922	1/2"	24X1,5	82922AD06	20	100	
942	3/8"	1/2"	82942AC06	20	100	
942	1/2"	1/2"	82942AD06	20	100	

**Angle micrometric lockshield.** For copper, Pex-Al-Pex, Pex piping. O-ring and metallic closure on the seat. With anti-leakage radiator union.

**Iron pipe**

ART. 952

**Iron pipe**

ART. 955

ART.	SIZE	CODE	1	10	
952	3/8"	82952AC06	20	100	
952	1/2"	82952AD06	20	100	
952	3/4"	82952AE06	20	100	

**Angle micrometric lockshield.** For iron piping. O-ring and metallic closure on the seat. With anti-leakage radiator union.



**Copper**  
**Multilayer**  
**Pe-x**

ART. 837 | 839 | 854

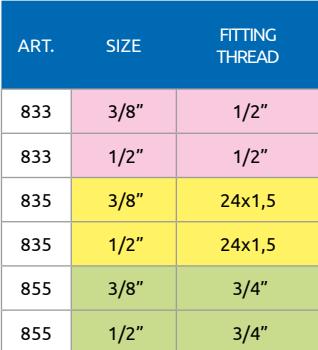


**Copper**  
**Multilayer**  
**Pe-x**

ART. 833 | 835 | 855

ART.	SIZE	FITTING THREAD	CODE	1	10	
837	3/8"	1/2"	82837AC06	20	100	
837	1/2"	1/2"	82837AD06	20	100	
839	3/8"	24x1,5	82839AC06	20	100	
839	1/2"	24x1,5	82839AD06	20	100	
854	3/8"	3/4"	82854AC06	20	100	
854	1/2"	3/4"	82854AD06	20	100	

**Angle lockshield.** For copper, Pex-Al-Pex, Pex piping. O-ring and metallic closure on the seat. With anti-leakage radiator union.



**Copper**  
**Multilayer**  
**Pe-x**

ART. 833 | 835 | 855

**Straight lockshield.** For copper, Pex-Al-Pex, Pex piping. O-ring and metallic closure on the seat. With anti-leakage radiator union.



**Copper**  
Multilayer  
Pe-x

**ART. 827 | 830**

ART.	SIZE	FITTING THREAD	CODE	1	50	
827	3/8"	1/2"	82827AC06	1	50	
827	1/2"	1/2"	82827ADAD	1	50	
827	1/2"	24x1,5	82827AD06	1	50	
830	1/2"	3/4"	82830AD06	1	50	

**Angle lockshield.** Radiator union with o-ring. For copper, Pex-Al-Pex, Pex piping.



**Copper**  
Multilayer  
Pe-x

**ART. 829 | 831**

ART.	SIZE	FITTING THREAD	CODE	1	50	
829	3/8"	1/2"	82829AC06	1	50	
829	1/2"	24X1,5	82829AD06	1	50	
831	1/2"	3/4"	82831AD06	1	50	

**Straight lockshield.** Radiator union with o-ring. For copper, Pex-Al-Pex, Pex piping.



**Iron pipe**

**ART. 805 | 805+940**

ART.	SIZE	CODE	1	50	
805	3/8"	82805AC06	1	50	
805	1/2"	82805AD06	1	50	
805	3/4"	82805AE06	1	50	
805+940	1/2"	82805AD06 940	1	50	
805+940	3/4"	82805AE06 940	1	50	

Single setting **angle lockshield.** For iron piping. Available also with anti-leakage radiator connection.



**Iron pipe**

**ART. 815 | 815 +940**

ART.	SIZE	CODE	1	50	
815	3/8"	82815AC06	1	50	
815	1/2"	82815AD06	1	50	
815	3/4"	82815AE06	1	50	
815+940	1/2"	82815AD06 940	1	50	
815+940	3/4"	82815AE06 940	1	50	

Single setting **straight lockshield.** For iron piping. Available also with anti-leakage radiator connection.



**Copper**

**ART. 162**

ART.	SIZE	CODE	1	20	100	
162	1/2"x15	82162GE06	1	20	100	

**Angle** lockshield with welding connection. Radiator union with o-ring. For copper piping.



**ART. 870**

ART.	SIZE	CONNECTION FOR EXTERNAL PROBE	CODE	10	50	
870	1/2"	15 mm	81870AD06	10	50	

**Inverse angle valve** with thermostatic option. With anti-leakage radiator union and fitting for connection to the 15mm external probe (art. 889). **Choose thermostatic heads and electrothermic actuators with 28x1,5 connection thread.**



**ART. 866**

ART.	SIZE	CONNECTION FOR EXTERNAL PROBE	CODE	10	50	
866	1/2"	15 mm	81866AD06	10	50	

**Inverse angle valve** with thermostatic option. Built-in air vent. With anti-leakage radiator union and fitting for connection to the 15mm external probe (art. 889). **Choose thermostatic heads and electrothermic actuators with 28x1,5 connection thread.**



**ART. 766**

ART.	SIZE	CONNECTION FOR EXTERNAL PROBE	CODE	10	50	
766	1/2"	15 mm	81766AD06	10	50	

**Inverse angle** thermostatic valve. With anti-leakage radiator union and fitting for connection to the 15mm external probe (art. 889). **Choose thermostatic heads and electrothermic actuators with 28x1,5 connection thread.**



**ART. 767**

ART.	SIZE	CONNECTION FOR EXTERNAL PROBE	CODE	10	50	
767	1/2"	15 mm	81767AD06	10	50	

**Inverse angle** thermostatic valve. Built-in air vent. With anti-leakage radiator union and fitting for connection to the 15mm external probe (art. 889). **Choose thermostatic heads and electrothermic actuators with 28x1,5 connection thread.**



**Iron pipe**

**ART. 878**

ART.	SIZE	CODE	10	50	
878	1/2"	81878AD06	10	50	

**Inverse angle** valve with thermostatic option with anti-leakage radiator union and fitting for connection to 1/2"iron pipe. **Choose thermostatic heads and electrothermic actuators with 28x1,5 connection thread.**



**ART. 868**

ART.	SIZE	CONNECTION FOR EXTERNAL PROBE	CODE	10	50	
868	1/2"	15 mm	81868AD06	10	50	

**90° valve** with thermostatic option. With fitting for connection to the 15mm external probe (art. 889). **Choose thermostatic heads and electrothermic actuators with 28x1,5 connection thread.**



**Copper**

**Multilayer**

**Pe-x**

**ART. 875 | 877**

ART.	SIZE	FITTING THREAD	CODE	10	50	
875	1/2"	24x1,5	81875AD06	10	50	
877	1/2"	3/4"	81877AD06	10	50	

Distributor for **single/double pipe**. Four-way group. Floor or wall connection. The valve can be easily switched from the one-pipe system (as provided) to the two-pipe system. With fitting for connection to the 15 mm external probe (art.889). **Interaxe 50 mm.**



**ART. 889**

ART.	DIAMETER (mm)	LENGTH (mm)	CODE	10	50	
889	15	600	818896006	1		
889	15	800	818898006	1		
889	15	1000	818891006	1		

Chromed steel probe Ø 15 mm. Fox external connection.



Copper  
Multilayer  
Pe-x

ART. 891

ART.	SIZE	FITTING THREAD	CODE			
891	1/2"	24x1,5	81891AD06	2	20	
891	3/4"	24x1,5	81891AE06	2	20	

**Single pipe valve** with thermostatic option. Built-in lockshield-valve. Interaxe 37,5 mm. Choose **thermostatic and electrothermic actuators with 28x1,5 connection thread**.



Copper  
Multilayer  
Pe-x

ART. 892

ART.	SIZE	FITTING THREAD	CODE			
892	1/2"	24x1,5	82892AD06	2	20	
892	3/4"	24x1,5	82892AE06	2	20	
892	1/2"	1/2"	82892ADAD	2	20	

**Double pipe valve** with thermostatic option. Built-in lockshield-valve. Interaxe 37,5 mm. Choose **thermostatic and electrothermic actuators with 28x1,5 connection thread**.



Copper  
Multilayer  
Pe-x



ART. 890

ART.	SIZE	FITTING THREAD	CODE			
890	1/2"	24x1,5	81890AD06	2	20	
890	3/4"	24x1,5	81890AE06	2	20	

**Single pipe valve** with thermostatic option. Built-in lockshield-valve. Interaxe 37,5 mm. Frontal knob. Choose **thermostatic and electrothermic actuators with 28x1,5 connection thread**.



Copper  
Multilayer  
Pe-x

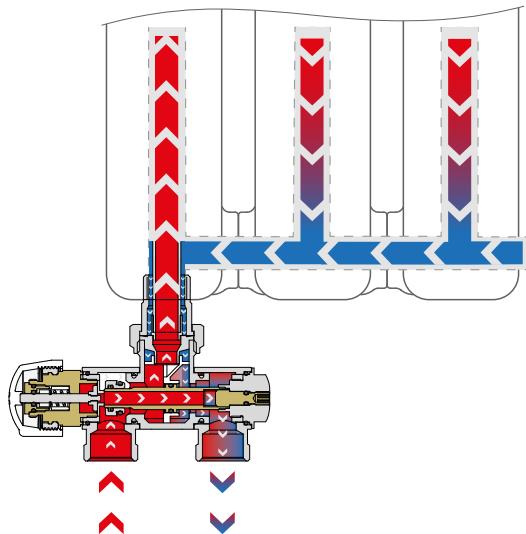


ART. 893

ART.	SIZE	FITTING THREAD	CODE			
893	1/2"	24x1,5	82893AD06	2	20	
893	3/4"	24x1,5	82893AE06	2	20	

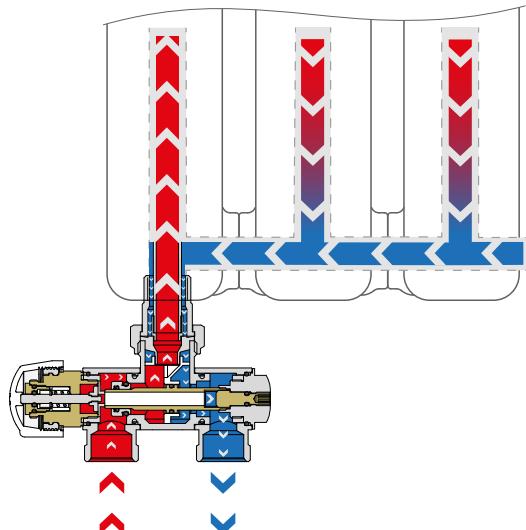
**Double pipe valve** with thermostatic option. Built-in lockshield-valve. Interaxe 37,5 mm. Frontal knob. Choose **thermostatic and electrothermic actuators with 28x1,5 connection thread**.

SINGLE PIPE VERSION



In this version the valve addresses 50% of the inlet flow to the radiator and 50% in by-pass.

DOUBLE PIPE VERSION



In this version the valve addresses the whole inlet flow to the radiator.



**Copper  
Multilayer  
Pe-x**  
**ART. 894 | 895**

ART.	SIZE	FITTING THREAD	CODE	2	20	
894	1/2"	24x1,5	81894AD06	2	20	
895	1/2"	3/4"	81895AD06	2	20	

**Single/double pipe manual valve. Adjustable for wall or floor connection.**  
It can be installed either on the right or on the left side of the radiator. Built-in lockshield-valve. **Interaxis 50 mm.**



**Copper  
Multilayer  
Pe-x**  
**ART. 906 | 907**

ART.	SIZE	FITTING THREAD	CODE	2	20	
906	1/2"	24x1,5	81906AD06	2	20	
907	1/2"	3/4"	81907AD06	2	20	

**Single-double pipe valve with thermostatic option. Adjustable for wall or floor connection.** It can be installed either on the right or on the left side of the radiator. Built-in lockshield-valve. **Interaxe 50 mm. Choose thermostatic and electrothermic actuators with 28x1,5 connection thread.**



**Copper  
Multilayer  
Pe-x**  
**ART. 932 | 933**

ART.	SIZE	FITTING THREAD	CODE	2	12	
932	1/2"	24x1,5	81932AE06	1	12	
933	1/2"	3/4"	81933AE06	1	12	

**Single/double pipe 30x1,5 thermostatic straight valve** with double connection. Distance between the exits 50 mm. Choose thermostatic and electrothermic actuators with 30x1,5 connection thread. Floor pipe connection.



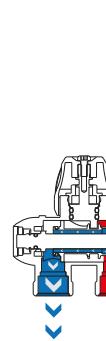
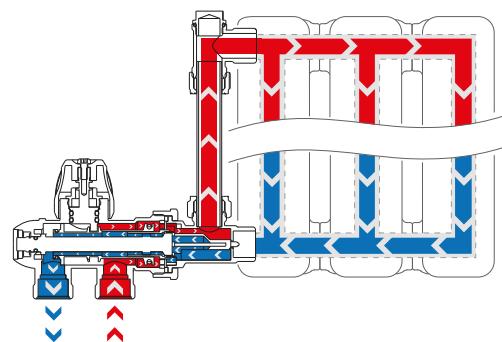
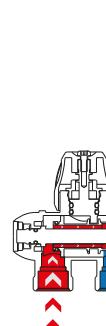
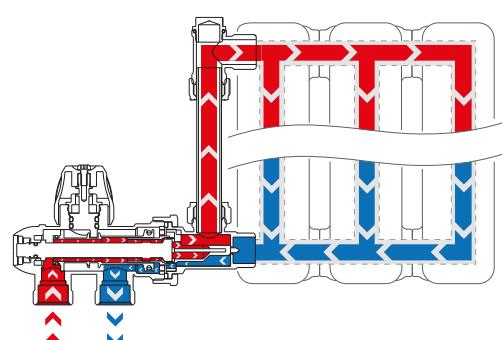
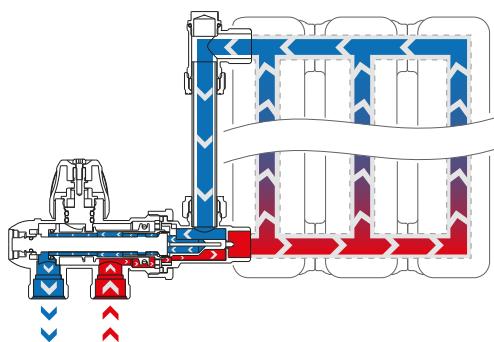
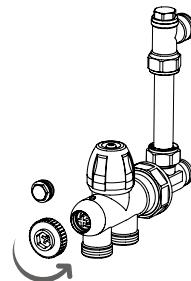
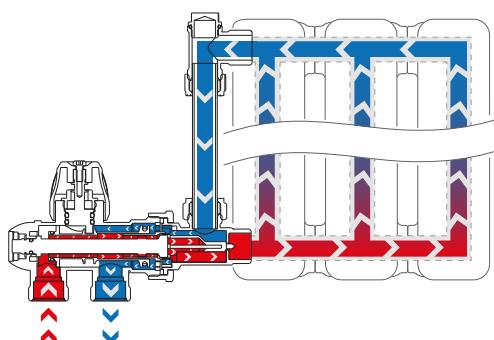
**Copper  
Multilayer  
Pe-x**  
**ART. 946 | 947**

ART.	SIZE	FITTING THREAD	CODE	2	12	
946	1/2"	24x1,5	81946AED06	1	12	
947	1/2"	3/4"	81947AED06	1	12	

**Single/double pipe 30x1,5 thermostatic angle valve** with double connection. Distance between the exits 50 mm. Choose thermostatic and electrothermic actuators with 30x1,5 connection thread. **Wall pipe connection.** Left-side insert available on request.

## PROBLEM

## SOLUTION



**Copper**  
Multilayer  
Pe-x

**ART. 887**

ART.	SIZE	FITTING THREAD	CODE	2	20
887	1/2"	24x1,5	81887AD06	2	20

Single pipe valve. Frontal knob. For copper, Pex-Al-Pex, Pex piping. Reversible flow entry. No need to empty neither the system nor the radiator. Interaxe 37,5 mm. Chromed steel probe, art.889, not included.



**Copper**  
Multilayer  
Pe-x

**ART. 888**

ART.	SIZE	FITTING THREAD	CODE	2	20
888	1/2"	24x1,5	81888AD06	2	20

Single pipe valve. Frontal knob. For copper, Pex-Al-Pex, Pex piping. Reversible flow entry. Interaxe 37,5 mm. Chromed steel probe, art.889, not included.



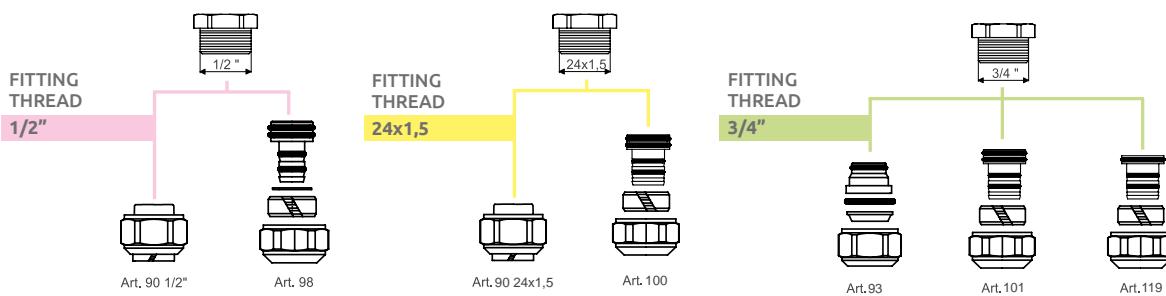
**Copper**  
Multilayer  
Pe-x

**ART. 886**

ART.	SIZE	FITTING THREAD	CODE	2	20
886	1/2"	24x1,5	81886AD06	2	20
886	3/4"	24x1,5	81886AE06	2	20
886	1"	24x1,5	81886AF06	2	20

Single pipe valve. Frontal knob. For copper, Pex-Al-Pex, Pex piping. Reversible flow entry. Interaxe: 37,5 mm. 40 cm probe. The connection thread to the radiator could be either on the right or on the left side.

**CHOICE OF FITTINGS ACCORDING TO VALVE AND LOCKSHIELD CONNECTION THREAD**



**ART. 90**

ART.	PIPE SIZE	FITTING THREAD	CODE	Box	Carton
90	10	1/2"	81090FC06	1	250
90	12	1/2"	81090FD06	1	250
90	14	1/2"	81090FE06	1	250
90	15	1/2"	81090FF06	1	250
90	16	1/2"	81090FG06	1	250
90	10	24x1,5	81090GB06	1	250
90	12	24x1,5	81090GC06	1	250
90	14	24x1,5	81090GD06	1	250
90	15	24x1,5	81090GE06	1	250
90	16	24x1,5	81090GF06	1	250
90	18	24x1,5	81090GG06	1	250

Patent-pending fitting SICURBLOC for copper pipe.



**ART. 98**

ART.	PIPE SIZE	EXT. PIPE SIZE	INT. PIPE SIZE	FITTING THREAD	CODE	Box	Carton
98	16x1,5	16	13	1/2"	81098GI06	1	250
98	14x2	14	10	1/2"	81098BN06	1	250
98	16x2	16	12	1/2"	81098GH06	1	250
98	16x2,2	16	11,6	1/2"	81098BO06	1	250
98	16x2,25	16	11,5	1/2"	81098BO06	1	250

Fitting for Pex and Pex-Al-Pex pipe.



**ART. 93**

ART.	PIPE SIZE	FITTING THREAD	CODE	Box	Carton
93	12	3/4"	81093HB06	1	250
93	14	3/4"	81093HC06	1	250
93	15	3/4"	81093HD06	1	250
93	16	3/4"	81093HE06	1	250
*93	18	3/4"	81093HF06	5	250

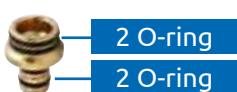
Euroconus fitting for copper pipe. With o-ring.



**ART. 100**

ART.	PIPE SIZE	EXT. PIPE SIZE	INT. PIPE SIZE	FITTING THREAD	CODE	Box	Carton
100	18x2,5	18	13	24X1,5	81100GG06	1	250
100	20x2,5	20	15	24X1,5	81100GK06	1	250
100	12x1,1	12	9,8	24X1,5	81100GB06	1	250
100	12X2	12	8	24X1,5	81100BM06	1	250
100	14X2	14	10	24X1,5	81100BN06	1	250
100	16X2	16	12	24X1,5	81100GH06	1	250
100	18X2	18	14	24X1,5	81100GJ06	1	250
100	20X2	20	16	24X1,5	81100BQ06	1	250
100	16X2,2	16	11,6	24X1,5	81100BO06	1	250
100	16X2,25	16	11,5	24X1,5	81100BO06	1	250
100	18X2,2	18	13,6	24X1,5	81100BP06	1	250
100	20X2,25	20	15,5	24X1,5	81100BR06	1	250
100	16X1,5	16	13	24X1,5	81100GI06	1	250
100	20X1,9	20	16,2	24X1,5	81100GN06	1	250
100	16X2,6 rehau rautitan	16,2	11	24X1,5	81100GL06	1	250
100	17x2	17	13	24x1,5	81100BS06	1	250
100	20x2,9	20	14,2	24x1,5	81100GM06	1	250
100	25x2,5	20	15	1"	81100GO06	1	150
100	26x3	20	14	1"	81100GP06	1	150

Fitting for Pex and Pex-Al-Pex pipe.



ART. 101

ART.	PIPE SIZE	EXT. PIPE SIZE	INT. PIPE SIZE	FITTING THREAD	CODE		
101	18x2,5	18	13	3/4"	81101GG06	1	250
101	20x2,5	20	15	3/4"	81101GK06	1	250
101	12x1,1	12	9,8	3/4"	81101GB06	1	250
101	12X2	12	8	3/4"	81101BM06	1	250
101	14X2	14	10	3/4"	81101BN06	1	250
101	16X2	16	12	3/4"	81101GH06	1	250
101	18X2	18	14	3/4"	81101GJ06	1	250
101	20X2	20	16	3/4"	81101BQ06	1	250
101	16X2,2	16	11,6	3/4"	81101BO06	1	250
101	16X2,25	16	11,5	3/4"	81101BO06	1	250
101	18X2,2	18	13,6	3/4"	81101BP06	1	250
101	20X2,25	20	15,5	3/4"	81101BR06	1	250
101	16X1,5	16	13	3/4"	81101GI06	1	250
101	20X1,9	20	16,2	3/4"	81101GN06	1	250
101	16X2,6 rehaus rautitan	16,2	11	3/4"	81101GL06	1	250
101	17x2	17	13	3/4"	81101BS06	1	250
101	20x2,9	20	14,2	3/4"	81101GM06	1	250

Fitting for Pex and Pex-Al-Pex pipe. Long nut and adapter with **4 o-rings**.



ART. 514

ART.	SIZE	CODE	
514	24X1,5	81514OO06	1

Extender M24X1,5, male-female. L=20 mm. It enables to extend the connection of the valve for Pex-Al-Pex or copper pipe fittings to reach the pipe.



ART. 116 | 117

ART.	SIZE	CODE	
116	24-27	87116OO06	1
117	27-30	87117OO06	1

Wrench for fittings. Art.116 Hexagon 24-Hexagon 27 for 1/2"-24x1,5 thread. Art.117 Hexagon 27-Hexagon 30 for 24x1,5-3/4" thread.



ART. 720

ART.	SIZE	CODE	
720	3/8"x1	82720CH06	5 100
720	3/8"x2	82720CI06	5 100
720	3/8"x3	82720CL06	5 100
720	3/8"x4	82720CM06	5 100
720	3/8"x5	82720CN06	5 100
720	3/8"x6	82720CO06	5 100
720	1/2"x1	82720CP06	5 100
720	1/2"x2	82720CQ06	5 100
720	1/2"x3	82720CR06	5 100
720	1/2"x4	82720CS06	5 100
720	1/2"x5	82720CT06	5 100
720	1/2"x6	82720CU06	5 100
720	3/4"x5	82720CV06	5 100

Eccentric for radiators.



ART. 119

ART.	PIPE SIZE	EXT. PIPE SIZE	INT. PIPE SIZE	FITTING THREAD	CODE	
119*	12x1,1	12	9,8	3/4"	81119GB06	1 250
119**	16x1,5	16	13	3/4"	81119GI06	1 250
119**	16x2	16	12	3/4"	81119GH06	1 250
119**	17x2	17	13	3/4"	81119BS06	1 250

Fitting for Pex and Pex-Al-Pex pipe. Compact adapter available with **1 O-ring** or **3 O-rings** version.



**ART. 140**

ART.	SIZE	CODE			
140	1/2"	90140AD06	1	100	

1/2" angle fitting. **Flat seat**, 3/4" nut. For connection to wall boilers.



**ART. 106**

ART.	CODE			
106	82106AC20	1	30	

Single rosette for two-pipe radiator valve. With pipe cover.



**ART. 108**

ART.	CODE			
108	82108AC20	100	2000	

Single rosette for two-pipe radiator valve.



**ART. 141**

ART.	SIZE	CODE			
141	1/2"	90141AD06	1	100	

1/2" angle fitting. **Conical seat**, o-ring. To connect the valve to the radiator.



**ART. 107**

ART.	CODE		
107	81107AD20	1000	

Double rosette for one-pipe radiator valve. With pipe cover.



**ART. 109**

ART.	CODE			
109	81109AD20	1	50	

Double rosette for one-pipe radiator valve.



**Copper**  
**Multilayer**  
**Pe-x**

ART. 897

ART.	SIZE	FITTING THREAD	CODE	Box	Carton	
897	1/2"	3/4"	82897AD06	10	50	

**Two-pipe** system double straight distributor. For integrated panels with built-in thermostatic group. **Suitable for 1/2" Female radiator connection.** Euroconus connection to the pipe.

NEW DESIGN &  
HYDRAULIC  
PERFORMANCE

ART. 902



**Copper**  
**Multilayer**  
**Pe-x**

ART. SIZE FITTING THREAD CODE

902	1/2"	3/4"	81902AD06	10	50	
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**One-pipe** system double straight distributor. For integrated panels with built-in thermostatic group. **Suitable for 1/2"Female radiator connection.** Euroconus connection to the pipe.



**Copper**  
**Multilayer**  
**Pe-x**

ART. 884

ART.	SIZE	FITTING THREAD	CODE	Box	Carton	
884	1/2"	3/4"	82884AD06	10	50	

**Two-pipe** system double angle distributor. For integrated panels with built-in thermostatic group. **Suitable for 1/2" Female radiator connection.** Euroconus connection to the pipe.

NEW DESIGN &  
HYDRAULIC  
PERFORMANCE

ART. 903



**Copper**  
**Multilayer**  
**Pe-x**

ART. SIZE FITTING THREAD CODE

903	1/2"	3/4"	81903AD06	10	50	
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**One-pipe** system double angle distributor. For integrated panels with built-in thermostatic group. **Suitable for 1/2"Female radiator connection.** Euroconus connection to the pipe.



**Copper**  
**Multilayer**  
**Pe-x**

ART. 896

ART.	SIZE	FITTING THREAD	CODE	Box	Carton	
896	3/4"	3/4"	82896AE06	10	50	

**Two-pipe** system double straight distributor. For integrated panels with built-in thermostatic group. **Suitable for 3/4"Male radiator connection.** Euroconus connection to the pipe.

NEW DESIGN &  
HYDRAULIC  
PERFORMANCE

ART. 904



**Copper**  
**Multilayer**  
**Pe-x**

ART. SIZE FITTING THREAD CODE

904	3/4"	3/4"	81904AE06	10	50	
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**One-pipe** system double straight distributor. For integrated panels with built-in thermostatic group. **Suitable for 3/4"Male radiator connection.** Euroconus connection to the pipe.



**Copper**  
**Multilayer**  
**Pe-x**

ART. 883

ART.	SIZE	FITTING THREAD	CODE	Box	Carton	
883	3/4"	3/4"	82883AE06	10	50	

**Two-pipe** system double angle distributor. For integrated panels with built-in thermostatic group. **Suitable for 3/4" Male radiator connection.** Euroconus connection to the pipe.

NEW DESIGN &  
HYDRAULIC  
PERFORMANCE

ART. 905



**Copper**  
**Multilayer**  
**Pe-x**

ART. SIZE FITTING THREAD CODE

905	3/4"	3/4"	81905AE06	10	50	
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**One-pipe** system double angle distributor. For integrated panels with built-in thermostatic group. **Suitable for 3/4"Male radiator connection.** Euroconus connection to the pipe.



**ART. 885**

ART.	SIZE	FITTING THREAD	CODE	Box	Carton	
885	1/2"	3/4"	81885AD05	10	200	

Union with gasket for panels 1/2" male. For art. 883,884, 896 e 897.



**ART. 898**

ART.	SIZE	FITTING THREAD	CODE	Box	Carton	
898	1/2"	3/4"	81898AD05	10	200	

Union with gasket for panels 1/2" Female. For art. 902, 903, 912, 913.



**ART. 899**

ART.	FITTING THREAD	CODE	Box	Carton	
899	3/4"	81899AD05	10	200	

Adaptor for panels 3/4"Male. For art. 904, 905, 914, 915.



ART. 701

ART.	SIZE	CODE	
701	1/8"	82701AA06	100
701	1/4"	82701AB06	100
701	3/8"	82701AC06	100
701	1/2"	82701AD06	50

Manual air vent. Soft seat, white plastic knob.



ART. 702

ART.	SIZE	CODE	
702	1/4"	82702AB06	100
702	3/8"	82702AC06	100
702	1/2"	82702AD06	50

Manual air vent. Soft seat, white plastic knob, teflon ring.



ART. 703

ART.	SIZE	CODE	
703	1/8"	82703AA06	100
703	1/4"	82703AB06	100
703	3/8"	82703AC06	100

Manual air vent. Soft seat, brass nickel plated knob.



ART. 717

ART.	SIZE	CODE	
717	1/8"	82717AA06	100
717	1/4"	82717AB06	100
717	3/8"	82717AC06	100

Manual air vent with revolving drain knob. O-ring seat on the radiator connection.



ART. 705

ART.	SIZE	CODE	
705	1/2"	82705AD06	100
705	3/4"	82705AE06	100

Manual air vent with revolving drain knob. O-ring seat on the radiator connection.



ART. 706

ART.	SIZE	CODE	
706	1/2"	82706AD06	500
706	3/4"	82706AE06	500

Plug with o-ring seat on the radiator connection.



ART. 715

ART.	SIZE	CODE		
715	3/8"	82715AC06	10	100
715	1/2"	82715AD06	10	100
715	3/4"	82715AE06	10	100

Angle automatic floating air vent. Nickel plated.



ART. 716

ART.	SIZE	CODE		
716	1"DX	82716AF06	10	100
716	1"SX	82716AT06	10	100

Radiator plug with automatic floating air vent. EPDM gasket on the radiator connection.



ART. 718

ART.	SIZE	MATERIAL	CODE	
718	5 MM	STEEL	82718OO06	100
718	5 MM	PLASTIC	82718OO20	100

Metal tool for item 705, 5 mm.

## VALVES AND LOCKSHIELDS FOR DESIGN RADIATORS



LEFT VERSION

RIGHT VERSION

Copper  
Multilayer  
Pe-x

ART. 1140

ART.	SIZE	FITTING THREAD	VERSION	CODE			
1140	1/2"	24X1,5	RIGHT	821140ADD07	1	25	
1140	1/2"	24X1,5	LEFT	821140ADS07	1	25	

**Double angle** valve with thermostatic option for copper piping for thermostatic heads and electrothermic actuators. Right and left version available. Ideal in case of limited spaces. With antileakage radiator union. **For installation of electrothermic actuators use connection ring art. 22023AY20. Chrome finish.**



Copper  
Multilayer  
Pe-x

ART. 1110

ART.	SIZE	FITTING THREAD	CODE			
1110	3/8"	24X1,5	821110AC07	1	25	
1110	1/2"	24X1,5	821110AD07	1	25	

**Angle** valve with thermostatic option. For copper, Pex-Al-pex, pex piping. With anti-leakage radiator union. **Choose thermostatic actuators with 28x1,5 connection thread. For installation of electrothermic actuators use connection ring art. 22023AY20. Chrome finish.**



Iron pipe

ART. 1112

ART.	SIZE	CODE			
1112	1/2"	821112AD07	1	25	

**Angle** valve with thermostatic option. For iron piping. With anti-leakage radiator union. Choose thermostatic actuators with **28x1,5 connection thread**. **For installation of electrothermic actuators use connection ring art. 22023AY20. Chrome finish.**



Copper  
Multilayer  
Pe-x

RUNNING OUT OF PRODUCTION  
ART. 1114

ART.	SIZE	FITTING THREAD	CODE			
1114	3/8"	24X1,5	821114AC07	1	25	
1114	1/2"	24X1,5	821114AD07	1	25	

Single setting manual **angle valve**. For copper, Pex-Al-Pex and Pex piping. Double sealing on the spindle with O-ring and PTFE gasket and on the valve seat. With antileakage radiator unit. **Chrome finish**.



LEFT VERSION

RIGHT VERSION

Copper  
Multilayer  
Pe-x

ART. 1143

ART.	SIZE	FITTING THREAD	VERSION	CODE			
1143	1/2"	24X1,5	RIGHT	821143ADD07	1	25	
1143	1/2"	24X1,5	LEFT	821143ADS07	1	25	

**Double angle** lockshield for copper piping for design radiators. Right and left version available. With antileakage radiator connection. **Chrome finish**.



Copper  
Multilayer  
Pe-x

ART. 1111

ART.	SIZE	FITTING THREAD	CODE			
1111	3/8"	24X1,5	821111AC07	1	25	
1111	1/2"	24X1,5	821111AD07	1	25	

**Straight** valve with thermostatic option. For copper, Pex-Al-pex, pex piping. With anti-leakage radiator union. Choose thermostatic actuators with **28x1,5 connection thread**. **For installation of electrothermic actuators use connection ring art. 22023AY20. Chrome finish**.



Iron pipe

ART. 1113

ART.	SIZE	CODE			
1113	1/2"	821113AD07	1	25	

Straight valve with thermostatic option. For iron piping. With antileakage radiator union. Choose thermostatic actuators with **28x1,5 connection thread**. **For installation of electrothermic actuators use connection ring art. 22023AY20. Chrome finish**.



Copper  
Multilayer  
Pe-x

RUNNING OUT OF PRODUCTION  
ART. 1115

ART.	SIZE	FITTING THREAD	CODE			
1115	3/8"	24X1,5	821115AC07	1	25	
1115	1/2"	24X1,5	821115AD07	1	25	

Single setting manual **straight valve**. For copper, Pex-Al-Pex and Pex piping. Double sealing on the spindle with O-ring and PTFE gasket and on the valve seat. With antileakage radiator unit. **Chrome finish**.



Iron pipe

RUNNING OUT OF PRODUCTION

ART. 1116

ART.	SIZE	CODE		
1116	1/2"	821116AD07	1	25

Single setting manual **angle valve**. For iron piping. Double sealing on the spindle with O-ring and PTFE gasket and on the valve seat. With anti-leakage radiator unit. **Chrome finish**.

Copper  
Multilayer  
Pe-x

RUNNING OUT OF PRODUCTION

ART. 1118

ART.	SIZE	FITTING THREAD	CODE		
1118	3/8"	24X1,5	821118AC07	1	25
1118	1/2"	24X1,5	821118AD07	1	25

**Angle** micrometric lockshield for copper, Pex-Al-Pex, Pex pipe. With anti-leakage radiator connection. **Chrome finish**.



Iron pipe

ART. 1120

ART.	SIZE	CODE		
1120	1/2"	821120AD07	1	25

**Angle** micrometric lockshield for iron pipe. With anti-leakage radiator connection. **Chrome finish**.



RIGHT VERSION

LEFT VERSION

Copper  
Multilayer  
Pe-x

ART. 1146

ART.	SIZE	FITTING THREAD	VERSION	CODE		
1146	1/2"	24X1,5	RIGHT	821146ADD13	1	25
1146	1/2"	24X1,5	LEFT	821146ADS13	1	25

**Double angle valve with thermostatic option** for copper, Pex-Al-Pex, Pex pipe, for thermostatic heads and electrothermic actuators. Right and left version available. Ideal for design radiators or in case of limited spaces. **For installation of electrothermic actuators use connection ring art. 22023AY20. White finish. With anti-leakage radiator union.**



Iron pipe

RUNNING OUT OF PRODUCTION

ART. 1117

ART.	SIZE	CODE		
1117	1/2"	821117AD07	1	25

Single setting manual **straight valve**. For iron piping. Double sealing on the spindle with O-ring and PTFE gasket and on the valve seat. With anti-leakage radiator unit. **Chrome finish**.

Copper  
Multilayer  
Pe-x

RUNNING OUT OF PRODUCTION

ART. 1119

ART.	SIZE	FITTING THREAD	CODE		
1119	3/8"	24X1,5	821119AC07	1	25
1119	1/2"	24X1,5	821119AD07	1	25

**Straight** micrometric lockshield for copper, Pex-Al-Pex, Pex pipe. With anti-leakage radiator connection. **Chrome finish**.



Iron pipe

ART. 1121

ART.	SIZE	CODE		
1121	1/2"	821121AD07	1	25

**Straight** micrometric lockshield for iron pipe. With anti-leakage radiator connection. **Chrome finish**.

Copper  
Multilayer  
Pe-x

ART. 1147

ART.	SIZE	FITTING THREAD	VERSION	CODE		
1147	1/2"	24X1,5	RIGHT	821147ADD13	1	25
1147	1/2"	24X1,5	TLEFT	821147ADS13	1	25

**Double angle lockshield** for copper Pex-Al-Pex, Pex pipe, for design radiators. Right and left version available. **White finish**.

## VALVES AND LOCKSHIELDS FOR DESIGN RADIATORS



● White finish with chromed radiator connection and nut

Copper  
Multilayer  
Pe-x  
**ART. 1122**

ART.	SIZE	FITTING THREAD	CODE			
1122	3/8"	24X1,5	821122AC13	1	25	
1122	1/2"	24X1,5	821122AD13	1	25	
• 1122	3/8"	24X1,5	821122AC1307	1	25	
• 1122	1/2"	24X1,5	821122AD1307	1	25	

**Angle valve** with thermostatic option. For copper, Pex-Al-pex, pex piping. With anti-leakage radiator union. Choose thermostatic actuators with 28x1,5 connection thread. **For installation of electrothermic actuators use connection ring art. 22023AY20. White finish.**



● White finish with chromed radiator connection and nut

Iron pipe **ART. 1124**

ART.	SIZE	CODE			
1124	1/2"	821124AD13	1	25	
• 1124	1/2"	821124AD1307	1	25	

**Angle valve** with thermostatic option. For iron piping. With anti-leakage radiator union. Choose thermostatic actuators with 28x1,5 connection thread. **For installation of electrothermic actuators use connection ring art. 22023AY20. White finish.**



● White finish with chromed radiator connection and nut

Copper  
Multilayer  
Pe-x

RUNNING OUT OF PRODUCTION

**ART. 1126**

ART.	SIZE	FITTING THREAD	CODE			
1126	3/8"	24X1,5	821126AC13	1	25	
1126	1/2"	24X1,5	821126AD13	1	25	
• 1126	3/8"	24X1,5	821126AC1307	1	25	
• 1126	1/2"	24X1,5	821126AD1307	1	25	

**Single setting manual angle valve.** For copper, Pex-Al-Pex and Pex piping. Double sealing on the spindle with O-ring and PTFE gasket and on the valve seat. With antileakage radiator unit. **White finish.**



● White finish with chromed radiator connection and nut

RUNNING OUT OF PRODUCTION

Iron pipe **ART. 1128**

ART.	SIZE	CODE			
1128	1/2"	821128AD13	1	25	
• 1128	1/2"	821128AD1307	1	25	

**Single setting manual angle valve.** For iron piping. Double sealing on the spindle with O-ring and PTFE gasket and on the valve seat. With anti-leakage radiator unit. **White finish.**



● White finish with chromed radiator connection and nut

Copper  
Multilayer  
Pe-x  
**ART. 1123**

ART.	SIZE	FITTING THREAD	CODE			
1123	3/8"	24X1,5	821123AC13	1	25	
1123	1/2"	24X1,5	821123AD13	1	25	
• 1123	3/8"	24X1,5	821123AC1307	1	25	
• 1123	1/2"	24X1,5	821123AD1307	1	25	

**Straight valve** with thermostatic option. For copper, Pex-Al-pex, pex piping. With anti-leakage radiator union. Choose thermostatic actuators with 28x1,5 connection thread. **For installation of electrothermic actuators use connection ring art. 22023AY20. White finish.**



● White finish with chromed radiator connection and nut

Iron pipe **ART. 1125**

ART.	SIZE	CODE			
1125	1/2"	821125AD13	1	25	
• 1125	1/2"	821125AD1307	1	25	

**Straight valve** with thermostatic option. For iron piping. With anti-leakage radiator union. Choose thermostatic actuators with 28x1,5 connection thread. **For installation of electrothermic actuators use connection ring art. 22023AY20. White finish.**



● White finish with chromed radiator connection and nut

Copper  
Multilayer  
Pe-x

RUNNING OUT OF PRODUCTION

**ART. 1127**

ART.	SIZE	FITTING THREAD	CODE			
1127	3/8"	24X1,5	821127AC13	1	25	
1127	1/2"	24X1,5	821127AD13	1	25	
• 1127	3/8"	24X1,5	821127AC1307	1	25	
• 1127	1/2"	24X1,5	821127AD1307	1	25	

**Single setting manual straight valve.** For copper, Pex-Al-Pex and Pex piping. Double sealing on the spindle with O-ring and PTFE gasket and on the valve seat. With anti-leakage radiator unit. **White finish.**



● White finish with chromed radiator connection and nut

RUNNING OUT OF PRODUCTION

Iron pipe **ART. 1129**

ART.	SIZE	CODE			
1129	1/2"	821129AD13	1	25	
• 1129	1/2"	821129AD1307	1	25	

**Single setting manual straight valve.** For iron piping. Double sealing on the spindle with O-ring and PTFE gasket and on the valve seat. With anti-leakage radiator unit. **White finish.**



● White finish with chromed radiator connection and nut

**Copper**  
**Multilayer**  
Pe-x      **ART. 1130**

ART.	SIZE	FITTING THREAD	CODE	1	25	
1130	3/8"	24X1,5	821130AC13	1	25	
1130	1/2"	24X1,5	821130AD13	1	25	
● 1130	3/8"	24X1,5	821130AC1307	1	25	
● 1130	1/2"	24X1,5	821130AD1307	1	25	

**Angle** micrometric lockshield for copper, Pex-Al-Pex, Pex pipe. With anti-leakage radiator connection. **White finish**.



● White finish with chromed radiator connection and nut

**Copper**  
**Multilayer**  
Pe-x      **ART. 1131**

ART.	SIZE	FITTING THREAD	CODE	1	25	
1131	3/8"	24X1,5	821131AC13	1	25	
1131	1/2"	24X1,5	821131AD13	1	25	
● 1131	3/8"	24X1,5	821131AC1307	1	25	
● 1131	1/2"	24X1,5	821131AD1307	1	25	

**Straight** micrometric lockshield for copper, Pex-Al-Pex, Pex pipe. With anti-leakage radiator connection. **White finish**.



● White finish with chromed radiator connection and nut

**Iron pipe**      **ART. 1132**

ART.	SIZE	CODE	1	25	
1132	1/2"	821132AD13	1	25	
● 1132	1/2"	821132AD1307	1	25	

**Angle** micrometric lockshield for iron pipe. With anti-leakage radiator connection. **White finish**.



● White finish with chromed radiator connection and nut

**Iron pipe**      **ART. 1133**

ART.	SIZE	CODE	1	25	
1133	1/2"	821133AD13	1	25	
● 1133	1/2"	821133AD1307	1	25	

**Straight** micrometric lockshield for iron pipe. With anti-leakage radiator connection. **White finish**.



**Copper**  
**Multilayer**  
Pe-x

**ART. 908 | 909**

ART.	SIZE	FITTING THREAD	CODE	2	20	
908	1/2"	24X1,5	82908AD07	2	20	
909	1/2"	3/4"	82909AD07	2	20	

**Single-double pipe valve with thermostatic option.** Adjustable for wall or floor connection. It can be installed either on the right or on the left side of the radiator. Built-in lockshield-valve. **Interaxe 50 mm.** Choose **thermostatic heads** and **electrothermic actuators** with **28x1,5 connection thread**. For installation of **electrothermic actuators** use **connection ring art. 22023AY20**. **Chrome finish**.



**Copper**  
**Multilayer**  
Pe-x

**ART. 938 | 968**

ART.	SIZE	FITTING THREAD	CODE	2	20	
938	1/2"	24X1,5	82938AD07	2	20	
968	1/2"	3/4"	82968AD07	2	20	

**Single-double pipe valve** for towel heaters and design radiators with 360° rotating pipe connection. Universal model which can be installed both on right / left hand side of the towel heater. Distance between the exits 50 mm. The valve can be easily switched from one to two pipe systems. It includes an internal lockshield for the by-pass regulation when installed in one-pipe systems. **Chrome finish**.



**Copper**  
**Multilayer**  
Pe-x

ART. 930 | 931

ART.	SIZE	FITTING THREAD	CODE			
930	1/2"	24X1,5	82930AD13	2	20	
931	1/2"	3/4"	82931AD13	2	20	

**Single-double pipe valve with thermostatic option.** Adjustable for wall or floor connection. It can be installed either on the right or on the left side of the radiator. Built-in lockshield-valve. **Interaxe 50 mm.** Choose thermostatic heads and electrothermic actuators with 28x1,5 connection thread. For installation of electrothermic actuators use connection ring art. 22023AY20. White finish.



**Copper**  
**Multilayer**  
Pe-x

ART. 923 | 943

ART.	SIZE	FITTING THREAD	CODE			
923	1/2"	24X1,5	82923AD13	2	20	
943	1/2"	3/4"	82943AD13	2	20	

**Single-double pipe valve** for towel heaters and design radiators with 360° rotating pipe connection. Universal model which can be installed both on right / left hand side of the towel heater. Distance between the exits 50 mm. The valve can be easily switched from one to two pipe systems. It includes an internal lockshield for the by-pass regulation when installed in one-pipe systems. **White finish.**



**Copper**  
**Multilayer**  
Pe-x

ART. 934 | 935

ART.	SIZE	FITTING THREAD	CODE			
934	1/2"	24x1,5	81934AE07	1	12	
935	1/2"	3/4"	81935AE07	1	12	

**Single/double pipe 30x1,5 thermostatic straight valve** with double connection. Distance between the exits 50 mm. Choose thermostatic and electrothermic actuators with 30x1,5 connection thread. **Chrome finish.** **Floor pipe connection.**



**Copper**  
**Multilayer**  
Pe-x

ART. 948 | 949

ART.	SIZE	FITTING THREAD	CODE			
948	1/2"	24x1,5	81948AED07	1	12	
949	1/2"	3/4"	81949AED07	1	12	

**Single/double pipe 30x1,5 thermostatic angle valve** with double connection. Distance between the exits 50 mm. Choose thermostatic and electrothermic actuators with 30x1,5 connection thread. **Chrome finish. Wall pipe connection.** Left-side insert available on request.



**Copper**  
**Multilayer**  
Pe-x

ART. 936 | 937

ART.	SIZE	FITTING THREAD	CODE			
936	1/2"	24x1,5	81936AE13	1	12	
937	1/2"	3/4"	81937AE13	1	12	

**Single/double pipe 30x1,5 thermostatic straight valve** with double connection. Distance between the exits 50 mm. Choose thermostatic and electrothermic actuators with 30x1,5 connection thread. **White finish. Floor pipe connection.**



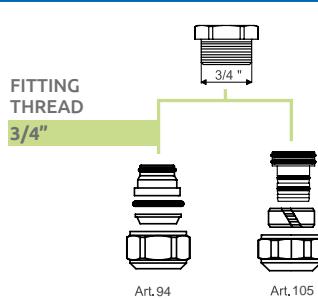
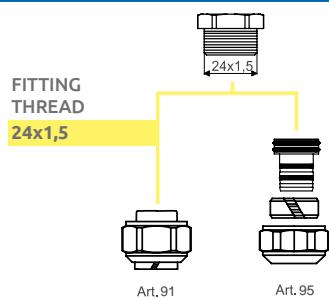
**Copper**  
**Multilayer**  
Pe-x

ART. 956 | 957

ART.	SIZE	FITTING THREAD	CODE			
956	1/2"	24x1,5	81956AED13	1	12	
957	1/2"	3/4"	81957AED13	1	12	

**Single/double pipe 30x1,5 thermostatic angle valve** with double connection. Distance between the exits 50 mm. Choose thermostatic and electrothermic actuators with 30x1,5 connection thread. **White finish. Wall pipe connection.** Left-side insert available on request.

## CHOICE OF FITTINGS ACCORDING TO VALVE AND LOCKSHIELD CONNECTION THREAD



ART. 95

ART.	PIPE SIZE	EXT. PIPE SIZE	INT. PIPE SIZE	FITTING THREAD	CODE			
95	18x2,5	18	13	24X1,5	81095GG07	1	200	
95	20x2,5	20	15	24X1,5	81095GK07	1	200	
95	12X2	12	8	24X1,5	81095BM07	1	200	
95	14X2	14	10	24X1,5	81095BN07	1	200	
95	16X2	16	12	24X1,5	81095GH07	1	200	
95	18X2	18	14	24X1,5	81095GJ07	1	200	
95	20X2	20	16	24X1,5	81095BQ07	1	200	
95	16X2,2	16	11,6	24X1,5	81095BO07	1	200	
95	16X2,25	16	11,5	24X1,5	81095BO07	1	200	
95	18X2,2	18	13,6	24X1,5	81095BP07	1	200	
95	20X2,25	20	15,5	24X1,5	81095BR07	1	200	
95	16X1,5	16	13	24X1,5	81095GI07	1	200	
95	20X1,9	20	16,2	24X1,5	81095GN07	1	200	
95	16X2,6 rehau- rautitan	16,2	11	24X1,5	81095GL07	1	200	
95	17x2	17	13	24x1,5	81095BS07	1	200	
95	20x2,9	20	14,2	24x1,5	81095GM07	1	200	

Fitting for Pex and Pex-Al-Pex pipe. **Chrome finish**.

ART. 91

ART.	PIPE SIZE	FITTING THREAD	CODE			
91	10	24x1,5	81091GB07	1	200	
91	12	24x1,5	81091GC07	1	200	
91	14	24x1,5	81091GD07	1	200	
91	15	24x1,5	81091GE07	1	200	
91	16	24x1,5	81091GF07	1	200	
91	18	24x1,5	81091GG07	1	200	

Fitting "SICURBLOC" for copper pipe. **Chrome finish**.



ART. 105

ART.	PIPE SIZE	EXT. PIPE SIZE	INT. PIPE SIZE	FITTING THREAD	CODE			
105	12x1,1	12	9,8	3/4"	81105GB07	2	200	
105	16x1,5	16	13	3/4"	81105GI07	2	200	
105	16x2	16	12	3/4"	81105GH07	2	200	
105	17x2	17	13	3/4"	81105BS07	2	200	
105	18x2	18	14	3/4"	81105GJ07	2	200	
105	20x2	20	16	3/4"	81105BQ07	2	200	

Fitting for Pex and Pex-Al-Pex pipe. **Chrome finish**.



ART. 94

ART.	PIPE SIZE	FITTING THREAD	CODE			
94	12	3/4"	81094HB07	1	200	
94	14	3/4"	81094HC07	1	200	
94	15	3/4"	81094HD07	1	200	
94	16	3/4"	81094HE07	1	200	
94	18	3/4"	81094HF07	1	200	

Euroconus fitting for copper pipe with o-ring seat. **Chrome finish**.



**ART. 1099 | 1098**

ART.	CONNECTION THREAD	CODE			
1099	28x1,5	821099AC07	1	50	
1098	30x1,5	821098AC07	1	50	

Thermostatic head **with liquid sensor** for thermostatic valves for radiators. Temperature locking and limiting to a desired value with a forked pin system (see instructions on page 11). Hysteresis 0,19°C; Room temperature setting range T = 7-28°C. **Chrome finish.**



**ART. 106**

ART.	CODE		
106	82106AC07	1000	

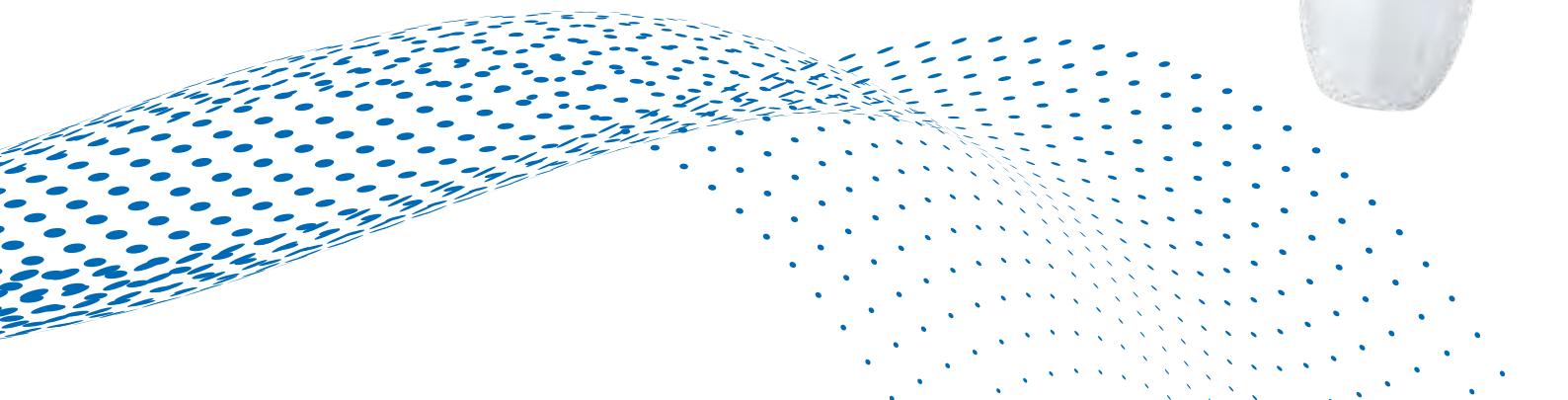
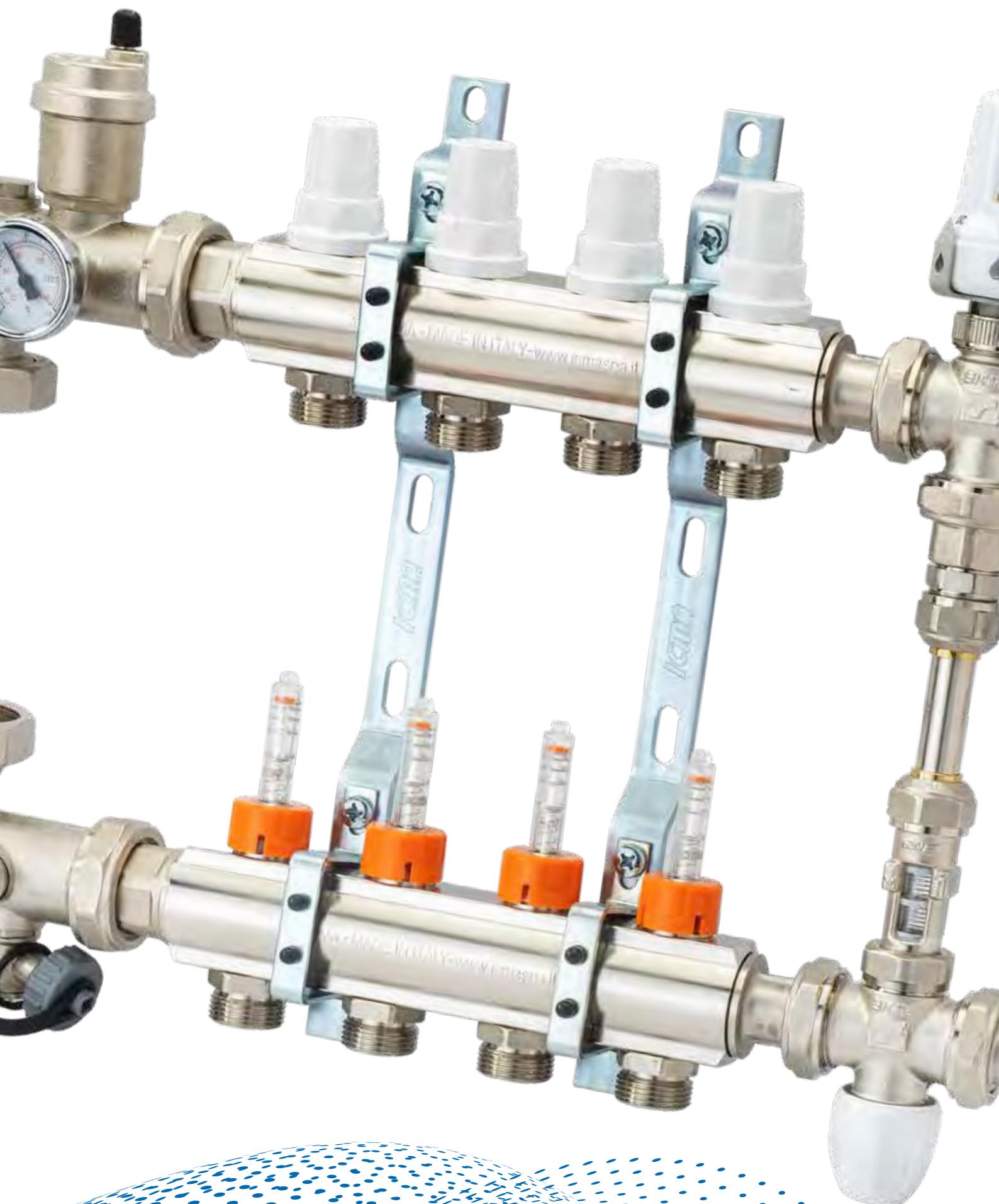
**Chromed** single rosette with pipe cover for two-pipe valve.



**ART. 108**

ART.	CODE		
108	82108AC07	100	2000

**Chromed** single rosette for two-pipe valve.



# B

## LOCKSHIELD AND CIRCULATION PUMP GROUPS FOR HEATING SYSTEMS



**B1** ELECTROTHERMIC ACTUATORS

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**B6** SINGLE AND COPLANAR JOINABLE MANIFOLDS FOR HEATING AND SANITARY SYSTEMS

page 75



**B2** THERMOSTATIC HEADS FOR ZONE VALVES, SUITABLE FOR INSTALLATION WITH FIXED POINT MIXING VALVES

page 45



**B7** SINGLE AND COPLANAR JOINABLE MANIFOLDS FOR HEATING AND SANITARY SYSTEMS

page 75



**B3** ZONE VALVES

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**B8** ACCESSORIES FOR MANIFOLDS

page 81



**B4** CIRCULATION GROUPS FOR LOW AND HIGH TEMPERATURE

page 51



**B9** FITTINGS FOR COPPER, PEX-AL-PEX, PEX PIPE

page 85



**B5** FIXED POINT REGULATION MANIFOLDS FOR UNDERFLOOR HEATING SYSTEM WITH LOW AND HIGH TEMPERATURE

page 62



**B10** TOOLS TO ASSEMBLE VALVES, MANIFOLDS AND FITTINGS

page 87



Wiring:  
Brown-Blue wires = Power supply  
Black-Grey wires = Micro Switch



### ART.982 | 979 Normally closed

ART.	MODEL	CONNECTION THREAD	VOLTAGE	CODE			
982	closed	28X1,5	24 Volt	82982NC54	1	50	
982	closed	28X1,5	230 Volt	82982NC53	1	50	
979	closed	30X1,5	24 Volt	82979NC54	1	50	
979	closed	30X1,5	230 Volt	82979NC53	1	50	
979	closed	FAR	230 Volt	FA979NC53	1	50	

Electrothermic actuator with micro switch for potential-free contact. Normally closed. At the end of the stroke the micro switch interrupts the outgoing signal. The product complies with the CE norm.

- Power supply 24 Volt or 230 Volt;
- Opening time 3 min.;
- Working temperature 5-50°C



Wiring:  
Brown-Blue wires = Power supply



### ART.983 | 980 Normally closed

ART.	MODEL	CONNECTION THREAD	VOLTAGE	CODE			
983	closed	28X1,5	24 Volt	82983NC54	1	50	
983	closed	28X1,5	230 Volt	82983NC53	1	50	
980	closed	30X1,5	24 Volt	82980NC54	1	50	
980	closed	30X1,5	230 Volt	82980NC53	1	50	
980	closed	FAR	230 Volt	FA980NC53	1	50	

Electrothermic on-off actuator normally closed. The product complies with the CE norm.

- Power supply 24 Volt or 230 Volt;
- Opening time 3 min.;
- Working temperature 5-50°C



Wiring:  
Brown-Blue wires = Power supply



### ART.983 | 980 Normally open

ART.	MODEL	CONNECTION THREAD	VOLTAGE	CODE			
983	open	28X1,5	24 Volt	82983NA54	1	50	
983	open	28X1,5	230 Volt	82983NA53	1	50	
980	open	30X1,5	24 Volt	82980NA54	1	50	
980	open	30X1,5	230 Volt	82980NA53	1	50	

Electrothermic on-off actuator normally open. The product complies with the CE norm.

- Power supply 24 Volt or 230 Volt;
- Opening time 3 min.;
- Working temperature 5-50°C



Wiring:  
Red-Green wires = Power supply  
Black-Brown wires = Micro Switch



### ART. 977 Normally closed

ART.	MODEL	CONNECTION THREAD	VOLTAGE	CODE			
977	closed	30X1,5	230 Volt	82977NC53	1		

Electrothermic actuator with micro switch for potential-free contact. Normally closed. At the end of the stroke the micro switch interrupts the outgoing signal. The product complies with the CE norm.

- Power supply 230 Volt;
- Opening time 3 min.;
- Working temperature 5-50°C

## HOW TO CHOOSE THE ELECTROTHERMIC ACTUATOR

1

Choose between normally closed or normally open actuator. Normally closed means that, in case of lack of tension, the actuator closes the valve.

2

Choose the connection thread to the body of the valve. For ICMA products, you find the specification of the connection thread in the description of each valve. For other suppliers' products, please, get in touch with our commercial offices to verify the compatibility

3

Choose the power supply.

4

Choose the opening/closing signal of the electrothermic actuator. It can be used to start/stop a circulator. Use art. 982 or art. 979.

**ZONE VALVES AND THERMOSTATIC HEADS  
FOR TEMPERATURE REGULATION OF THE THERMAL SYSTEM**



Our zone valves are designed to ensure your comfort.



**ART. 994 - ART.995**

ART.	CONNECTION THREAD	CODE			
994	28X1,5	82994AC20	1	10	
995	30X1,5	82995AC20	1	25	

Thermostatic head with remote sensor. **Working temperature range 20°-50°C**. The sensor can be inserted in our cockpit art. 189. (Cockpit length 63 mm). Suitable to feel the water temperature in underfloor heating systems and to regulate at fixed value. Temperature locking and limiting device on a desired value.



**ART. 189**

ART.	SIZE	CODE			
189	1/2"	87189AD06	1	50	

Cockpit for thermostatic heads with remote sensor art. 994 and 995. Cockpit length 63 mm.



**ART. 991 - ART. 992**

ART.	CONNECTION THREAD	CODE			
991	28X1,5	82991AC20	1	10	
992	30X1,5	82992AC20	1	20	

Thermostatic head with remote sensor, **Fluid setting range 20°-70°C**. The sensor can be inserted in our cockpit art. 212. (Cockpit length 132 mm). Suitable to feel the water temperature in underfloor heating systems and to regulate at fixed value. Temperature locking and limiting device on a desired value.



**ART. 997**

ART.	CONNECTION THREAD	CODE			
997	30X1,5	82997AC20	1	20	

Thermostatic head with remote sensor, **working temperature range 60°-90°C**. The sensor can be inserted in our cockpit art. 212 (Cockpit length 132 mm). Suitable to feel the water temperature in heating systems. Temperature locking and limiting device on a desired value. Both operations can be done without tools.



**ART. 212**

ART.	SIZE	CODE			
212	1/2"	87212AD05	10		

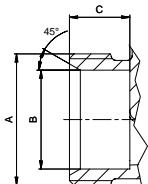
Cockpit for thermostatic heads with remote sensor art. 991, 992 and 997. Cockpit length 132 mm.



ART. 370

ART.	SIZE	Kv (m³/h)	CONNECTION THREAD	CODE			
370	1/2"	1,39	30X1,5	82370AD05	1	20	
370	3/4"	2,23	30X1,5	82370AE05	1	20	
370	1"	4,00	30X1,5	82370AF05	1	20	

Two-way fan coil valve. Conical seat, max. working temperature 110°C.



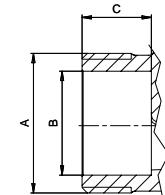
A	B	C
G1/2"	G1/2"	14,5
G3/4"	G3/4"	20,5
G1"	G1"	26
		11,5
		13
		13,5



ART. 377

ART.	SIZE	VOLTAGE	Kv (m³/h)	CODE			
377	1/2"	230 Volt	1,39	82377ADNC53	1	20	
377	3/4"	230 Volt	2,23	82377AENC53	1	20	
377	1"	230 Volt	4,00	82377AFNC53	1	20	

Two-way fan coil valve. Flat seat, max. working temperature 110°C. Equipped with ON-OFF normally closed actuator art. 980. Suitable for electrothermic actuators with M30x1,5 connection thread.



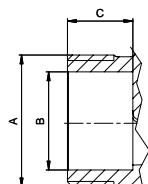
A	B	C
G1/2"	G1/2"	13,8
G3/4"	G3/4"	19,5
G1"	G1"	24
		11,5
		13
		13,5



ART. 371

ART.	SIZE	VOLTAGE	Kv (m³/h)	CODE			
371	1/2"	230 Volt	1,39	82371AD05	1	20	
371	3/4"	230 Volt	2,23	82371AE05	1	20	
371	1"	230 Volt	4,00	82371AF05	1	20	

Two-way fan coil valve. Flat seat, max. working temperature 110°C.



A	B	C
G1/2"	G1/2"	13,8
G3/4"	G3/4"	19,5
G1"	G1"	24
		11,5
		13
		13,5

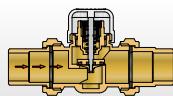
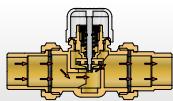
## ZONE VALVES



ART. 300

ART.	SIZE	CONNECTION THREAD	CODE			
300	1/2"	30X1,5	82300AD05	1	20	
300	3/4"	30X1,5	82300AE05	1	20	
300	1"	30X1,5	82300AF05	1	20	

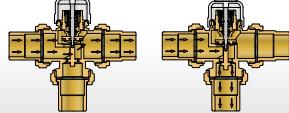
Two-way zone piston valve. For electrothermic actuators with 30x1,5 connection thread art. 979, 980 and thermostatic heads with remote sensor 992, 995 and 997. **The valve enables limiting the flow.** Max. working pressure 10 bars. Max. differential pressure 1 bar. Max. working temperature 95°C.

OPEN  
VALVE  
CLOSE  
VALVE  


ART. 301

ART.	SIZE	CONNECTION THREAD	CODE			
301	1/2"	30X1,5	82301AD05	1	20	
301	3/4"	30X1,5	82301AE05	1	20	
301	1"	30X1,5	82301AF05	1	20	

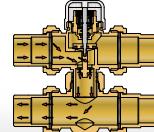
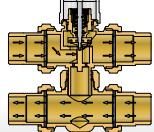
Three-way zone, diverting piston valve. For electrothermic actuators with 30x1,5 connection thread art. 979, 980 and thermostatic heads with remote sensor 992, 995 and 997. **The valve enables limiting the flow rate on the straight way.** Max. working pressure 10 bars. Max. differential pressure 1 bar. Max. working temperature 95°C.

OPEN  
VALVE  
  
CLOSE  
VALVE  
  


ART. 302

ART.	SIZE	CONNECTION THREAD	CODE			
302	1/2"	30X1,5	82302AD05	1	20	
302	3/4"	30X1,5	82302AE05	1	20	
302	1"	30X1,5	82302AF05	1	20	

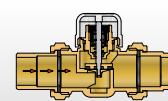
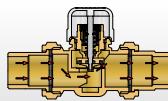
Four-way, zone piston valve. For electrothermic actuators with 30x1,5 connection thread art. 979, 980 and thermostatic heads with remote sensor 992, 995 and 997. The valve enables limiting the flow rate on the straight way. Max. working pressure 10 bars. Max. differential pressure 1 bar. Max. working temperature 95°C. Adjustable interaxe from 48 and 65 mm. Suitable for coplanar manifolds.

OPEN  
VALVE  
  
CLOSE  
VALVE  
  


ART. 320

ART.	SIZE	VOLTAGE	CONNECTION THREAD	CODE			
320	1/2	230 Volt	30X1,5	82320ADNC53	1	10	
320	3/4	230 Volt	30X1,5	82320AENC53	1	10	
320	1"	230 Volt	30X1,5	82320AFNC53	1	10	

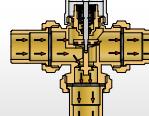
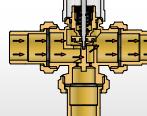
Two-way zone valve. **Normally closed electrothermic actuator with end microswitch for potential-free contact.** Max. working pressure 10 bar. Max. differential pressure 1 bar. Max. working temperature 95°C.

OPEN  
VALVE  
CLOSE  
VALVE  


ART. 321

ART.	SIZE	VOLTAGE	CONNECTION THREAD	CODE			
321	1/2	230 Volt	30X1,5	82321ADNC53	1	10	
321	3/4	230 Volt	30X1,5	82321AENC53	1	10	
321	1"	230 Volt	30X1,5	82321AFNC53	1	10	

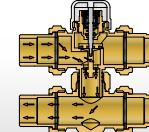
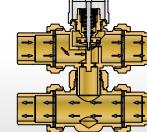
Three-way piston zone valve, **normally closed electrothermic actuator with end microswitch for potential-free contact.** Max. working pressure 10 bar. Max. differential pressure 1 bar. Max. working temperature 95°C.

OPEN  
VALVE  
  
CLOSE  
VALVE  
  


ART. 322

ART.	SIZE	VOLTAGE	CONNECTION THREAD	CODE			
322	1/2	230 Volt	30X1,5	82322ADNC53	1	10	
322	3/4	230 Volt	30X1,5	82322AENC53	1	10	
322	1"	230 Volt	30X1,5	82322AFNC53	1	10	

Four-way piston zone valve, **normally closed electrothermic actuator with end microswitch for potential-free contact.** Max. working pressure 10 bar. Max. differential pressure 1 bar. Max. working temperature 95°C. Adjustable interaxe from 48 mm to 65 mm. Suitable for coplanar manifolds.

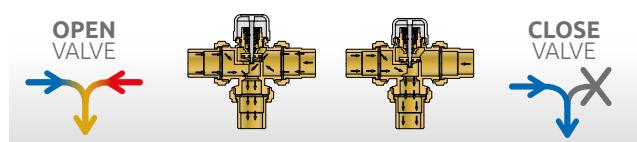
OPEN  
VALVE  
  
CLOSE  
VALVE



ART. 323

ART.	SIZE	CODE			
323	1/2"	82323AD05	1	10	
323	3/4"	82323AE05	1	10	
323	1"	82323AF05	1	10	

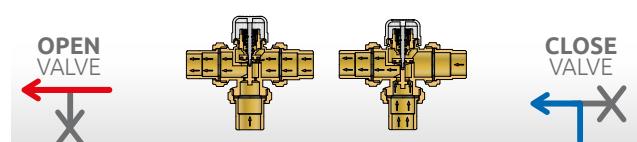
Three-way, mixing valve with thermostatic capillary remote sensor. It allows mixing two fluids, resulting in a fluid with intermediate temperature. **Setting range 20-50°C.** Max. working temperature 95°C, max. working pressure 10 bars, max. differential pressure 1 bar. **The probe also works when connected; for immersion use cockpit with sensor art. 212**



ART. 324

ART.	SIZE	CODE			
324	1/2"	82324AD05	1	10	
324	3/4"	82324AE05	1	10	
324	1"	82324AF05	1	10	

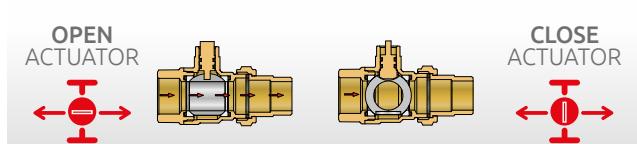
Three-way, mixing valve with thermostatic capillary remote sensor. It allows mixing two fluids, resulting in a fluid with intermediate temperature. **Setting range 60-90°C.** Max. working temperature 110°C, max. working pressure 10 bars, max. differential pressure 1 bar. **The probe also works when connected; for immersion use cockpit with sensor art. 212**



ART. 331

ART.	SIZE	CODE			
331	1/2	82331AD05	1	20	
331	3/4	82331AE05	1	20	
331	1"	82331AF05	1	10	
331	1"1/4	82331AG05	1	5	

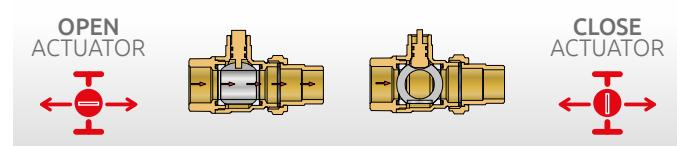
Male/female two-way full bore zone ball valve. It can be motor driven. Max. working pressure 16 bars. Max. differential pressure 10 bars. Max. working temperature 110°C.



ART. 332

ART.	SIZE	CODE			
332	1/2"	82332AD05	1	10	
332	3/4"	82332AE05	1	10	
332	1"	82332AF05	1	10	
332	1"1/4	82332AG05	1	5	

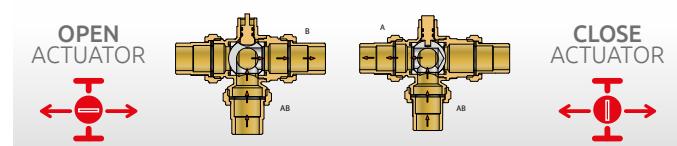
Two-way full bore zone ball valve. It can be motor driven. Male thread unions. Max. working pressure 16 bars. Max. differential pressure 10 bars. Max. working temperature 110°C.



ART. 333

ART.	SIZE	CODE			
333	1/2	82333AD05	1	20	
333	3/4	82333AE05	1	20	
333	1"	82333AF05	1	10	
333	1"1/4	82333AG05	1	5	

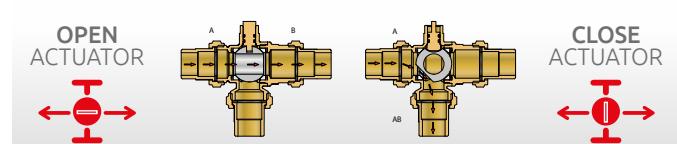
Three-way full bore diverting zone ball valve. It can be motor driven. Union connections. Max. working pressure 16 bars. Max. differential pressure 10 bars. Max. working temperature 110°C.



ART. 334

ART.	SIZE	CODE			
334	1/2	82334AD05	1	10	
334	3/4	82334AE05	1	10	
334	1"	82334AF05	1	10	
334	1"1/4	82334AG05	1	5	

Three-way by-pass zone ball valve. It can be motor driven. Union connections. Max. working pressure 16 bars. Max. differential pressure 10 bars. Max. working temperature 110°C.



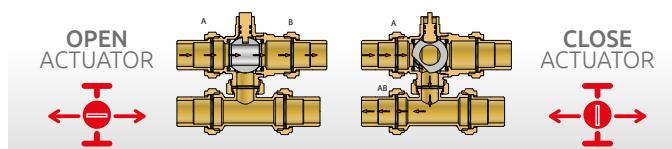
## ZONE VALVES



ART. 336

ART.	SIZE	CODE			
336	3/4	82336AE05	1	10	
336	1"	82336AF05	1	10	

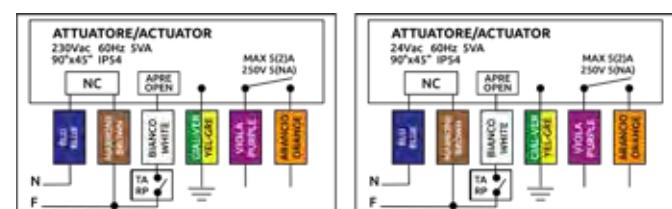
Four-way full bore zone ball valve. It can be motor driven. Union connections. Fixed interaxe 50 mm. Variable By-pass. Max. working pressure 16 bars. Max. differential pressure 10 bars. Max. working temperature 110°C.



ART. 337

ART.	VOLTAGE	CODE			
337	230 Volt	82337BI53	1	20	
337	24 Volt AC	82337BI54	1	20	

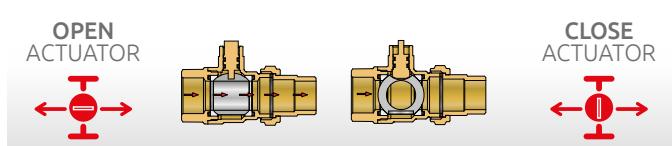
Servomotor for zone ball valves, normally closed, with relay and auxiliary microswitch. Max. ambient temperature 55°C, protection degree IP44, CE Mark Approved. Opening time 45 seconds.



ART. 341

ART.	SIZE	VOLTAGE	CODE			
341	1/2	230 Volt	82341AD0553	1	10	
341	3/4	230 Volt	82341AE0553	1	10	
341	1"	230 Volt	82341AF0553	1	10	
341	1"1/4	230 Volt	82341AG0553	1	5	

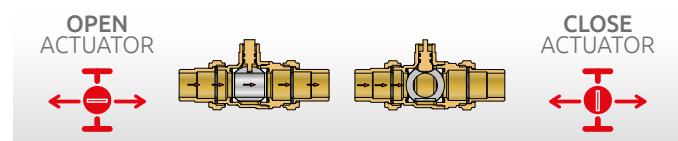
Male/female two-way full bore zone ball valve, with servomotor with relay and auxiliary microswitch for potential-free contact. Max. working pressure 16 bars. Max. differential pressure 10 bars. Max. working temperature 110°C.



ART. 342

ART.	SIZE	VOLTAGE	CODE			
342	1/2"	230 Volt	82342AD0553	1	10	
342	3/4	230 Volt	82342AE0553	1	10	
342	1"	230 Volt	82342AF0553	1	10	
342	1"1/4	230 Volt	82342AG0553	1	5	

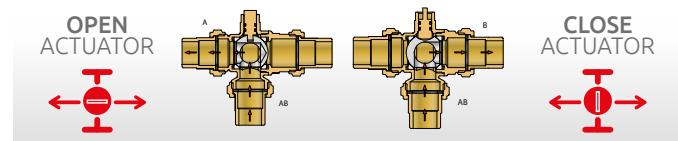
Two-way full bore zone ball valve with servomotor with relay and auxiliary microswitch for potential-free contact. Union connections. Max. working pressure 16 bars. Max. differential pressure 10 bars. Max. working temperature 110°C.



ART. 343

ART.	SIZE	VOLTAGE	CODE			
343	1/2"	230 Volt	82343AD0553	1	10	
343	3/4	230 Volt	82343AE0553	1	10	
343	1"	230 Volt	82343AF0553	1	10	
343	1"1/4	230 Volt	82343AG0553	1	5	

Three way full bore diverting zone ball valve, with servomotor with relay and auxiliary microswitch for potential-free contact. Union connections. Max. working pressure 16 bars. Max. differential pressure 10 bars. Max. working temperature 110°C.



► 24 VOLT SERVO-MOTORS ARE SOLD SEPARATELY FROM VALVES

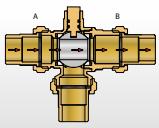


ART. 344

ART.	SIZE	VOLTAGE	CODE			
344	1/2"	230 Volt	82344AD0553	1	10	
344	3/4	230 Volt	82344AE0553	1	10	
344	1"	230 Volt	82344AF0553	1	10	
344	1 1/4"	230 Volt	82344AG0553	1	5	

Three-way by-pass zone ball valve, with servomotor with relay and auxiliary microswitch for potential-free contact. Union connections. Max. working pressure 16 bars. Max. differential pressure 10 bars. Max. working temperature 110°C.

OPEN ACTUATOR



CLOSE ACTUATOR

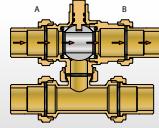


ART. 346

ART.	SIZE	VOLTAGE	CODE			
346	3/4	230 Volt	82346AE0553	1	10	
346	1"	230 Volt	82346AF0553	1	5	

Four-way full bore zone ball valve, with servomotor with relay and auxiliary microswitch for potential-free contact. Union connections. Fixed interaxe 50 mm. Max. working pressure 16 bars. Max. differential pressure 10 bars. Max. working temperature 110°C.

OPEN ACTUATOR

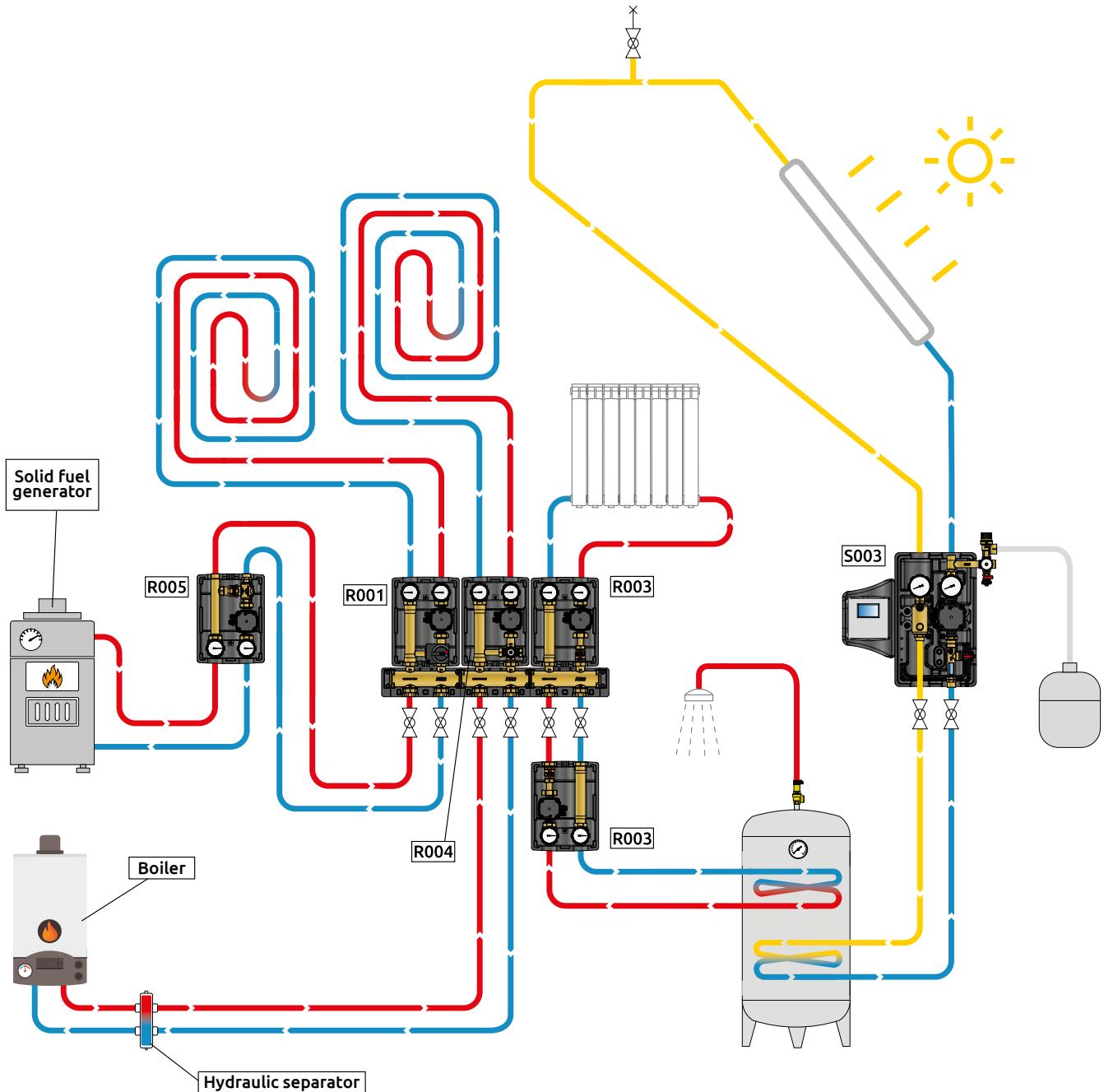


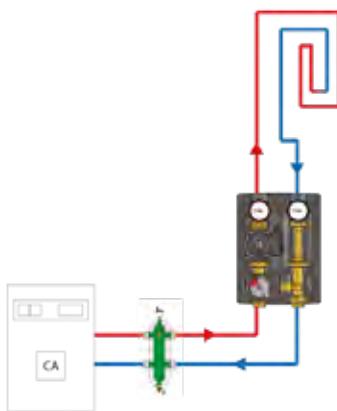
CLOSE ACTUATOR



## CIRCULATION MODULES AND MODULAR MANIFOLD FOR DISTRIBUTION GROUPS

B





### Art. R001

**Mixing group with variable point regulating unit.** It is provided with a three way mixing valve regulated by a 3-point modulating and bidirectional rotating electric servomotor, connectable to regulating control units; the valve has a By-Pass which brings a portion of the return side flow into the delivery side to obtain the desired temperature of the fluid. The pump has 1"1/2 connections and it can be asynchronous (not for sale in the EU) or electronic. The mixing group is also equipped with 2 interception ball valves with built-in thermometer to instantly read the delivery and return flow temperatures (the return ball valve has a built-in check valve). It can be ordered **without pump, with delivery pump to the right or to the left-hand** (in case of any changes on site please follow the technical sheet instructions included in the package); the group is supplied with a black PPE insulated shell.

The mixing unit is supplied with the servomotor art. 787 (230 or 24 Voltage).

- The product with UPS 25/65 pump is sold in non-EU countries.

\* PWM signal cable not included. To be purchased separately (see page 197) when connecting to a PWM signal controller.

ART.	SIZE	ACTUATOR VOLTAGE	DELIVERY SIDE	BOILER CONNECT.	SYSTEM CONNECT.	CODE	PUMP	CIRCULATOR CONTROL SIGNAL			
								ON/OFF	PWM	Box	
	R001	DN20	230 Volt	R	1"1/2 M	3/4 F	93R001AED53	NO PUMP	✓	✗	1
	R001	DN20	230 Volt	L	1"1/2 M	3/4 F	93R001AES53	NO PUMP	✓	✗	1
	R001 •	DN20	230 Volt	R	1"1/2 M	3/4 F	93R001AEDP32153	Grundfos UPS 25/65	✓	✗	1
	R001 •	DN20	230 Volt	L	1"1/2 M	3/4 F	93R001AESP32153	Grundfos UPS 25/65	✓	✗	1
	R001	DN20	230 Volt	R	1"1/2 M	3/4 F	93R001AEDP32653	Grundfos UPM3 25/70PWM*	✓	✓	1
	R001	DN20	230 Volt	L	1"1/2 M	3/4 F	93R001AESP32653	Grundfos UPM3 25/70PWM*	✓	✓	1
	R001	DN20	230 Volt	R	1"1/2 M	3/4 F	93R001AEDP32753	Wilo Para 25/8	✓	✗	1
	R001	DN20	230 Volt	L	1"1/2 M	3/4 F	93R001AESP32753	Wilo Para 25/8	✓	✗	1
	R001	DN20	230 Volt	R	1"1/2 M	3/4 F	93R001AEDP32853	UPM3 Hybrid 25/70 *	✓	✓	1
	R001	DN20	230 Volt	L	1"1/2 M	3/4 F	93R001AESP32853	UPM3 Hybrid 25/70 *	✓	✓	1
	R001	DN20	230 Volt	R	1"1/2 M	3/4 F	93R001AEDP33053	Wilo Para 25/7	✓	✗	1
	R001	DN20	230 Volt	L	1"1/2 M	3/4 F	93R001AESP33053	Wilo Para 25/7	✓	✗	1
	R001	DN20	230 Volt	R	1"1/2 M	1" M	94R001AED53	NO PUMP	✓	✗	1
	R001	DN20	230 Volt	L	1"1/2 M	1" M	94R001AES53	NO PUMP	✓	✗	1
	R001 •	DN20	230 Volt	R	1"1/2 M	1" M	94R001AEDP32153	Grundfos UPS 25/65	✓	✗	1
	R001 •	DN20	230 Volt	L	1"1/2 M	1" M	94R001AESP32153	Grundfos UPS 25/65	✓	✗	1
	R001	DN20	230 Volt	R	1"1/2 M	1" M	94R001AEDP32653	Grundfos UPM3 25/70PWM*	✓	✓	1
	R001	DN20	230 Volt	L	1"1/2 M	1" M	94R001AESP32653	Grundfos UPM3 25/70PWM*	✓	✓	1
	R001	DN20	230 Volt	R	1"1/2 M	1" M	94R001AEDP32753	Wilo Para 25/8	✓	✗	1
	R001	DN20	230 Volt	L	1"1/2 M	1" M	94R001AESP32753	Wilo Para 25/8	✓	✗	1
	R001	DN20	230 Volt	R	1"1/2 M	1" M	94R001AEDP32853	UPM3 Hybrid 25/70 *	✓	✓	1
	R001	DN20	230 Volt	L	1"1/2 M	1" M	94R001AESP32853	UPM3 Hybrid 25/70 *	✓	✓	1
	R001	DN20	230 Volt	R	1"1/2 M	1" M	94R001AEDP33053	Wilo Para 25/7	✓	✗	1
	R001	DN20	230 Volt	L	1"1/2 M	1" M	94R001AESP33053	Wilo Para 25/7	✓	✗	1

24 Volt actuators are available upon request. The code is modified for the last digit of code from 3 to 4.

For example: the code 93R001AEDP32153 will be 93R001AEDP32154.

## CIRCULATION GROUPS FOR LOW AND HIGH TEMPERATURE



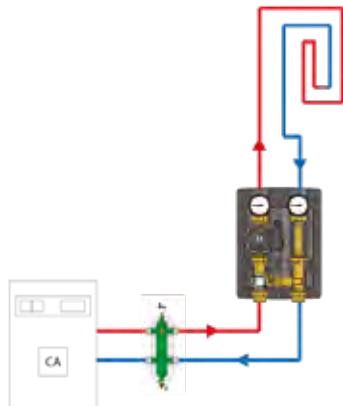
&gt;250 mm.



Code 93



Code 94



## Art. R002

**Mixing group with fixed point regulating unit.** It is provided with a three way mixing valve regulated by a thermostatic head with remote sensor art. 995 to be placed in contact with or by immersion in the system delivery pipe according to which the desired temperature is set (working temperature range 20°C - 50°C). The valve has a by-pass which brings a portion of the return side flow into the delivery side to obtain the desired temperature of the fluid. The pump has 1"1/2 connections and it can be asynchronous (not for sale in the EU) or electronic. The mixing group is also equipped with 2 interception ball valves with built-in thermometer to instantly read the delivery and return flow temperatures (the return ball valve has a built-in check valve). It can be ordered **without pump, with delivery pump to the right or to the left-hand** (in case of any changes on site please follow the technical sheet instructions included in the package); the group is supplied with a black PPE insulated shell. The mixing unit is supplied with the thermostatic head art. 995 with 30x1,5 connections.

• The product with UPS 25/65 pump is sold in non-EU countries.

\* PWM signal cable not included. To be purchased separately (see page 197) when connecting to a PWM signal controller.

	ART.	SIZE	DELIVERY SIDE	BOILER CONNECT.	SYSTEM CONNECT.	CODE	PUMP	CIRCULATOR CONTROL SIGNAL		
								ON/OFF	PWM	
	R002	DN20	R	1"1/2 M	3/4 F	93R002AED05	NO PUMP	✓	✗	1
	R002	DN20	L	1"1/2 M	3/4 F	93R002AES05	NO PUMP	✓	✗	1
	R002 •	DN20	R	1"1/2 M	3/4 F	93R002AEDP321	Grundfos UPS 25/65	✓	✗	1
	R002 •	DN20	L	1"1/2 M	3/4 F	93R002AESP321	Grundfos UPS 25/65	✓	✗	1
	R002	DN20	R	1"1/2 M	3/4 F	93R002AEDP326	Grundfos UPM3 25/70PWM*	✓	✓	1
	R002	DN20	L	1"1/2 M	3/4 F	93R002AESP326	Grundfos UPM3 25/70PWM*	✓	✓	1
	R002	DN20	R	1"1/2 M	3/4 F	93R002AEDP327	Wilo Para 25/8	✓	✗	1
	R002	DN20	L	1"1/2 M	3/4 F	93R002AESP327	Wilo Para 25/8	✓	✗	1
	R002	DN20	R	1"1/2 M	3/4 F	93R002AEDP328	UPM3 Hybrid 25/70 *	✓	✓	1
	R002	DN20	L	1"1/2 M	3/4 F	93R002AESP328	UPM3 Hybrid 25/70 *	✓	✓	1
	R002	DN20	R	1"1/2 M	3/4 F	93R002AEDP330	Wilo Para 25/7	✓	✗	1
	R002	DN20	L	1"1/2 M	3/4 F	93R002AESP330	Wilo Para 25/7	✓	✗	1
	R002	DN20	R	1"1/2 M	1" M	94R002AED05	NO PUMP	✓	✗	1
	R002	DN20	L	1"1/2 M	1" M	94R002AES05	NO PUMP	✓	✗	1
	R002 •	DN20	R	1"1/2 M	1" M	94R002AEDP321	Grundfos UPS 25/65	✓	✗	1
	R002 •	DN20	L	1"1/2 M	1" M	94R002AESP321	Grundfos UPS 25/65	✓	✗	1
	R002	DN20	R	1"1/2 M	1" M	94R002AEDP326	Grundfos UPM3 25/70PWM*	✓	✓	1
	R002	DN20	L	1"1/2 M	1" M	94R002AESP326	Grundfos UPM3 25/70PWM*	✓	✓	1
	R002	DN20	R	1"1/2 M	1" M	94R002AEDP327	Wilo Para 25/8	✓	✗	1
	R002	DN20	L	1"1/2 M	1" M	94R002AESP327	Wilo Para 25/8	✓	✗	1
	R002	DN20	R	1"1/2 M	1" M	94R002AEDP328	UPM3 Hybrid 25/70 *	✓	✓	1
	R002	DN20	L	1"1/2 M	1" M	94R002AESP328	UPM3 Hybrid 25/70 *	✓	✓	1
	R002	DN20	R	1"1/2 M	1" M	94R002AEDP330	Wilo Para 25/7	✓	✗	1
	R002	DN20	L	1"1/2 M	1" M	94R002AESP330	Wilo Para 25/7	✓	✗	1



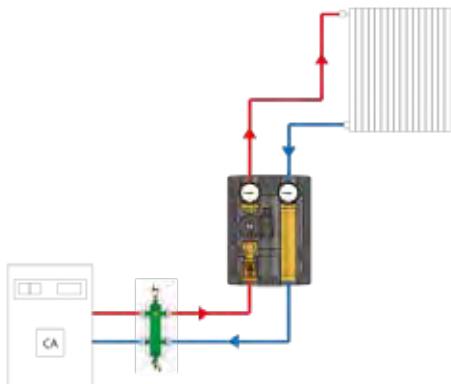
>250 mm.



Code 93



Code 94



### Art. R003

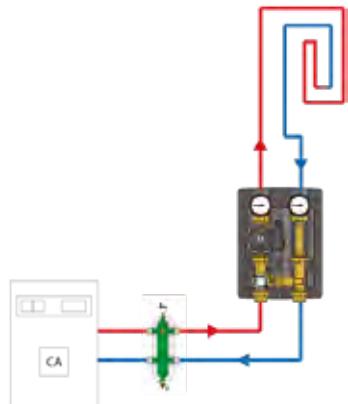
**Mixing group for high/low direct temperature unit**, suitable for radiators systems, fan coils, design radiators. The pump has 1"1/2 connections and it can be asynchronous (not for sale in the EU) or electronic. The mixing group is also equipped with 2 interception ball valves with built-in thermometer to instantly read the delivery and return flow temperatures (the return ball valve has a built-in check valve). **It can be ordered without pump or with delivery pump to the right**; the pump can be easily moved to the left. The group is supplied with a black PPE insulated shell.

- The product with UPS 25/65 pump is sold in non-EU countries.

\* PWM signal cable not included. To be purchased separately (see page 197) when connecting to a PWM signal controller.

ART.	SIZE	DELIVERY SIDE	BOILER CONNECT.	SYSTEM CONNECT.	CODE	PUMP	CIRCULATOR CONTROL SIGNAL			
							ON/OFF	PWM		
	R003	DN20	R	1"1/2 M	3/4 F	93R003AED05	NO PUMP	✓	✗	1
	R003 •	DN20	R	1"1/2 M	3/4 F	93R003AEDP321	Grundfos UPS 25/65	✓	✗	1
	R003	DN20	R	1"1/2 M	3/4 F	93R003AEDP326	Grundfos UPM3 25/70PWM*	✓	✓	1
	R003	DN20	R	1"1/2 M	3/4 F	93R003AEDP327	Wilo Para 25/8	✓	✗	1
	R003	DN20	R	1"1/2 M	3/4 F	93R003AEDP328	UPM3 Hybrid 25/70 *	✓	✓	1
	R003	DN20	R	1"1/2 M	3/4 F	93R003AEDP330	Wilo Para 25/7	✓	✗	1
	R003	DN20	R	1"1/2 M	1" M	94R003AED05	NO PUMP	✓	✗	1
	R003 •	DN20	R	1"1/2 M	1" M	94R003AEDP321	Grundfos UPS 25/65	✓	✗	1
	R003	DN20	R	1"1/2 M	1" M	94R003AEDP326	Grundfos UPM3 25/70PWM*	✓	✓	1
	R003	DN20	R	1"1/2 M	1" M	94R003AEDP327	Wilo Yonos Para RS 25/7,5	✓	✗	1
	R003	DN20	R	1"1/2 M	1" M	94R003AEDP328	UPM3 Hybrid 25/70 *	✓	✓	1
	R003	DN20	R	1"1/2 M	1" M	94R003AEDP330	Wilo Para 25/7	✓	✗	1

## CIRCULATION GROUPS FOR LOW AND HIGH TEMPERATURE

**Art. R004**

**Mixing group with fixed point regulating unit**, equipped with thermostatic mixing valve. By setting the working temperature on the mixing valve, you get an effective control of the plant delivery temperature when it is different from the heat generator one. **Two thermostatic valves are available with different working temperature (20-50°C / 30-70°C)**. The pump has 1"1/2 connections and it can be asynchronous (not for sale in the EU) or electronic. The mixing group is also equipped with 2 interception ball valves with built-in thermometer to instantly read the delivery and return flow temperatures (the return ball valve has a built-in check valve). It can be ordered **without pump, with delivery pump to the right or to the left-hand** (in case of any changes on site please follow the technical sheet instructions included in the package); the group is supplied with a black PPE insulated shell.

- When placing the order please specify the requested temperature (between 20-50 °C or 30-70 °C), by filling in the dotted line (between the pump position and the pump code) with the number corresponding to the temperature. For example, if you order R004 R with circulator P328 and temperature 20°-50 °C, the code will be: 94R004AED55P328 (in case of temperature 30-70 °C please fill in the dotted line with 70).

- The product with UPS 25/65 pump is sold in non-EU countries.

\* PWM signal cable not included. To be purchased separately (see page 197) when connecting to a PWM signal controller.

ART.	SIZE	DELIVERY SIDE	BOILER CONNECT.	SYSTEM CONNECT.	CODE	PUMP	CIRCULATOR CONTROL SIGNAL			
							ON/OFF	PWM	Box	
	R004	DN20	R	1"1/2M	1°F	93R004AED..05	NO PUMP	✓	✗	1
	R004	DN20	L	1"1/2M	1°F	93R004AES..05	NO PUMP	✓	✗	1
	R004 •	DN20	R	1"1/2M	1°F	93R004AED..P321	Grundfos UPS 25/65	✓	✗	1
	R004 •	DN20	L	1"1/2M	1°F	93R004AES..P321	Grundfos UPS 25/65	✓	✗	1
	R004	DN20	R	1"1/2M	1°F	93R004AED..P326	Grundfos UPM3 25/70PWM*	✓	✓	1
	R004	DN20	L	1"1/2M	1°F	93R004AES..P326	Grundfos UPM3 25/70PWM*	✓	✓	1
	R004	DN20	R	1"1/2M	1°F	93R004AED..P327	Wilo Para 25/8	✓	✗	1
	R004	DN20	L	1"1/2M	1°F	93R004AES..P327	Wilo Para 25/8	✓	✗	1
	R004	DN20	R	1"1/2M	1°F	93R004AED..P328	UPM3 Hybrid 25/70 *	✓	✓	1
	R004	DN20	L	1"1/2M	1°F	93R004AES..P328	UPM3 Hybrid 25/70 *	✓	✓	1
	R004	DN20	R	1"1/2M	1°F	93R004AED..P330	Wilo Para 25/7	✓	✗	1
	R004	DN20	L	1"1/2M	1°F	93R004AES..P330	Wilo Para 25/7	✓	✗	1
	R004	DN20	R	1"1/2M	1" M	94R004AED..05	NO PUMP	✓	✗	1
	R004	DN20	L	1"1/2M	1" M	94R004AES..05	NO PUMP	✓	✗	1
	R004 •	DN20	R	1"1/2M	1" M	94R004AED..P321	Grundfos UPS 25/65	✓	✗	1
	R004 •	DN20	L	1"1/2M	1" M	94R004AES..P321	Grundfos UPS 25/65	✓	✗	1
	R004	DN20	R	1"1/2M	1" M	94R004AED..P326	Grundfos UPM3 25/70PWM*	✓	✓	1
	R004	DN20	L	1"1/2M	1" M	94R004AES..P326	Grundfos UPM3 25/70PWM*	✓	✓	1
	R004	DN20	R	1"1/2M	1" M	94R004AED..P327	Wilo Para 25/8	✓	✗	1
	R004	DN20	L	1"1/2M	1" M	94R004AES..P327	Wilo Para 25/8	✓	✗	1
	R004	DN20	R	1"1/2M	1" M	94R004AED..P328	UPM3 Hybrid 25/70 *	✓	✓	1
	R004	DN20	L	1"1/2M	1" M	94R004AES..P328	UPM3 Hybrid 25/70 *	✓	✓	1
	R004	DN20	R	1"1/2M	1" M	94R004AED..P330	Wilo Para 25/7	✓	✗	1
	R004	DN20	L	1"1/2M	1" M	94R004AES..P330	Wilo Para 25/7	✓	✗	1



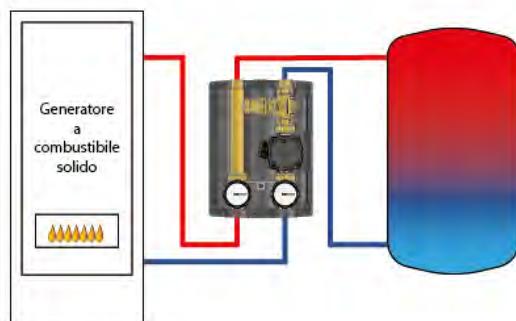
&gt;250 mm.



Code 93



Code 94

**Art. R005**

Anti-condensation mixing group, 1 "male connections. It is equipped with 2 interception ball valves with built-in thermometer to instantly read the delivery and return flow temperatures. It can be ordered without pump, with asynchronous pump (not for sale in the EU), with electronic pump to the right or to the left-hand. **The group includes an anti-condensation valve, 1", available settings: 45°, 55°, 60°, 70°.**

► When placing the order please specify the requested temperature setting, by filling in the dotted line with the number corresponding to the temperature setting. For example, if you order R005 R with circulator P328 and 55° anti-condensation, the code will be: 94R005AED55P328.

• The product with UPS 25/65 pump is sold in non-EU countries.

\* PWM signal cable not included. To be purchased separately (see page 197) when connecting to a PWM signal controller.

ART.	SIZE	DELIVERY SIDE	BOILER CONNECT.	SYSTEM CONNECT.	CODE	PUMP	CIRCULATOR CONTROL SIGNAL			
							ON/OFF	PWM	Box	
	R005	DN20	R	1" M	1" M	93R005AED..05	NO PUMP	✓	✗	1
	R005	DN20	L	1" M	1" M	93R005AES..05	NO PUMP	✓	✗	1
	R005 •	DN20	R	1" M	1" M	93R005AED..P321	Grundfos UPS 25/65	✓	✗	1
	R005 •	DN20	L	1" M	1" M	93R005AES..P321	Grundfos UPS 25/65	✓	✗	1
	R005	DN20	R	1" M	1" M	93R005AED..P326	Grundfos UPM3 25/70PWM*	✓	✓	1
	R005	DN20	L	1" M	1" M	93R005AES..P326	Grundfos UPM3 25/70PWM*	✓	✓	1
	R005	DN20	R	1" M	1" M	93R005AED..P327	Wilo Para 25/8	✓	✗	1
	R005	DN20	L	1" M	1" M	93R005AES..P327	Wilo Para 25/8	✓	✗	1
	R005	DN20	R	1" M	1" M	93R005AED..P328	UPM3 Hybrid 25/70 *	✓	✓	1
	R005	DN20	L	1" M	1" M	93R005AES..P328	UPM3 Hybrid 25/70 *	✓	✓	1
	R005	DN20	R	1" M	1" M	93R005AED..P330	Wilo Para 25/7	✓	✗	1
	R005	DN20	L	1" M	1" M	93R005AES..P330	Wilo Para 25/7	✓	✗	1
	R005	DN20	R	1" M	1" M	94R005AED..05	NO PUMP	✓	✗	1
	R005	DN20	L	1" M	1" M	94R005AES..05	NO PUMP	✓	✗	1
	R005 •	DN20	R	1" M	1" M	94R005AED..P321	Grundfos UPS 25/65	✓	✗	1
	R005 •	DN20	L	1" M	1" M	94R005AES..P321	Grundfos UPS 25/65	✓	✗	1
	R005	DN20	R	1" M	1" M	94R005AED..P326	Grundfos UPM3 25/70PWM*	✓	✓	1
	R005	DN20	L	1" M	1" M	94R005AES..P326	Grundfos UPM3 25/70PWM*	✓	✓	1
	R005	DN20	R	1" M	1" M	94R005AED..P327	Wilo Para 25/8	✓	✗	1
	R005	DN20	L	1" M	1" M	94R005AES..P327	Wilo Para 25/8	✓	✗	1
	R005	DN20	R	1" M	1" M	94R005AED..P328	UPM3 Hybrid 25/70 *	✓	✓	1
	R005	DN20	L	1" M	1" M	94R005AES..P328	UPM3 Hybrid 25/70 *	✓	✓	1
	R005	DN20	R	1" M	1" M	94R005AED..P330	Wilo Para 25/7	✓	✗	1
	R005	DN20	L	1" M	1" M	94R005AES..P330	Wilo Para 25/7	✓	✗	1

## CIRCULATION GROUPS FOR LOW AND HIGH TEMPERATURE



ART. 781

ART.	SIZE	BOILER CONNECT.	SYSTEM CONNECT.	RETURN CONNECT.	CODE	
781	1"	1"1/2 M	1"1/2 F	1" F	93781AE05	1

Tee fitting for connecting the mixing unit components to manage the flow return to the system.



ART. 782

ART.	SIZE	DELIVERY SIDE	BOILER CONNECT.	SYSTEM CONNECT.	RETURN CONNECT.	CODE	
782	DN20	R	1"1/2 M	1"1/2 F	1" M	93782AED05	1
782	DN20	L	1"1/2 M	1"1/2 F	1" M	93782AES05	1

**Mixing group with variable point regulation unit.** It is provided with a three way mixing valve regulated by a rotating electric servomotor, connectable to every type of regulating control units. The valve has a By-Pass which brings a portion of the return side flow into the delivery side to recover heat and to balance the temperature.

**PLEASE NOTE:** the servomotor art. 787 is not included.



ART. 783

ART.	SIZE	DELIVERY SIDE	BOILER CONNECT.	SYSTEM CONNECT.	RETURN CONNECT.	CODE	
783	DN20	R	1"1/2 M	1"1/2 F	1" M	93783AED05	1
783	DN20	L	1"1/2 M	1"1/2 F	1" M	93783AES05	1

**Mixing group with fixed point regulating unit.** It is provided with a three way mixing valve regulated by a thermostatic head with remote sensor art. 995 according to which the desired mixed temperature in the delivery side is set (working temperature range 20°C - 50°C). The valve has a By-Pass which brings a portion of the return side flow into the delivery side to obtain the desired temperature of the fluid.

**PLEASE NOTE:** the thermostatic head art. 995 is not included.



ART. 786

ART.	SIZE	BOILER CONNECT.	SYSTEM CONNECT.	RETURN CONNECT.	CODE	
786	DN20	1"1/2 M	1"1/2 F	1" M	93786AE052050	1
786	DN20	1"1/2 M	1"1/2 F	1" M	93786AE053070	1

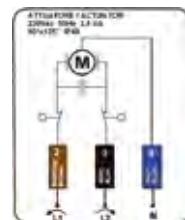
**Thermostatic Mixing group.** It is provided with a four way mixing valve regulated with 90° inlet for pump and manifold connection. **Working temperature range 20°C - 50°C: code 93786AE052050 / 30°C - 70°C: code 93786AE053070.**



ART. 787

ART.	VOLTAGE	CODE	
787	230 Volt	82787BI53	1
787	24 Volt AC	82787BI54	1

3-point rotating electric servomotor (modulating and bidirectional). It is installed on the mixing valve by means of a screw. Rotation angle 90°. The servomotor can also work manually by means of its switch. For the proper functioning and connection please refer to the instructions in the technical sheet.



ART. 785

ART.	BOILER CONNECT.	SYSTEM CONNECT.	CODE	
785	1" F - 1"1/2 M	1"1/2 F	87785AF05	1

**PLEASE NOTE:** In case of reduction for the connection to the boiler please use art. 789.

Modular brass manifold with double chamber equipped with black EPP insulation shell, suitable for circulation modules art. R001-R002-R003. Manifolds art. 785 can be used as single units or connected in series up to a maximum of 6 to serve several users, simplifying the installation operations and reducing the size of installations. Included in the package there are nuts, bolts and two O-rings to close the single manifold or connect several manifolds in series.

**PLEASE NOTE:** the cap for manifold head art. 790 and the bracket art. 788 are not included.

#### How to order:

- N. 1 single manifold: n. 1 art. 785 + n. 2 art. 790
- N. 2 serial manifolds: n.2 art. 785 + n.2 art. 790 + n.2 art. 173
- N. 3 serial manifolds: n.3 art. 785 + n.2 art. 790 + n.4 art. 173
- N. 4 serial manifolds: n.4 art. 785 + n.2 art. 790 + n.6 art. 173
- N. 5 serial manifolds: n.5 art. 785 + n.2 art. 790 + n.8 art. 173
- N. 6 serial manifolds: n.6 art. 785 + n.2 art. 790 + n.10 art. 173



ART. 788

ART.	CODE	
788	82788AE05	1

Wall mounting kit for circulation pump groups R001-R002-R003 consisting of 1 support bracket with screws and rawl plugs.



ART. 790

ART.	CODE		
790	87790AF05	2	40

Cap for manifold head art. 785.



ART. 797

ART.	SIZE	CODE		
797	1" F 1" 1/2 M	82797AF05	1	20

Flat seat Male-Female connector with gaskets on both sides. Reduction from 1" 1/2 M to 1" F.



ART. 173

ART.	SIZE	CODE		
173	1"	87173AF05	5	200

End cap with O-ring to close 1" exits of manifold art. 785.



ART. 798

ART.	SIZE	CODE		
798	1" 1/2 F 1" 1" M	82798AF05	1	10

Flat seat Male-Female union with revolving nut and gasket. Reduction from 1" 1/2 F to 1" M.



ART. 789

ART.	SIZE	CODE		
789	1/2" F - 1" F	82789AD05	1	100
789	3/4" F - 1" 1/2 F	82789AE05	1	50
789	1" F - 1" 1/2 F	82789AF05	1	50

1" 1/2 plane seat union with nut and gasket. It reduces from 1" 1/2 to 3/4" F or from 1" 1/2 to 1" F the lower connection of art. R001, R002, R003 and 785.



ART. 995

ART.	CONNECTION THREAD	CODE		
995	30X1,5	82995AC20	1	25

Thermostatic head with remote sensor. Working temperature range 20°-50°C. The sensor can be inserted in our cockpit art.189 (cockpit length 63 mm). Suitable to feel the water temperature in underfloor heating systems and to regulate at fixed value. Temperature locking and limiting device on a desired value. Both operations can be done without tools.



ART. 796

ART.	SIZE	CODE		
796	1" 1/2 F 1" F	82796AF05	1	10

Flat seat Female-Female union with revolving nut and gasket. Reduction from 1" 1/2 F (**flat seat connection**) to 1" F.



ART. 784

ART.	SIZE	CODE		
784	3/4"	87784AE05	1	25
784	1"	87784AF05	1	25

Housing kit for bulb art. 995



ART. M054



ART. M058

ART.	SIZE	CODE	PUMP	
M054	1"	87M054PG06RU	NO PUMP	1
M054•	1"	87M054PG0660RU	Grundfos UPS 25/65	1

Fixed point three-way mixing group with maximum pressure differential valve and flow meter. It can be equipped with asynchronous circulators (not sold in the EU) or electronic circulators with 1" ½ connections. The mixing unit includes thermostatic head 20°-50°C with remote sensor art.995. **Connection to delivery and return manifolds on the side. Suitable for installation in cabinets for manifolds with 110 mm. depth.**

- The product with UPS 25/65 pump is sold in non-EU countries.



ART. M055



ART. M059

ART.	SIZE	CODE	PUMP	
M055	1"	87M055PG0600	NO PUMP	1
M055•	1"	87M055PG0660	Grundfos UPS 25/65	1
M055	1"	87M055PGP328	UPM3 Hybrid 25/70*	1
M055	1"	87M055PG06P330	Wilo Para 25/7	1

Fixed point three-way mixing group with maximum pressure differential valve and flow meter. It can be equipped with asynchronous circulators (not sold in the EU) or electronic circulators with 1" ½ connections. The mixing unit includes safety thermostat (art. P310), thermostatic head 20°-50°C with remote sensor art.995. **Connection to delivery and return manifolds on the side. Suitable for installation in cabinets for manifolds with 110 mm. depth.**

- The product with UPS 25/65 pump is sold in non-EU countries.

\* PWM signal cable not included. To be purchased separately (see page 197) when connected to a controller with **PWM signal**.

ART.	SIZE	CODE	PUMP	
M059	1"	87M059PG06	NO PUMP	1
M059•	1"	87M059PG0665	Grundfos UPS 25/65	1
M059	1"	87M059PGP326	Grundfos UPM3 25/60	1
M059	1"	87M059PGP328	UPM3 Hybrid 25/70 *	1

Mixing group with fixed point regulating unit, circulating pump and thermostatic head 20°-50°C with remote sensor. Fixed point valve, adjustable flow rate optimising the flow to the panels. **Boiler delivery on left lower side, return on lower side. 1" delivery/return for radiant panel systems. Safety thermostat P310 not included.**

- The product with UPS 25/65 pump is sold in non-EU countries.

\* PWM signal cable not included. To be purchased separately (see page 197) when connected to a controller with **PWM signal**.



ART. M060



ART. K062

ART.	SIZE	CODE	PUMP	
M060	1"	87M060PG06	NO PUMP	1
M060	1"	87M060PG06P328	UPM3 Hybrid 25/70*	1
M060	1"	87M060PG06P330	Wilo Para 25/7	1

Mixing group with fixed point regulating unit, circulating pump and thermostatic head 20°-50°C with remote sensor. Fixed point valve, adjustable flow rate optimising the flow to the panels. It can be equipped with asynchronous circulators (not sold in the EU) or electronic circulators with 1" ½ connections. The mixing unit includes safety thermostat (art. P310), thermostatic head 20°-50°C with remote sensor art.995. **Connection to delivery and return manifolds on the side. Suitable for installation in cabinets for manifolds with 110 mm. depth.**

\* PWM signal cable not included. To be purchased separately (see page 197) when connected to a controller with **PWM signal**.

ART.	SIZE	CODE	PUMP	
K062	1"	87K062PG06	NO PUMP	1
K062•	1"	87K062PG0640	Grundfos UPS 25/40	1
K062•	1"	87K062PG0660	Grundfos UPS 25/65	1
K062	1"	87K062PGP326	Grundfos UPS2 25/60	1
K062	1"	87K062PGP328	UPM3 Hybrid 25/70*	1

Delivery pump group. It can be equipped with asynchronous circulators (not sold in the EU) or electronic circulators with 1" ½ connections. The mixing unit includes safety thermostat (art. P310) and manual air vent (art. 705 1/2"), it can be installed on the left or right side of the manifold. 1" connection. **Connection to delivery and return manifolds on the side. Suitable for installation in cabinets for manifolds with 110 mm. depth.**

• The products with UPS 25/40 and UPS 25/65 pumps are sold in non-EU countries.

\* PWM signal cable not included. To be purchased separately (see page 197) when connected to a controller with **PWM signal**.

Version **without** water filling and drain tapVersion **with** water filling and drain tap

ART. M061

ART.	SIZE	CODE WITHOUT WATER FILLING AND DRAIN TAP ART. 172	CODE WITH WATER FILLING AND DRAIN TAP ART. 172	PUMP		
M061	1"	87M0615006		NO PUMP	1	
M061	1"	87M0615006P328		UPM3 Hybrid 25/65 130*	1	
M061	1"	87M0615006P330		Wilo Para 25/7 130	1	
M061	1"	87M0615006PGP327		Wilo Para RS 25/8	1	
M061•	1"	87M0615006P321		Grundfos UPS 25/65 130	1	
M061	1"		87M06150172	NO PUMP	1	
M061	1"		87M06150172P328	UPM3 Hybrid 25/65 130*	1	
M061	1"		87M06150172P330	Wilo Para 25/7 130	1	
M061	1"		87M06150172PGP327	Wilo Para RS 25/8	1	
M061•	1"		87M06150172P321	Grundfos UPS 25/65 130	1	

Mixing group with thermostatic fixed point regulation unit, circulation pump with 1"/2 connections, it can be equipped with asynchronous circulators (not sold in UE) or electronic. **Available with or without 3/4" water filling and drain valve. Connection to delivery and return on lower side. Suitable for installation in cabinets for manifolds with 110 mm. depth.**

• The products with UPS 25/65 are sold in non-EU countries.

\* PWM signal cable not included. To be purchased separately (see page 197) when connected to a controller with PWM signal.

## CIRCULATION GROUPS FOR LOW AND HIGH TEMPERATURE



NEW DESIGN &  
ENERGY  
PERFORMANCE

ART. K063

ART.	SIZE	CODE	
K063	1"	87K063PG06	1

Fixed point temperature regulating group. Max.pressure valve and flowmeter. Thermostatic head 20-50°C with remote sensor and cockpit art.189 with 1/2" connection.



ART. P310

ART.	SIZE	VOLTAGE	CODE	
P310	1/2	230 Volt	88P3100199	1

Safety thermostat. Suitable for underfloor systems with high temperature boiler supply. It stops the pump when reaching 50°C.



NEW

ART. 793

ART.	CODE	
793	93793AE062050	1

Mixing valve for underfloor heating kit. Operating temperature 20°C - 53°C. Max. Operating pressure: 10 bar.

B



## MANIFOLDS FOR UNDERFLOOR HEATING

### FLOWMETER VALVE OPENING/CLOSING

Its high quality components make it an easy to use, durable and reliable device of flow measuring.

FULLY  
CLOSED



FULLY  
OPEN



### ICMA FLOW RATES

All highly precise range of measurements.

1 L/min      2 L/min      3 L/min      4 L/min

## RANGE OF BRACKETS FOR DISTRIBUTION MANIFOLDS

B



ICMA presents a complete range of brackets for underfloor distribution manifolds.

In addition to the standard bracket (Art. 208) supplied as a basic set for manifolds, two new bracket models are added: articles 208L and 208H.

The integration of this range will ensure:

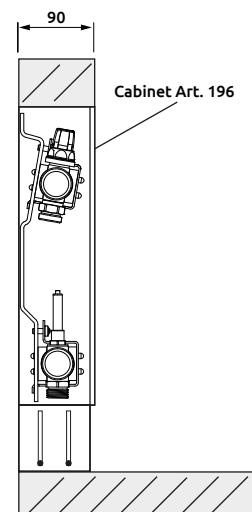
- 1 **Compatibility with cabinets with 90mm. depth** (via bracket art. 208).
- 2 **Increased ease and installation speed** (via bracket art. 208L).
- 3 **Possibility of housing pumps with 180 mm. lenght** (via bracket art. 208H).

90  
mm



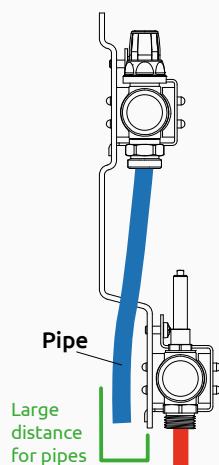
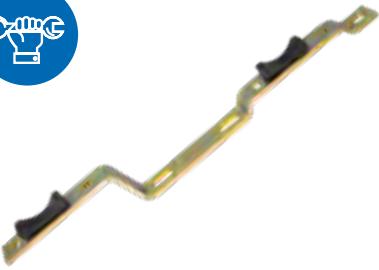
### BRACKET ART. 208

Thanks to its compact design it enables the installation of the distribution manifolds in the cabinets (art. 196) housed in walls with a 90 mm. thickness.

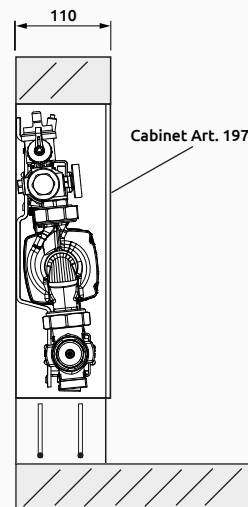




## BRACKET ART. 208L NEW



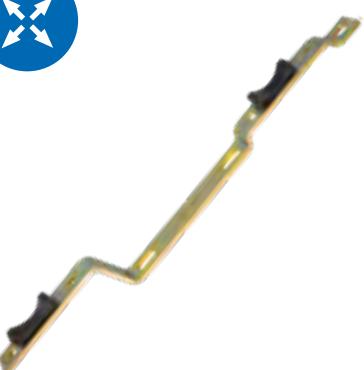
It enables a simpler and faster installation, increasing the space for pipes laying and solving the problem of pipe connection bend. Manifolds without pump group can be housed in the cabinets with 90 mm. depth (Art. 196).



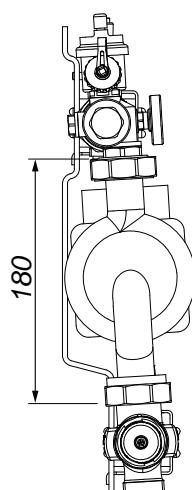
ICMA manifolds with circulating pump unit will be distributed with brackets Art. 208L. These manifolds can be placed in cabinets with 110mm. depth (Art. 197).



## BRACKET ART. 208H NEW



Thanks to a 210 mm. inter-axis, it allows the housing of 180 mm. inter-axis circulators.



For manifolds without circulation pump, the new brackets may be used and ordered by adding in the final part of the product code:

- "L" for bracket **208L**
- "H" for bracket **208H**



ART. K054 | K056 | K058

ART.	HEAD CONNECT.	LOW TEMP. OUTLETS	HIGH TEMP. OUTLETS	CODE. EUROCONUS	BOX PROVIDED ART. 197	
K054	1"	2	1	87K054PG06	1	600 mm
K054	1"	3	1	87K054PH06	1	700 mm
K054	1"	4	1	87K054PJ06	1	700 mm
K054	1"	5	1	87K054PQ06	1	850 mm
K054	1"	6	1	87K054PK06	1	850 mm
K054	1"	7	1	87K054PR06	1	850 mm
K054	1"	8	1	87K054PL06	1	1000 mm
K054	1"	9	1	87K054PS06	1	1000 mm
K054	1"	10	1	87K054PM06	1	1000 mm
K054	1"	11	1	87K054PT06	1	1200 mm
K054	1"	12	1	87K054PU06	1	1200 mm
K056	1"	2	2	87K056PG06	1	700 mm
K056	1"	3	2	87K056PH06	1	700 mm
K056	1"	4	2	87K056PJ06	1	850 mm
K056	1"	5	2	87K056PQ06	1	850 mm
K056	1"	6	2	87K056PK06	1	850 mm
K056	1"	7	2	87K056PR06	1	1000 mm
K056	1"	8	2	87K056PL06	1	1000 mm
K056	1"	9	2	87K056PS06	1	1000 mm
K056	1"	10	2	87K056PM06	1	1200 mm
K056	1"	11	2	87K056PT06	1	1200 mm
K056	1"	12	2	87K056PU06	1	1200 mm
K058	1"	2	3	87K058PG06	1	700 mm
K058	1"	3	3	87K058PH06	1	850 mm
K058	1"	4	3	87K058PJ06	1	850 mm
K058	1"	5	3	87K058PQ06	1	850 mm
K058	1"	6	3	87K058PK06	1	1000 mm
K058	1"	7	3	87K058PR06	1	1000 mm
K058	1"	8	3	87K058PL06	1	1000 mm
K058	1"	9	3	87K058PS06	1	1200 mm
K058	1"	10	3	87K058PM06	1	1200 mm
K058	1"	11	3	87K058PT06	1	1200 mm
K058	1"	12	3	87K058PU06	1	1200 mm

Pre-assembled group with box. For radiant panel systems with low temperature circuits and for radiators with high temperature circuits, high temperature supply. **fixed point mixing unit. It is supplied with pump P328 (Grundfos UPM3 Hybrid) and safety thermostat P310 installed in the box. Choose electrothermic actuators with 28x1,5 connection thread.**



ART. K060

ART.	HEAD CONNECT.	LOW TEMP. OUTLETS	CODE. EUROCONUS	BOX PROVIDED ART.197
K060	1"	2	87K060PG06	1
K060	1"	3	87K060PH06	1
K060	1"	4	87K060PJ06	1
K060	1"	5	87K060PQ06	1
K060	1"	6	87K060PK06	1
K060	1"	7	87K060PR06	1
K060	1"	8	87K060PL06	1
K060	1"	9	87K060PS06	1
K060	1"	10	87K060PM06	1
K060	1"	11	87K060PT06	1
K060	1"	12	87K060PU06	1

Pre-assembled group with box. For radiant panel systems with low temperature circuits, high temperature supply, **fixed point mixing unit. It is supplied with pump P328 (Grundfos UPM3 Hybrid) and safety thermostat P310 installed in the box. Choose electrothermic actuators with 28x1,5 connection thread.**



ART. A1K013

ART.	HEAD CONNECT.	LOW TEMP. OUTLETS	CODE. EUROCONUS	
A1K013	1"	2	A1K013APG06	1
A1K013	1"	3	A1K013APH06	1
A1K013	1"	4	A1K013APJ06	1
A1K013	1"	5	A1K013APQ06	1
A1K013	1"	6	A1K013APK06	1
A1K013	1"	7	A1K013APR06	1
A1K013	1"	8	A1K013APL06	1
A1K013	1"	9	A1K013APS06	1
A1K013	1"	10	A1K013APM06	1
A1K013	1"	11	A1K013APT06	1
A1K013	1"	12	A1K013APU06	1

Pre-assembled group for radiant panel systems with low temperature circuits, supplied at high-temperature **with fixed-point three-way mixing system** with differential maximum pressure valve and flow meter. It is supplied without circulator and complete with thermostatic head 20°-50°C with remote sensor. **Choose thermostatic and electrothermic actuators with M28x1,5 connection thread.**

Combinable with pumps P320, P321, P326, P327, P328, P330 (page 196).



ART. A2K013

ART.	HEAD CONNECT.	LOW TEMP. OUTLETS	CODE EUROCONUS	
A2K013	3/4"	2	A2K013APG06	1
A2K013	3/4"	3	A2K013APH06	1
A2K013	3/4"	4	A2K013APJ06	1
A2K013	3/4"	5	A2K013APQ06	1
A2K013	3/4"	6	A2K013APK06	1
A2K013	3/4"	7	A2K013APR06	1
A2K013	3/4"	8	A2K013APL06	1
A2K013	3/4"	9	A2K013APS06	1
A2K013	3/4"	10	A2K013APM06	1
A2K013	3/4"	11	A2K013APT06	1
A2K013	3/4"	12	A2K013APU06	1

Pre-assembled group for radiant panel systems with low temperature circuits, supplied at high-temperature with fixed-point two-way mixing system and adjustable by-pass placed on the distribution manifold. It is supplied without circulator and complete with thermostatic head 20°-50°C with remote sensor.

**Choose thermostatic and electrothermic actuators with M30x1,5 connection thread.**

Combinable with pumps P320, P321, P326, P327, P328, P330 (page 196).



ART. A3K013

ART.	HEAD CONNECT.	LOW TEMP. OUTLETS	CODE EUROCONUS	
A3K013	3/4"	2	A3K013APG06	1
A3K013	3/4"	3	A3K013APH06	1
A3K013	3/4"	4	A3K013APJ06	1
A3K013	3/4"	5	A3K013APQ06	1
A3K013	3/4"	6	A3K013APK06	1
A3K013	3/4"	7	A3K013APR06	1
A3K013	3/4"	8	A3K013APL06	1
A3K013	3/4"	9	A3K013APS06	1
A3K013	3/4"	10	A3K013APM06	1
A3K013	3/4"	11	A3K013APT06	1
A3K013	3/4"	12	A3K013APU06	1

Pre-assembled group for radiant panel systems with low temperature circuits, supplied at high-temperature with fixed-point two-way mixing system. It is supplied without circulator and complete with thermostatic head 20°-50°C with remote sensor.

**Choose thermostatic and electrothermic actuators with M30x1,5 connection thread.**

Combinable with pumps P320, P321, P326, P327, P328, P330 (page 196).



ART. TP01

ART.	HEAD CONNECTION	OUTLETS	CODE EUROCONUS	LENGTH TOTAL COLLECTOR	BOX RECOMMENDED ART. 196	
TP01	1"	2	87TP01PG05	220 mm	500 mm	1
TP01	1"	3	87TP01PH05	265 mm	500 mm	1
TP01	1"	4	87TP01PJ05	310 mm	500 mm	1
TP01	1"	5	87TP01PQ05	355 mm	500 mm	1
TP01	1"	6	87TP01PK05	400 mm	500 mm	1
TP01	1"	7	87TP01PR05	445 mm	700 mm	1
TP01	1"	8	87TP01PL05	490 mm	700 mm	1
TP01	1"	9	87TP01PS05	535 mm	700 mm	1
TP01	1"	10	87TP01PM05	580 mm	700 mm	1
TP01	1"	11	87TP01PT05	625 mm	850 mm	1
TP01	1"	12	87TP01PU05	670 mm	850 mm	1

Techno-polymer manifold (single block) with manual/thermostatic regulation. It includes: 2 Ball valves incorporated in the manifold with 0-60°C thermometers and drain valves, 2 mounting brackets, 2 manual air vent valves integrated in the manifold, flow meters 0-6 lt/min, **connection thread for fittings 3/4 Euroconus. Choose thermostatic and electrothermic actuator Art. 977 with M30x1,5 connection thread**

- FOR TEMPERATURE SETTING SEE CHAPTER D PAGE 100  
- FOR MANIFOLD ACCESSORIES SEE CHAPTER A8 PAGE 81

CODE M24x1,5

CODE. 3/4 EUROCONUS



**ART. K025 | K026 WITH STRAIGHT BALL VALVE**

ART.	HEAD CONNECT.	OUTLETS	CODE	FITTING THREAD		LENGTH TOTAL COLLECTOR	BOX RECOMMENDED ART. 196
K025	1"	2	87K025PG06	3/4" EK.	1	295 mm	500 mm
K025	1"	3	87K025PH06	3/4" EK.	1	345 mm	500 mm
K025	1"	4	87K025PJ06	3/4" EK.	1	395 mm	500 mm
K025	1"	5	87K025PQ06	3/4" EK.	1	445 mm	700 mm
K025	1"	6	87K025PK06	3/4" EK.	1	495 mm	700 mm
K025	1"	7	87K025PR06	3/4" EK.	1	545 mm	700 mm
K025	1"	8	87K025PL06	3/4" EK.	1	595 mm	700 mm
K025	1"	9	87K025PS06	3/4" EK.	1	645 mm	850 mm
K025	1"	10	87K025PM06	3/4" EK.	1	695 mm	850 mm
K025	1"	11	87K025PT06	3/4" EK.	1	745 mm	850 mm
K025	1"	12	87K025PU06	3/4" EK.	1	795 mm	1000 mm
K025	1"	13	87K025PV06	3/4" EK.	1	845 mm	1000 mm
K025	1"	14	87K025PW06	3/4" EK.	1	895 mm	1200 mm
K025	1"	15	87K025PY06	3/4" EK.	1	945 mm	1200 mm
K026	1"	2	87K026PG06	M24x1,5	1	295 mm	500 mm
K026	1"	3	87K026PH06	M24x1,5	1	345 mm	500 mm
K026	1"	4	87K026PJ06	M24x1,5	1	395 mm	500 mm
K026	1"	5	87K026PQ06	M24x1,5	1	445 mm	700 mm
K026	1"	6	87K026PK06	M24x1,5	1	495 mm	700 mm
K026	1"	7	87K026PR06	M24x1,5	1	545 mm	700 mm
K026	1"	8	87K026PL06	M24x1,5	1	595 mm	700 mm
K026	1"	9	87K026PS06	M24x1,5	1	645 mm	850 mm
K026	1"	10	87K026PM06	M24x1,5	1	695 mm	850 mm
K026	1"	11	87K026PT06	M24x1,5	1	745 mm	850 mm
K026	1"	12	87K026PU06	M24x1,5	1	795 mm	1000 mm
K026	1"	13	87K026PV06	M24x1,5	1	845 mm	1000 mm
K026	1"	14	87K026PW06	M24x1,5	1	895 mm	1200 mm
K026	1"	15	87K026PY06	M24x1,5	1	945 mm	1200 mm

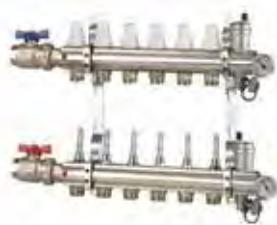
**ART. K025 | K026 WITH ANGLE BALL VALVE**

ART.	HEAD CONNECT.	OUTLETS	CODE	FITTING THREAD		LENGTH TOTAL COLLECTOR	BOX RECOMMENDED ART. 196
K025	1"	2	87K025PG06 225	3/4" EK.	1	295 mm	500 mm
K025	1"	3	87K025PH06 225	3/4" EK.	1	345 mm	500 mm
K025	1"	4	87K025PJ06 225	3/4" EK.	1	395 mm	500 mm
K025	1"	5	87K025PQ06 225	3/4" EK.	1	445 mm	700 mm
K025	1"	6	87K025PK06 225	3/4" EK.	1	495 mm	700 mm
K025	1"	7	87K025PR06 225	3/4" EK.	1	545 mm	700 mm
K025	1"	8	87K025PL06 225	3/4" EK.	1	595 mm	700 mm
K025	1"	9	87K025PS06 225	3/4" EK.	1	645 mm	850 mm
K025	1"	10	87K025PM06 225	3/4" EK.	1	695 mm	850 mm
K025	1"	11	87K025PT06 225	3/4" EK.	1	745 mm	850 mm
K025	1"	12	87K025PU06 225	3/4" EK.	1	795 mm	1000 mm
K025	1"	13	87K025PV06 225	3/4" EK.	1	845 mm	1000 mm
K025	1"	14	87K025PW06 225	3/4" EK.	1	895 mm	1200 mm
K025	1"	15	87K025PY06 225	3/4" EK.	1	945 mm	1200 mm
K026	1"	2	87K026PG06 225	M24x1,5	1	295 mm	500 mm
K026	1"	3	87K026PH06 225	M24x1,5	1	345 mm	500 mm
K026	1"	4	87K026PJ06 225	M24x1,5	1	395 mm	500 mm
K026	1"	5	87K026PQ06 225	M24x1,5	1	445 mm	700 mm
K026	1"	6	87K026PK06 225	M24x1,5	1	495 mm	700 mm
K026	1"	7	87K026PR06 225	M24x1,5	1	545 mm	700 mm
K026	1"	8	87K026PL06 225	M24x1,5	1	595 mm	700 mm
K026	1"	9	87K026PS06 225	M24x1,5	1	645 mm	850 mm
K026	1"	10	87K026PM06 225	M24x1,5	1	695 mm	850 mm
K026	1"	11	87K026PT06 225	M24x1,5	1	745 mm	850 mm
K026	1"	12	87K026PU06 225	M24x1,5	1	795 mm	1000 mm
K026	1"	13	87K026PV06 225	M24x1,5	1	845 mm	1000 mm
K026	1"	14	87K026PW06 225	M24x1,5	1	895 mm	1200 mm
K026	1"	15	87K026PY06 225	M24x1,5	1	945 mm	1200 mm

Manifolds unit with memory flowmeters and valves with thermostatic option. It includes: 2 ball valves (art. 215 or art. 225), connection to the ball valve with gasket with plane seat and o-ring, 2 brackets (art.208) with anti-vibration supports, 2 1" male/female intermediate fittings **with revolving connection** (art.204). **Conical sealing gasket. Art.204 can be assembled between manifold and ball valve.** 2 3/8" automatic air vents (art.700), 2 1/2" drain cocks (art.172), 2 1" thermometer caps with o-ring (art.185), 2 0-60° thermometers (art.206).

**Suitable for 3/4" Euroconus or M24x1,5 fittings.**

**Choose thermostatic and electrothermic actuators with 28x1,5 connection thread.**



CODE M24x1,5

CODE 3/4 EUROCONUS

## ART. K031 | K032 WITH STRAIGHT BALL VALVE

ART.	HEAD CONNECT.	OUTLETS	CODE	FITTING THREAD		LENGTH TOTAL COLLECTOR	BOX RECOMMENDED ART. 196
K031	1"	2	87K031PG06	3/4" EK.	1	295 mm	500 mm
K031	1"	3	87K031PH06	3/4" EK.	1	345 mm	500 mm
K031	1"	4	87K031PJ06	3/4" EK.	1	395 mm	500 mm
K031	1"	5	87K031PQ06	3/4" EK.	1	445 mm	700 mm
K031	1"	6	87K031PK06	3/4" EK.	1	495 mm	700 mm
K031	1"	7	87K031PR06	3/4" EK.	1	545 mm	700 mm
K031	1"	8	87K031PL06	3/4" EK.	1	595 mm	700 mm
K031	1"	9	87K031PS06	3/4" EK.	1	645 mm	850 mm
K031	1"	10	87K031PM06	3/4" EK.	1	695 mm	850 mm
K031	1"	11	87K031PT06	3/4" EK.	1	745 mm	850 mm
K031	1"	12	87K031PU06	3/4" EK.	1	795 mm	1000 mm
K031	1"	13	87K031PV06	3/4" EK.	1	845 mm	1000 mm
K031	1"	14	87K031PW06	3/4" EK.	1	895 mm	1200 mm
K032	1"	2	87K032PG06	M24x1,5	1	295 mm	500 mm
K032	1"	3	87K032PH06	M24x1,5	1	345 mm	500 mm
K032	1"	4	87K032PJ06	M24x1,5	1	395 mm	500 mm
K032	1"	5	87K032PQ06	M24x1,5	1	445 mm	700 mm
K032	1"	6	87K032PK06	M24x1,5	1	495 mm	700 mm
K032	1"	7	87K032PR06	M24x1,5	1	545 mm	700 mm
K032	1"	8	87K032PL06	M24x1,5	1	595 mm	700 mm
K032	1"	9	87K032PS06	M24x1,5	1	645 mm	850 mm
K032	1"	10	87K032PM06	M24x1,5	1	695 mm	850 mm
K032	1"	11	87K032PT06	M24x1,5	1	745 mm	850 mm
K032	1"	12	87K032PU06	M24x1,5	1	795 mm	1000 mm
K032	1"	13	87K032PV06	M24x1,5	1	845 mm	1000 mm
K032	1"	14	87K032PW06	M24x1,5	1	895 mm	1200 mm

## ART. K031 | K032 WITH ANGLE BALL VALVE

ART.	HEAD CONNECT.	OUTLETS	CODE	FITTING THREAD		LENGTH TOTAL COLLECTOR	BOX RECOMMENDED ART. 196
K031	1"	2	87K031PG06 226	3/4" EK.	1	295 mm	500 mm
K031	1"	3	87K031PH06 226	3/4" EK.	1	345 mm	500 mm
K031	1"	4	87K031PJ06 226	3/4" EK.	1	395 mm	500 mm
K031	1"	5	87K031PQ06 226	3/4" EK.	1	445 mm	700 mm
K031	1"	6	87K031PK06 226	3/4" EK.	1	495 mm	700 mm
K031	1"	7	87K031PR06 226	3/4" EK.	1	545 mm	700 mm
K031	1"	8	87K031PL06 226	3/4" EK.	1	595 mm	700 mm
K031	1"	9	87K031PS06 226	3/4" EK.	1	645 mm	850 mm
K031	1"	10	87K031PM06 226	3/4" EK..	1	695 mm	850 mm
K031	1"	11	87K031PT06 226	3/4" EK.	1	745 mm	850 mm
K031	1"	12	87K031PU06 226	3/4" EK.	1	795 mm	1000 mm
K031	1"	13	87K031PV06 226	3/4" EK.	1	845 mm	1000 mm
K031	1"	14	87K031PW06 226	3/4" EK.	1	895 mm	1200 mm
K032	1"	2	87K032PG06 226	M24x1,5	1	295 mm	500 mm
K032	1"	3	87K032PH06 226	M24x1,5	1	345 mm	500 mm
K032	1"	4	87K032PJ06 226	M24x1,5	1	395 mm	500 mm
K032	1"	5	87K032PQ06 226	M24x1,5	1	445 mm	700 mm
K032	1"	6	87K032PK06 226	M24x1,5	1	495 mm	700 mm
K032	1"	7	87K032PR06 226	M24x1,5	1	545 mm	700 mm
K032	1"	8	87K032PL06 226	M24x1,5	1	595 mm	700 mm
K032	1"	9	87K032PS06 226	M24x1,5	1	645 mm	850 mm
K032	1"	10	87K032PM06 226	M24x1,5	1	695 mm	850 mm
K032	1"	11	87K032PT06 226	M24x1,5	1	745 mm	850 mm
K032	1"	12	87K032PU06 226	M24x1,5	1	795 mm	1000 mm
K032	1"	13	87K032PV06 226	M24x1,5	1	845 mm	1000 mm
K032	1"	14	87K032PW06 226	M24x1,5	1	895 mm	1200 mm

Manifolds unit with memory flowmeters and valves with thermostatic option.

It includes: 2 ball valves (art.215 or art. 225), connection to the ball valve with gasket with plane seat and o-ring, 2 brackets (art.208) with anti-vibration supports, 2 1/2" automatic air vents (art.700), 2 1/2" drain cocks (art.172), 2 1" thermometer caps with o-ring (art.185), 2 0-60°thermometers (art.206).

**Suitable for 3/4" Euroconus or M24x1,5 fittings.****Choose thermostatic and electrothermic actuators with 28x1,5 connection thread.**

CODE M24x1,5

CODE 3/4 EUROCONUS



### ART. K023 | K024 WITH STRAIGHT BALL VALVE

ART.	HEAD CONNECT.	OUTLETS	CODE	FITTING THREAD	LENGTH TOTAL COLLECTOR	SIZE BOX RECOMMENDED
K023	1"	2	87K023PG06	3/4" EK.	1	295 mm
K023	1"	3	87K023PH06	3/4" EK.	1	345 mm
K023	1"	4	87K023PJ06	3/4" EK.	1	395 mm
K023	1"	5	87K023PQ06	3/4" EK.	1	445 mm
K023	1"	6	87K023PK06	3/4" EK.	1	495 mm
K023	1"	7	87K023PR06	3/4" EK.	1	545 mm
K023	1"	8	87K023PL06	3/4" EK.	1	595 mm
K023	1"	9	87K023PS06	3/4" EK.	1	645 mm
K023	1"	10	87K023PM06	3/4" EK.	1	695 mm
K023	1"	11	87K023PT06	3/4" EK.	1	745 mm
K023	1"	12	87K023PU06	3/4" EK.	1	795 mm
K023	1"	13	87K023PV06	3/4" EK.	1	845 mm
K023	1"	14	87K023PW06	3/4" EK.	1	895 mm
K023	1"1/4	2	87K023DG06	3/4" EK.	1	304 mm
K023	1"1/4	3	87K023DH06	3/4" EK.	1	354 mm
K023	1"1/4	4	87K023DJ06	3/4" EK.	1	404 mm
K023	1"1/4	5	87K023DQ06	3/4" EK.	1	454 mm
K023	1"1/4	6	87K023DK06	3/4" EK.	1	504 mm
K023	1"1/4	7	87K023DR06	3/4" EK.	1	554 mm
K023	1"1/4	8	87K023DL06	3/4" EK.	1	604 mm
K023	1"1/4	9	87K023DS06	3/4" EK.	1	654 mm
K023	1"1/4	10	87K023DM06	3/4" EK.	1	704 mm
K023	1"1/4	11	87K023DT06	3/4" EK.	1	754 mm
K023	1"1/4	12	87K023DU06	3/4" EK.	1	804 mm
K023	1"1/4	13	87K023DV06	3/4" EK.	1	854 mm
K023	1"1/4	14	87K023DW06	3/4" EK.	1	904 mm
K024	1"	2	87K024PG06	M24x1,5	1	295 mm
K024	1"	3	87K024PH06	M24x1,5	1	345 mm
K024	1"	4	87K024PJ06	M24x1,5	1	395 mm
K024	1"	5	87K024PQ06	M24x1,5	1	445 mm
K024	1"	6	87K024PK06	M24x1,5	1	495 mm
K024	1"	7	87K024PR06	M24x1,5	1	545 mm
K024	1"	8	87K024PL06	M24x1,5	1	595 mm
K024	1"	9	87K024PS06	M24x1,5	1	645 mm
K024	1"	10	87K024PM06	M24x1,5	1	695 mm
K024	1"	11	87K024PT06	M24x1,5	1	745 mm
K024	1"	12	87K024PU06	M24x1,5	1	795 mm
K024	1"	13	87K024PV06	M24x1,5	1	845 mm
K024	1"	14	87K024PW06	M24x1,5	1	895 mm

### ART. K023 | K024 WITH ANGLE BALL VALVE

ART.	HEAD CONNECT.	OUTLETS	CODE	FITTING THREAD	LENGTH TOTAL COLLECTOR	BOX RECOMMENDED ART. 196
K023	1"	2	87K023PG06 226	3/4" EK.	1	295 mm
K023	1"	3	87K023PH06 226	3/4" EK.	1	345 mm
K023	1"	4	87K023PJ06 226	3/4" EK.	1	395 mm
K023	1"	5	87K023PQ06 226	3/4" EK.	1	445 mm
K023	1"	6	87K023PK06 226	3/4" EK.	1	495 mm
K023	1"	7	87K023PR06 226	3/4" EK.	1	545 mm
K023	1"	8	87K023PL06 226	3/4" EK.	1	595 mm
K023	1"	9	87K023PS06 226	3/4" EK.	1	645 mm
K023	1"	10	87K023PM06 226	3/4" EK.	1	695 mm
K023	1"	11	87K023PT06 226	3/4" EK.	1	745 mm
K023	1"	12	87K023PU06 226	3/4" EK.	1	795 mm
K023	1"	13	87K023PV06 226	3/4" EK.	1	845 mm
K023	1"	14	87K023PW06 226	3/4" EK.	1	895 mm
K024	1"	2	87K024PG06 226	M24x1,5	1	295 mm
K024	1"	3	87K024PH06 226	M24x1,5	1	345 mm
K024	1"	4	87K024PJ06 226	M24x1,5	1	395 mm
K024	1"	5	87K024PQ06 226	M24x1,5	1	445 mm
K024	1"	6	87K024PK06 226	M24x1,5	1	495 mm
K024	1"	7	87K024PR06 226	M24x1,5	1	545 mm
K024	1"	8	87K024PL06 226	M24x1,5	1	595 mm
K024	1"	9	87K024PS06 226	M24x1,5	1	645 mm
K024	1"	10	87K024PM06 226	M24x1,5	1	695 mm
K024	1"	11	87K024PT06 226	M24x1,5	1	745 mm
K024	1"	12	87K024PU06 226	M24x1,5	1	795 mm
K024	1"	13	87K024PV06 226	M24x1,5	1	845 mm
K024	1"	14	87K024PW06 226	M24x1,5	1	895 mm

Manifolds unit with memory flowmeters and valves with thermostatic option. It includes: 2 ball valves (art. 215 or art. 225), connection to the ball valve with gasket with flat seat and o-ring, 2 brackets (art.208) with anti-vibration supports, 2 built-in manual air vents with o-ring (art.705), 2 1/2" drain cocks (art.172), 2 1" thermometer caps with o-ring (art.185), 2 0-60° thermometers (art.206).

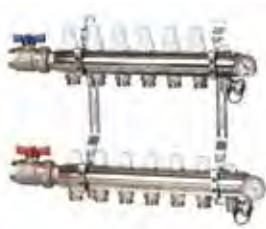
**Suitable for 3/4" Euroconus or M24x1,5 fittings.**

**Choose thermostatic and electrothermic actuators with 28x1,5 connection thread.**

CODE M24x1,5

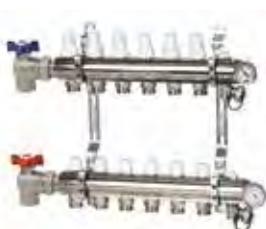
CODE 3/4 EUROCONUS

## ART. K021 | K022 WITH STRAIGHT BALL VALVE



ART.	HEAD CONNECT.	OUTLETS	CODE	FITTING THREAD	LENGTH TOTAL COLLECTOR	SIZE BOX RECOMMENDED
K021	1"	2	87K021PG06	3/4" EK.	1	295 mm
K021	1"	3	87K021PH06	3/4" EK.	1	345 mm
K021	1"	4	87K021PJ06	3/4" EK.	1	395 mm
K021	1"	5	87K021PQ06	3/4" EK.	1	445 mm
K021	1"	6	87K021PK06	3/4" EK.	1	495 mm
K021	1"	7	87K021PR06	3/4" EK.	1	545 mm
K021	1"	8	87K021PL06	3/4" EK.	1	595 mm
K021	1"	9	87K021PS06	3/4" EK.	1	645 mm
K021	1"	10	87K021PM06	3/4" EK.	1	695 mm
K021	1"	11	87K021PT06	3/4" EK.	1	745 mm
K021	1"	12	87K021PU06	3/4" EK.	1	795 mm
K021	1"	13	87K021PV06	3/4" EK.	1	845 mm
K021	1"	14	87K021PW06	3/4" EK.	1	895 mm
K021	1"1/4	2	87K021DG06	3/4" EK.	1	304 mm
K021	1"1/4	3	87K021DH06	3/4" EK.	1	354 mm
K021	1"1/4	4	87K021DJ06	3/4" EK.	1	404 mm
K021	1"1/4	5	87K021DQ06	3/4" EK.	1	454 mm
K021	1"1/4	6	87K021DK06	3/4" EK.	1	504 mm
K021	1"1/4	7	87K021DR06	3/4" EK.	1	554 mm
K021	1"1/4	8	87K021DL06	3/4" EK.	1	604 mm
K021	1"1/4	9	87K021DS06	3/4" EK.	1	654 mm
K021	1"1/4	10	87K021DM06	3/4" EK.	1	704 mm
K021	1"1/4	11	87K021DT06	3/4" EK.	1	754 mm
K021	1"1/4	12	87K021DU06	3/4" EK.	1	804 mm
K021	1"1/4	13	87K021DV06	3/4" EK.	1	854 mm
K021	1"1/4	14	87K021DW06	3/4" EK.	1	904 mm
K022	1"	2	87K022PG06	M24x1,5	1	295 mm
K022	1"	3	87K022PH06	M24x1,5	1	345 mm
K022	1"	4	87K022PJ06	M24x1,5	1	395 mm
K022	1"	5	87K022PQ06	M24x1,5	1	445 mm
K022	1"	6	87K022PK06	M24x1,5	1	495 mm
K022	1"	7	87K022PR06	M24x1,5	1	545 mm
K022	1"	8	87K022PL06	M24x1,5	1	595 mm
K022	1"	9	87K022PS06	M24x1,5	1	645 mm
K022	1"	10	87K022PM06	M24x1,5	1	695 mm
K022	1"	11	87K022PT06	M24x1,5	1	745 mm
K022	1"	12	87K022PU06	M24x1,5	1	795 mm
K022	1"	13	87K022PV06	M24x1,5	1	845 mm
K022	1"	14	87K022PW06	M24x1,5	1	895 mm

## ART. K021 | K022 WITH ANGLE BALL VALVE



ART.	HEAD CONNECT.	OUTLETS	CODE	FITTING THREAD	LENGTH TOTAL COLLECTOR	BOX RECOMMENDED ART. 196
K021	1"	2	87K021PG06 226	3/4" EK.	1	295 mm
K021	1"	3	87K021PH06 226	3/4" EK.	1	345 mm
K021	1"	4	87K021PJ06 226	3/4" EK.	1	395 mm
K021	1"	5	87K021PQ06 226	3/4" EK.	1	445 mm
K021	1"	6	87K021PK06 226	3/4" EK.	1	495 mm
K021	1"	7	87K021PR06 226	3/4" EK.	1	545 mm
K021	1"	8	87K021PL06 226	3/4" EK.	1	595 mm
K021	1"	9	87K021PS06 226	3/4" EK.	1	645 mm
K021	1"	10	87K021PM06 226	3/4" EK.	1	695 mm
K021	1"	11	87K021PT06 226	3/4" EK.	1	745 mm
K021	1"	12	87K021PU06 226	3/4" EK.	1	795 mm
K021	1"	13	87K021PV06 226	3/4" EK.	1	845 mm
K021	1"	14	87K021PW06 226	3/4" EK.	1	895 mm
K022	1"	2	87K022PG06 226	M24x1,5	1	295 mm
K022	1"	3	87K022PH06 226	M24x1,5	1	345 mm
K022	1"	4	87K022PJ06 226	M24x1,5	1	395 mm
K022	1"	5	87K022PQ06 226	M24x1,5	1	445 mm
K022	1"	6	87K022PK06 226	M24x1,5	1	495 mm
K022	1"	7	87K022PR06 226	M24x1,5	1	545 mm
K022	1"	8	87K022PL06 226	M24x1,5	1	595 mm
K022	1"	9	87K022PS06 226	M24x1,5	1	645 mm
K022	1"	10	87K022PM06 226	M24x1,5	1	695 mm
K022	1"	11	87K022PT06 226	M24x1,5	1	745 mm
K022	1"	12	87K022PU06 226	M24x1,5	1	795 mm
K022	1"	13	87K022PV06 226	M24x1,5	1	845 mm
K022	1"	14	87K022PW06 226	M24x1,5	1	895 mm

Manifolds unit with adjustment lockshields and valves with thermostatic option.

It includes: 2 ball valves (art.215 or art.225), connection to the ball valve with gasket with plane seat and o-ring, 2 brackets (art.208) with anti-vibration supports, 2 built-in manual air vents with o-ring (ns.art.705), 2 1/2" drain cocks (Ns.art.172), 2 1" thermometer caps with o-ring (art.185), 2 0-60° thermometers (art.206). **Suitable for 3/4" Euroconus or M24x1,5 fittings.**  
**Choose thermostatic and electrothermic actuators with 28x1,5 connection thread.**

CODE M24x1,5

CODE 3/4 EUROCONUS

**ART. K013 | K014**



ART.	HEAD CONNECT.	OUTLETS	CODE	FITTING THREAD	LENGTH TOTAL COLLECTOR
K013	1"	2	87K013PG06	3/4" EK.	1 104 mm
K013	1"	3	87K013PH06	3/4" EK.	1 154 mm
K013	1"	4	87K013PJ06	3/4" EK.	1 204 mm
K013	1"	5	87K013PQ06	3/4" EK.	1 254 mm
K013	1"	6	87K013PK06	3/4" EK.	1 304 mm
K013	1"	7	87K013PR06	3/4" EK.	1 354 mm
K013	1"	8	87K013PL06	3/4" EK.	1 404 mm
K013	1"	9	87K013PS06	3/4" EK.	1 454 mm
K013	1"	10	87K013PM06	3/4" EK.	1 504 mm
K013	1"	11	87K013PT06	3/4" EK.	1 554 mm
K013	1"	12	87K013PU06	3/4" EK.	1 604 mm
K013	1"	13	87K013PV06	3/4" EK.	1 654 mm
K013	1"	14	87K013PW06	3/4" EK.	1 704 mm
K013	1"	15	87K013PY06	3/4" EK.	1 754 mm
K014	1"	2	87K014PG06	M24x1,5	1 104 mm
K014	1"	3	87K014PH06	M24x1,5	1 154 mm
K014	1"	4	87K014PJ06	M24x1,5	1 204 mm
K014	1"	5	87K014PQ06	M24x1,5	1 254 mm
K014	1"	6	87K014PK06	M24x1,5	1 304 mm
K014	1"	7	87K014PR06	M24x1,5	1 354 mm
K014	1"	8	87K014PL06	M24x1,5	1 404 mm
K014	1"	9	87K014PS06	M24x1,5	1 454 mm
K014	1"	10	87K014PM06	M24x1,5	1 504 mm
K014	1"	11	87K014PT06	M24x1,5	1 554 mm
K014	1"	12	87K014PU06	M24x1,5	1 604 mm
K014	1"	13	87K014PV06	M24x1,5	1 654 mm
K014	1"	14	87K014PW06	M24x1,5	1 704 mm
K014	1"	15	87K014PY06	M24x1,5	1 754 mm

Manifolds unit with memory flowmeters and valves with thermostatic option. Brackets with antivibration supports (art.208). The flow regulators allow to close and regulate the flow.

**Suitable for 3/4" Euroconus or M24x1,5 fittings.**

**Choose electrothermic actuators with 28x1,5 connection thread.**

CODE M24x1,5

CODE 3/4 EUROCONUS

**ART. K005 | K006**



ART.	HEAD CONNECT.	OUTLETS	CODE	FITTING THREAD	LENGTH TOTAL COLLECTOR
K005	1"	2	87K005PG06	3/4" EK.	1 104 mm
K005	1"	3	87K005PH06	3/4" EK.	1 154 mm
K005	1"	4	87K005PJ06	3/4" EK.	1 204 mm
K005	1"	5	87K005PQ06	3/4" EK.	1 254 mm
K005	1"	6	87K005PK06	3/4" EK.	1 304 mm
K005	1"	7	87K005PR06	3/4" EK.	1 354 mm
K005	1"	8	87K005PL06	3/4" EK.	1 404 mm
K005	1"	9	87K005PS06	3/4" EK.	1 454 mm
K005	1"	10	87K005PM06	3/4" EK.	1 504 mm
K005	1"	11	87K005PT06	3/4" EK.	1 554 mm
K005	1"	12	87K005PU06	3/4" EK.	1 604 mm
K005	1"	13	87K005PV06	3/4" EK.	1 654 mm
K005	1"	14	87K005PW06	3/4" EK.	1 704 mm
K005	1"	15	87K005PY06	3/4" EK.	1 754 mm
K006	1"	2	87K006PG06	M24x1,5	1 104 mm
K006	1"	3	87K006PH06	M24x1,5	1 154 mm
K006	1"	4	87K006PJ06	M24x1,5	1 204 mm
K006	1"	5	87K006PQ06	M24x1,5	1 254 mm
K006	1"	6	87K006PK06	M24x1,5	1 304 mm
K006	1"	7	87K006PR06	M24x1,5	1 354 mm
K006	1"	8	87K006PL06	M24x1,5	1 404 mm
K006	1"	9	87K006PS06	M24x1,5	1 454 mm
K006	1"	10	87K006PM06	M24x1,5	1 504 mm
K006	1"	11	87K006PT06	M24x1,5	1 554 mm
K006	1"	12	87K006PU06	M24x1,5	1 604 mm
K006	1"	13	87K006PV06	M24x1,5	1 654 mm
K006	1"	14	87K006PW06	M24x1,5	1 704 mm
K006	1"	15	87K006PY06	M24x1,5	1 754 mm

Manifolds unit with adjustment lockshields and valves with thermostatic option. Brackets with anti-vibration supports (art.208).

**Suitable for 3/4" Euroconus or M24x1,5 fittings.**

**Choose electrothermic actuators with 28x1,5 connection thread.**



## ART. K009 | K010

ART.	HEAD CONNECT.	OUTLETS	CODE	FITTING THREAD	LENGTH TOTAL COLLECTOR
K009	1"	2	87K009PG06	3/4" EK.	1 104 mm
K009	1"	3	87K009PH06	3/4" EK.	1 154 mm
K009	1"	4	87K009PJ06	3/4" EK.	1 204 mm
K009	1"	5	87K009PQ06	3/4" EK.	1 254 mm
K009	1"	6	87K009PK06	3/4" EK.	1 304 mm
K009	1"	7	87K009PR06	3/4" EK.	1 354 mm
K009	1"	8	87K009PL06	3/4" EK.	1 404 mm
K009	1"	9	87K009PS06	3/4" EK.	1 454 mm
K009	1"	10	87K009PM06	3/4" EK..	1 504 mm
K009	1"	11	87K009PT06	3/4" EK.	1 554 mm
K009	1"	12	87K009PU06	3/4" EK.	1 604 mm
K009	1"	13	87K009PV06	3/4" EK.	1 654 mm
K009	1"	14	87K009PW06	3/4" EK.	1 704 mm
K010	1"	2	87K010PG06	M24x1,5	1 104 mm
K010	1"	3	87K010PH06	M24x1,5	1 154 mm
K010	1"	4	87K010PJ06	M24x1,5	1 204 mm
K010	1"	5	87K010PQ06	M24x1,5	1 254 mm
K010	1"	6	87K010PK06	M24x1,5	1 304 mm
K010	1"	7	87K010PR06	M24x1,5	1 354 mm
K010	1"	8	87K010PL06	M24x1,5	1 404 mm
K010	1"	9	87K010PS06	M24x1,5	1 454 mm
K010	1"	10	87K010PM06	M24x1,5	1 504 mm
K010	1"	11	87K010PT06	M24x1,5	1 554 mm
K010	1"	12	87K010PU06	M24x1,5	1 604 mm
K010	1"	13	87K010PV06	M24x1,5	1 654 mm
K010	1"	14	87K010PW06	M24x1,5	1 704 mm

Manifolds unit with adjustment lockshields and valves with thermostatic option. Outlets for 1/2" air vent (art.700) and 1/2" drain cock (art.172). Brackets with anti-vibration supports (art.208).

**Suitable for 3/4" Euroconus or M24x1,5 fittings.**

**Choose electrothermic actuators with 28x1,5 connection thread.**



## ART. 1001 | 1002

ART.	HEAD CONNECT.	OUTLETS	CODE	FITTING THREAD
1001	1"	1	871001PF06	3/4" EK.
1001	1"	2	871001PG06	3/4" EK.
1001	1"	3	871001PH06	3/4" EK.
1001	1"	4	871001PJ06	3/4" EK.
1001	1"	5	871001PQ06	3/4" EK.
1001	1"	6	871001PK06	3/4" EK.
1001	1"	7	871001PR06	3/4" EK.
1001	1"	8	871001PL06	3/4" EK.
1001	1"	9	871001PS06	3/4" EK.
1001	1"	10	871001PM06	3/4" EK.
1001	1"	11	871001PT06	3/4" EK.
1001	1"	12	871001PU06	3/4" EK.
1001	1"	13	871001PV06	3/4" EK.
1001	1"	14	871001PW06	3/4" EK.
1001	1"	15	871001PY06	3/4" EK.
1002	1"	1	871002PF06	M24x1,5
1002	1"	2	871002PG06	M24x1,5
1002	1"	3	871002PH06	M24x1,5
1002	1"	4	871002PJ06	M24x1,5
1002	1"	5	871002PQ06	M24x1,5
1002	1"	6	871002PK06	M24x1,5
1002	1"	7	871002PR06	M24x1,5
1002	1"	8	871002PL06	M24x1,5
1002	1"	9	871002PS06	M24x1,5
1002	1"	10	871002PM06	M24x1,5
1002	1"	11	871002PT06	M24x1,5
1002	1"	12	871002PU06	M24x1,5
1002	1"	13	871002PV06	M24x1,5
1002	1"	14	871002PW06	M24x1,5
1002	1"	15	871002PY06	M24x1,5



## ART. 1005 | 1006

ART.	HEAD CONNECT.	OUTLETS	CODE	FITTING THREAD
1005	1"	1	871005PF06	3/4" EK.
1005	1"	2	871005PG06	3/4" EK.
1005	1"	3	871005PH06	3/4" EK.
1005	1"	4	871005PJ06	3/4" EK.
1005	1"	5	871005PQ06	3/4" EK.
1005	1"	6	871005PK06	3/4" EK.
1005	1"	7	871005PR06	3/4" EK.
1005	1"	8	871005PL06	3/4" EK.
1005	1"	9	871005PS06	3/4" EK.
1005	1"	10	871005PM06	3/4" EK.
1005	1"	11	871005PT06	3/4" EK.
1005	1"	12	871005PU06	3/4" EK.
1005	1"	13	871005PV06	3/4" EK.
1005	1"	14	871005PW06	3/4" EK.
1005	1"	15	871005PY06	3/4" EK.
1006	1"	1	871006PF06	M24x1,5
1006	1"	2	871006PG06	M24x1,5
1006	1"	3	871006PH06	M24x1,5
1006	1"	4	871006PJ06	M24x1,5
1006	1"	5	871006PQ06	M24x1,5
1006	1"	6	871006PK06	M24x1,5
1006	1"	7	871006PR06	M24x1,5
1006	1"	8	871006PL06	M24x1,5
1006	1"	9	871006PS06	M24x1,5
1006	1"	10	871006PM06	M24x1,5
1006	1"	11	871006PT06	M24x1,5
1006	1"	12	871006PU06	M24x1,5
1006	1"	13	871006PV06	M24x1,5
1006	1"	14	871006PW06	M24x1,5
1006	1"	15	871006PY06	M24x1,5

Return manifold with manual valves and valves with thermostatic option. Male outlets. Interaxe: 50 mm. **Suitable for 3/4" Euroconus or M24x1,5 fittings. Choose electrothermic actuators with 28x1,5 connection thread.**

Delivery manifold with micrometric regulation lockshields. Male outlets. Interaxe: 50 mm. **Suitable for 3/4" Euroconus or M24x1,5 fittings.**



**ART. 1013 | 1014**

ART.	HEAD CONNECT.	OUTLETS	CODE	FITTING THREAD	BOX
1013	1"	1	871013PF06	3/4" EK.	1
1013	1"	2	871013PG06	3/4" EK..	1
1013	1"	3	871013PH06	3/4" EK.	1
1013	1"	4	871013PJ06	3/4" EK.	1
1013	1"	5	871013PQ06	3/4" EK.	1
1013	1"	6	871013PK06	3/4" EK.	1
1013	1"	7	871013PR06	3/4" EK.	1
1013	1"	8	871013PL06	3/4" EK.	1
1013	1"	9	871013PS06	3/4" EK.	1
1013	1"	10	871013PM06	3/4" EK.	1
1013	1"	11	871013PT06	3/4" EK.	1
1013	1"	12	871013PU06	3/4" EK.	1
1013	1"	13	871013PV06	3/4" EK.	1
1013	1"	14	871013PW06	3/4" EK.	1
1013	1"	15	871013PY06	3/4" EK.	1
1014	1"	1	871014PF06	M24x1,5	1
1014	1"	2	871014PG06	M24x1,5	1
1014	1"	3	871014PH06	M24x1,5	1
1014	1"	4	871014PJ06	M24x1,5	1
1014	1"	5	871014PQ06	M24x1,5	1
1014	1"	6	871014PK06	M24x1,5	1
1014	1"	7	871014PR06	M24x1,5	1
1014	1"	8	871014PL06	M24x1,5	1
1014	1"	9	871014PS06	M24x1,5	1
1014	1"	10	871014PM06	M24x1,5	1
1014	1"	11	871014PT06	M24x1,5	1
1014	1"	12	871014PU06	M24x1,5	1
1014	1"	13	871014PV06	M24x1,5	1
1014	1"	14	871014PW06	M24x1,5	1
1014	1"	15	871014PY06	M24x1,5	1

Delivery manifold with flowmeters. Male outlets. Interaxe: 50 mm.

**Suitable for 3/4" Euroconus or M24x1,5 fittings.**



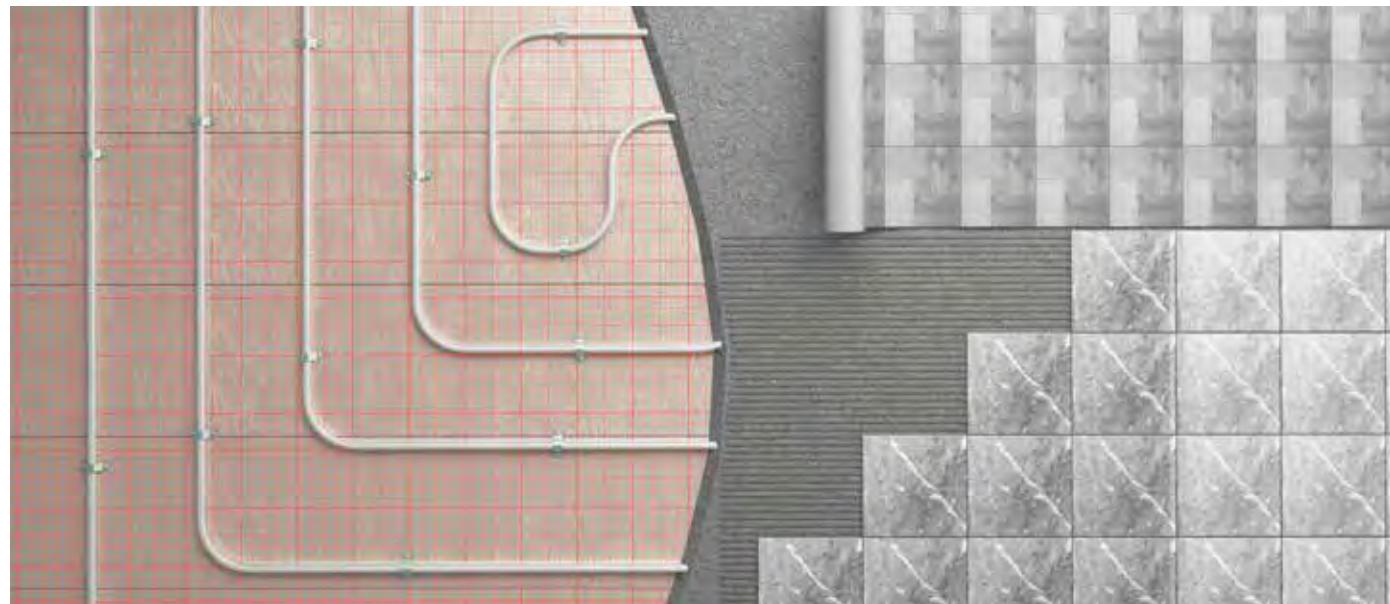
**ART. 1007 | 1008**

ART.	HEAD CONNECT.	OUTLETS	CODE	FITTING THREAD	BOX
1007	1"	2	871007PG06	3/4" EK.	1
1007	1"	3	871007PH06	3/4" EK..	1
1007	1"	4	871007PJ06	3/4" EK.	1
1007	1"	5	871007PQ06	3/4" EK.	1
1007	1"	6	871007PK06	3/4" EK.	1
1007	1"	7	871007PR06	3/4" EK.	1
1007	1"	8	871007PL06	3/4" EK.	1
1007	1"	9	871007PS06	3/4" EK..	1
1007	1"	10	871007PM06	3/4" EK..	1
1007	1"	11	871007PT06	3/4" EK.	1
1007	1"	12	871007PU06	3/4" EK.	1
1007	1"	13	871007PV06	3/4" EK.	1
1007	1"	14	871007PW06	3/4" EK.	1
1007	1"1/4	2	871007DG06	3/4" EK.	1
1007	1"1/4	3	871007DH06	3/4" EK.	1
1007	1"1/4	4	871007DJ06	3/4" EK.	1
1007	1"1/4	5	871007DQ06	3/4" EK..	1
1007	1"1/4	6	871007DK06	3/4" EK..	1
1007	1"1/4	7	871007DR06	3/4" EK.	1
1007	1"1/4	8	871007DL06	3/4" EK.	1
1007	1"1/4	9	871007DS06	3/4" EK.	1
1007	1"1/4	10	871007DM06	3/4" EK.	1
1007	1"1/4	11	871007DT06	3/4" EK.	1
1007	1"1/4	12	871007DU06	3/4" EK.	1
1007	1"1/4	13	871007DV06	3/4" EK.	1
1007	1"1/4	14	871007DW06	3/4" EK.	1
1008	1"	2	871008PG06	M24x1,5	1
1008	1"	3	871008PH06	M24x1,5	1
1008	1"	4	871008PJ06	M24x1,5	1
1008	1"	5	871008PQ06	M24x1,5	1
1008	1"	6	871008PK06	M24x1,5	1
1008	1"	7	871008PR06	M24x1,5	1
1008	1"	8	871008PL06	M24x1,5	1
1008	1"	9	871008PS06	M24x1,5	1
1008	1"	10	871008PM06	M24x1,5	1
1008	1"	11	871008PT06	M24x1,5	1
1008	1"	12	871008PU06	M24x1,5	1
1008	1"	13	871008PV06	M24x1,5	1
1008	1"	14	871008PW06	M24x1,5	1

Return manifold with manual valves and valves with thermostatic option. Outlets for 1/2" air vent (art.700) and 1/2" drain cock (art.172). Male outlets. Interaxe: 50 mm.

**Suitable for 3/4" Euroconus or M24x1,5 fittings.**

**Choose thermostatic and electrothermic actuators with 28x1,5 connection thread.**





ART. 1011 | 1012

ART.	HEAD CONNECT.	OUTLETS	CODE	CONNECTION THREAD	
1011	1"	2	871011PG06	3/4" EK.	1
1011	1"	3	871011PH06	3/4" EK.	1
1011	1"	4	871011PJ06	3/4" EK.	1
1011	1"	5	871011PQ06	3/4" EK.	1
1011	1"	6	871011PK06	3/4" EK.	1
1011	1"	7	871011PR06	3/4" EK.	1
1011	1"	8	871011PL06	3/4" EK.	1
1011	1"	9	871011PS06	3/4" EK.	1
1011	1"	10	871011PM06	3/4" EK.	1
1011	1"	11	871011PT06	3/4" EK.	1
1011	1"	12	871011PU06	3/4" EK.	1
1011	1"	13	871011PV06	3/4" EK.	1
1011	1"	14	871011PW06	3/4" EK.	1
1011	1"1/4	2	871011DG06	3/4" EK.	1
1011	1"1/4	3	871011DH06	3/4" EK.	1
1011	1"1/4	4	871011DJ06	3/4" EK.	1
1011	1"1/4	5	871011DQ06	3/4" EK.	1
1011	1"1/4	6	871011DK06	3/4" EK.	1
1011	1"1/4	7	871011DR06	3/4" EK.	1
1011	1"1/4	8	871011DL06	3/4" EK.	1
1011	1"1/4	9	871011DS06	3/4" EK.	1
1011	1"1/4	10	871011DM06	3/4" EK.	1
1011	1"1/4	11	871011DT06	3/4" EK.	1
1011	1"1/4	12	871011DU06	3/4" EK.	1
1011	1"1/4	13	871011DV06	3/4" EK.	1
1011	1"1/4	14	871011DW06	3/4" EK.	1
1012	1"	2	871012PG06	M24x1,5	1
1012	1"	3	871012PH06	M24x1,5	1
1012	1"	4	871012PJ06	M24x1,5	1
1012	1"	5	871012PQ06	M24x1,5	1
1012	1"	6	871012PK06	M24x1,5	1
1012	1"	7	871012PR06	M24x1,5	1
1012	1"	8	871012PL06	M24x1,5	1
1012	1"	9	871012PS06	M24x1,5	1
1012	1"	10	871012PM06	M24x1,5	1
1012	1"	11	871012PT06	M24x1,5	1
1012	1"	12	871012PU06	M24x1,5	1
1012	1"	13	871012PV06	M24x1,5	1
1012	1"	14	871012PW06	M24x1,5	1

Delivery manifold with micrometric regulation lockshields. Outlets for 1/2" air vent (art.700) and 1/2" drain cock (art.172). Male outlets. Interaxe: 50 mm.  
**Suitable for 3/4" Euroconus or M24x1,5 fittings.**



CODE M24x1,5

CODE 3/4 EUROCONUS

ART. 1015 | 1016

ART.	HEAD CONNECT.	OUTLETS	CODE	CONNECTION THREAD	
1015	1"	2	871015PG06	3/4" EK.	1
1015	1"	3	871015PH06	3/4" EK.	1
1015	1"	4	871015PJ06	3/4" EK.	1
1015	1"	5	871015PQ06	3/4" EK.	1
1015	1"	6	871015PK06	3/4" EK.	1
1015	1"	7	871015PR06	3/4" EK.	1
1015	1"	8	871015PL06	3/4" EK.	1
1015	1"	9	871015PS06	3/4" EK.	1
1015	1"	10	871015PM06	3/4" EK.	1
1015	1"	11	871015PT06	3/4" EK.	1
1015	1"	12	871015PU06	3/4" EK.	1
1015	1"	13	871015PV06	3/4" EK.	1
1015	1"	14	871015PW06	3/4" EK.	1
1015	1"1/4	2	871015DG06	3/4" EK.	1
1015	1"1/4	3	871015DH06	3/4" EK.	1
1015	1"1/4	4	871015DJ06	3/4" EK.	1
1015	1"1/4	5	871015DQ06	3/4" EK.	1
1015	1"1/4	6	871015DK06	3/4" EK.	1
1015	1"1/4	7	871015DR06	3/4" EK.	1
1015	1"1/4	8	871015DL06	3/4" EK.	1
1015	1"1/4	9	871015DS06	3/4" EK.	1
1015	1"1/4	10	871015DM06	3/4" EK.	1
1015	1"1/4	11	871015DT06	3/4" EK.	1
1015	1"1/4	12	871015DU06	3/4" EK.	1
1015	1"1/4	13	871015DV06	3/4" EK.	1
1015	1"1/4	14	871015DW06	3/4" EK.	1
1016	1"	2	871016PG06	M24x1,5	1
1016	1"	3	871016PH06	M24x1,5	1
1016	1"	4	871016PJ06	M24x1,5	1
1016	1"	5	871016PQ06	M24x1,5	1
1016	1"	6	871016PK06	M24x1,5	1
1016	1"	7	871016PR06	M24x1,5	1
1016	1"	8	871016PL06	M24x1,5	1
1016	1"	9	871016PS06	M24x1,5	1
1016	1"	10	871016PM06	M24x1,5	1
1016	1"	11	871016PT06	M24x1,5	1
1016	1"	12	871016PU06	M24x1,5	1
1016	1"	13	871016PV06	M24x1,5	1
1016	1"	14	871016PW06	M24x1,5	1

Delivery manifold with flowmeters. Outlets for 1/2" air vent (art.700) and 1/2" drain cock (art.172). Male outlets. Interaxe: 50 mm.  
**Suitable for 3/4" Euroconus or M24x1,5 fittings.**



ART. 177

ART.	HEAD CONNECT.	CODE EUROCONUS	
177	1"	87177AF66	1
177	1"1/4	87177AG66	1

Insulators for 1" and 1"1/4 manifolds. For manifolds 1" up to 12 outlets, for manifolds 1"1/4 up to 15 outlets. The insulators can be cut, to insulate the manifolds carrying a lower outlet number. **Holes on both sides** with 50 mm interaxe.

**SINGLE AND COPLANAR JOINABLE MANIFOLDS FOR HEATING AND SANITARY SYSTEMS**

B6



**ART. 1103**

ART.	HEAD CONNECT.	OUTLETS	CODE	
1103	1"	2	871103PG06	30
1103	1"	3	871103PH06	20
1103	1"	4	871103PJ06	20
1103	1"	5	871103PQ06	10
1103	1"	6	871103PK06	10
1103	1"	7	871103PR06	10
1103	1"	8	871103PL06	10
1103	1"	9	871103PS06	10
1103	1"	10	871103PM06	10
1103	1"	11	871103PT06	5
1103	1"	12	871103PU06	5
1103	1"	13	871103PV06	5
1103	1"	14	871103PW06	5
1103	1"	15	871103PY06	5

Single distribution manifold. Outlets for 1/2" air vent (art.700) and 1/2" drain cock (art.172). Female outlets. Interaxe: 50 mm.



**ART. 1102**

ART.	HEAD CONNECT.	OUTLETS	SIDE CONNECT. THREAD	CODE	
1102	3/4	2	1/2	871102PA05	40
1102	3/4	3	1/2	871102PB05	30
1102	3/4	4	1/2	871102PC05	30
1102	3/4	5	1/2	871102PN05	20
1102	3/4	6	1/2	871102PD05	20
1102	3/4	7	1/2	871102PO05	20
1102	3/4	8	1/2	871102PE05	20
1102	3/4	9	1/2	871102PP05	10
1102	3/4	10	1/2	871102PF05	10
1102	1"	2	1/2	871102PG05	30
1102	1"	3	1/2	871102PH05	20
1102	1"	4	1/2	871102PJ05	20
1102	1"	5	1/2	871102PQ05	20
1102	1"	6	1/2	871102PK05	20
1102	1"	7	1/2	871102PR05	20
1102	1"	8	1/2	871102PL05	20
1102	1"	9	1/2	871102PS05	10
1102	1"	10	1/2	871102PM05	10
1102	1"	11	1/2	871102PT05	10
1102	1"	12	1/2	871102PU05	10
1102	1"	13	1/2	871102PV05	10
1102	1"	14	1/2	871102PW05	10
1102	1"	15	1/2	871102PY05	10
1102	1"1/4	2	1/2	871102DG05	30
1102	1"1/4	3	1/2	871102DH05	20
1102	1"1/4	4	1/2	871102DJ05	20
1102	1"1/4	5	1/2	871102DQ05	20
1102	1"1/4	6	1/2	871102DK05	20
1102	1"1/4	7	1/2	871102DR05	20
1102	1"1/4	8	1/2	871102DL05	20
1102	1"1/4	9	1/2	871102DS05	10
1102	1"1/4	10	1/2	871102DM05	10
1102	1"1/4	11	1/2	871102DT05	10
1102	1"1/4	12	1/2	871102DU05	10
1102	1"1/4	13	1/2	871102DV05	10
1102	1"1/4	14	1/2	871102DW05	10
1102	1"1/4	15	1/2	871102DY05	10

Single distribution manifold. 1/2" female side connections. Interaxe: 50 mm.



**ART. 1104**

ART.	HEAD CONNECT.	OUTLETS	CODE	FITTING THREAD	
1104	1"	2	871104PG06	3/4" EK.	30
1104	1"	3	871104PH06	3/4" EK.	20
1104	1"	4	871104PJ06	3/4" EK.	20
1104	1"	5	871104PQ06	3/4" EK.	10
1104	1"	6	871104PK06	3/4" EK.	10
1104	1"	7	871104PR06	3/4" EK.	10
1104	1"	8	871104PL06	3/4" EK.	10
1104	1"	9	871104PS06	3/4" EK.	10
1104	1"	10	871104PM06	3/4" EK.	10
1104	1"	11	871104PT06	3/4" EK.	5
1104	1"	12	871104PU06	3/4" EK.	5
1104	1"	13	871104PV06	3/4" EK.	5
1104	1"	14	871104PW06	3/4" EK.	5
1104	1"	15	871104PY06	3/4" EK.	5

Single distribution manifold with pre-assembled fittings. Male outlets. Interaxe: 50 mm. **Suitable for 3/4" Euroconus fittings.**



**NEW**

**ART. 1105**

ART.	HEAD CONNECT.	OUTLETS	COLOR	CODE	FITTING THREAD	
1105	1"	2	BLU	871105PG0511	3/4" EK.	1 10
1105	1"	3	BLU	871105PH0511	3/4" EK.	1 10
1105	1"	4	BLU	871105PJ0511	3/4" EK.	1 10
1105	1"	5	BLU	871105PQ0511	3/4" EK.	1 10
1105	1"	6	BLU	871105PK0511	3/4" EK.	1 5
1105	1"	7	BLU	871105PR0511	3/4" EK.	1 5
1105	1"	8	BLU	871105PL0511	3/4" EK.	1 5
1105	1"	9	BLU	871105PS0511	3/4" EK.	1 4
1105	1"	10	BLU	871105PM0511	3/4" EK.	1 4
1105	1"	11	BLU	871105PT0511	3/4" EK.	1 4
1105	1"	12	BLU	871105PU0511	3/4" EK.	1 4

Distribution manifold with shut-off valves. Distance between outlets 50 mm. **Head connections 1" F. Pipe connections 3/4" Euroconus. Available also with red handle, in this case the code will end with "12" instead of "11".**

**ICMA**



ART. 178

ART.	HEAD CONNECT.	CODE	
178	1"	87178AF66	1
178	1"1/4	87178AG66	1

Insulators for 1" and 1"1/4 single bar manifolds. For manifolds 1" up to 12 outlets, for manifolds 1"1/4 up to 15 outlets. The insulators can be cut to insulate manifolds with a lower number of outlets. Suitable for distribution manifolds. **Holes on one side** with 50 mm interaxe.



ART. 222 | 223 | 224 | 186

ART.	HEAD CONNECT.	OUTLETS	SIDE CONNECTION	CODE	
222	3/4	2	1/2	87222PA05	50
222	3/4	3	1/2	87222PB05	50
222	3/4	4	1/2	87222PC05	40
222	3/4	5	1/2	87222PN05	35
222	1"	2	1/2	87222PG05	50
222	1"	3	1/2	87222PH05	40
222	1"	4	1/2	87222PJ05	25
222	1"	5	1/2	87222PQ05	20
222	3/4	2	1/2	87222PA06	50
222	3/4	3	1/2	87222PB06	50
222	3/4	4	1/2	87222PC06	40
222	3/4	5	1/2	87222PN06	35
222	1"	2	1/2	87222PG06	50
222	1"	3	1/2	87222PH06	40
222	1"	4	1/2	87222PJ06	25
222	1"	5	1/2	87222PQ06	20
223	3/4	2	24x1,5	87223PA05	50
223	3/4	3	24x1,5	87223PB05	50
223	3/4	4	24x1,5	87223PC05	40
223	3/4	5	24X1,5	87223PN05	35
223	1"	2	24x1,5	87223PG05	50
223	1"	3	24x1,5	87223PH05	40
223	1"	4	24x1,5	87223PJ05	25
223	1"	5	24X1,5	87223PQ05	20
223	3/4	2	24x1,5	87223PA06	50
223	3/4	3	24X1,5	87223PB06	50
223	3/4	4	24x1,5	87223PC06	40
223	3/4	5	24x1,5	87223PN06	40
223	1"	2	24x1,5	87223PG06	50
223	1"	3	24X1,5	87223PH06	40
223	1"	4	24x1,5	87223PJ06	25
223	1"	5	24X1,5	87223PQ06	20
224	3/4	2	1/2	87224PA05	50
224	3/4	3	1/2	87224PB05	50
224	3/4	4	1/2	87224PC05	40
224	3/4	5	1/2	87224PN05	35
224	3/4	2	1/2	87224PA06	50
224	3/4	3	1/2	87224PB06	50
224	3/4	4	1/2	87224PC06	40
224	3/4	5	1/2	87224PN06	35
186	3/4	2	3/4	87186PA05	50
186	3/4	3	3/4	87186PB05	50
186	3/4	4	3/4	87186PC05	40
186	1"	2	3/4	87186PG05	50
186	1"	3	3/4	87186PH05	50
186	1"	4	3/4	87186PJ05	40
186	3/4	2	3/4	87186PA06	50
186	3/4	3	3/4	87186PB06	50
186	3/4	4	3/4	87186PC06	40
186	1"	2	3/4	87186PG06	50
186	1"	3	3/4	87186PH06	50
186	1"	4	3/4	87186PJ06	40



ART. 230 | 232

ART.	HEAD CONNECT.	SIDE CONNECT. NR.	SIDE CONNECT.	CODE		
230	3/4	4x4	24x1,5	87230PC09	1	10
230	3/4	6x6	24x1,5	87230PD09	1	10
230	3/4	8x8	24x1,5	87230PE09	1	5
230	3/4	10x10	24x1,5	87230PF09	1	5
230	1"	4x4	24x1,5	87230PJ09	1	10
230	1"	6x6	24x1,5	87230PK09	1	10
230	1"	8x8	24x1,5	87230PL09	1	5
230	1"	10x10	24x1,5	87230PM09	1	5
232	3/4	4x4	1/2	87232PC09	1	10
232	3/4	6x6	1/2	87232PD09	1	10
232	3/4	8x8	1/2	87232PE09	1	5
232	3/4	10x10	1/2	87232PF09	1	5
232	1"	4x4	1/2	87232PJ09	1	10
232	1"	6x6	1/2	87232PK09	1	10
232	1"	8x8	1/2	87232PL09	1	5
232	1"	10x10	1/2	87232PM09	1	5

Coplanar manifold. 1/2" and 24x1,5 side male outlets with interaxe 37,5. Distance between head outlets 50 mm.

Male/Female modular single manifold, side exits Male 1/2" with **conical seat (art.222)**, 1/2" with **flat seat (art.224)**, 24x1,5 (art.223), **Euroconus (art.186)**. Articles 222, 223 and 224 with inter-axe between outlets 37,5 mm., art. 186 with inter-axe between outlets 50 mm.



ART. 227 | 228 | 229

ART	DESCRIPTION	HEAD CONNECT.	SIDE CONNECT. NR.	SIDE CONNECT. THREAD	CODE		
227	3/4"x2	3/4	2	1/2	87227PA06	10	50
227	3/4"x3	3/4	3	1/2	87227PB06	5	25
227	3/4"x4	3/4	4	1/2	87227PC06	5	25
227	1"x2	1"	2	1/2	87227PG06	5	25
227	1"x3	1"	3	1/2	87227PH06	5	25
228	3/4"x2	3/4	2	24x1,5	87228PA06	10	50
228	3/4"x3	3/4	3	24x1,5	87228PB06	5	25
228	3/4"x4	3/4	4	24x1,5	87228PC06	5	25
228	1"x2	1"	2	24x1,5	87228PG06	5	25
228	1"x3	1"	3	24x1,5	87228PH06	5	25
229	1"x2	1"	2	3/4	87229PG06	5	25
229	1"x3	1"	3	3/4	87229PH06	5	25

Fit-together single manifold with interception valves. 3/4" head connections with interaxe 37,5 mm and 1" head connection with interaxe 50 mm. 1/2", M24x1,5 and 3/4" side connections. It includes: hot/cold plates: one side red, the other side blue and double face plates with descriptions for sanitary and heating system in the following languages: Italian, Russian, English, Spanish, Greek, Hungarian.



ART. 213 | 214

ART	HEAD CONNECT.	SIDE CONNECT. NR.	SIDE CONNECT. THREAD	CODE		
213	3/4	2x2	24x1,5	87213PA05	2	20
213	3/4	2x2	24x1,5	87213PA06	2	20
214	3/4	2x2	1/2	87214PA05	2	20
214	3/4	2x2	1/2	87214PA06	2	20

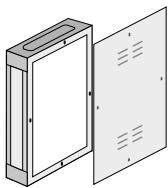
Fit-together coplanar manifold. Side male outlets with interaxe 37,5 mm. Distance between head outlets 50 mm.



ART. 210

ART	HEAD CONNECT.	SIDE CONNECT. NR.	SIDE CONNECT. THREAD	CODE		
210	3/4	2x2	1/2"	87210PA05	1	10

Double fit-together coplanar manifold with interception valves. For heating and sanitary systems. With hot/cold plates: one side red – the other side blue. 1/2" male side connections.  
Side male outlets with interaxe 37,5 mm. Distance between head outlets 50 mm.



ART. 190

ART.	HEIGHT (mm)	WIDTH (mm)	DEPTH (mm)	CODE	
190	400	300	70	871900A09	5
190	500	300	70	871900B09	5
190	700	300	70	871900D09	5

Box for manifolds art. 230, 232, 213, 214. Zinc plated, white painted sheet. With frame, bottom and brackets.



ART. 191

ART.	HEIGHT (mm)	WIDTH (mm)	CODE	
191	300	200	871910O09	10
191	400	300	871910A09	20
191	500	300	871910B09	20
191	600	300	871910C09	20
191	700	300	871910D09	20

Door for manifolds with frame and brackets. Zinc plated, white painted sheet.



ART. 195

ART.	HEIGHT (mm)	WIDTH (mm)	CODE	
195	400	250	871950H20	20
195	500	250	871950I20	20
195	600	300	871950L20	20

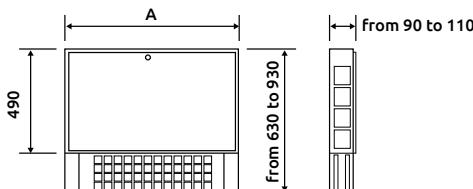
Plastic cover for manifolds. With frame and fixing screws.



ART. 196

ART.	SIZE A (mm)	CODE	
196	500	87196OE09	1
196	700	87196OF09	1
196	850	87196OK09	1
196	1000	87196OG09	1
196	1200	87196OH09	1

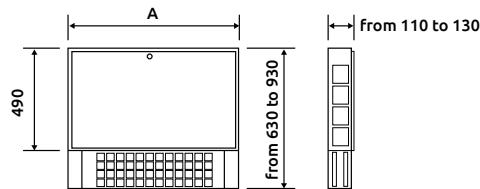
White RAL 9010 painted box for underfloor heating systems with lock. Adjustable height (from 630 mm to 930 mm) and depth (from 90 mm to 110 mm). It is possible to regulate the internal position of the manifold (up-down and laterally). **For manifolds without circulating pump.** Sheet frame and cover thickness 1 mm for a high constructive solidity.



ART. 197

ART.	SIZE A (mm)	CODE	
197	600	87197OC09	1
197	700	87197OF09	1
197	850	87197OK09	1
197	1000	87197OG09	1
197	1200	87197OH09	1

White RAL 9010 painted box for underfloor heating systems with lock. Adjustable height (from 630 mm to 930 mm) and depth (from 110 mm to 130 mm). It is possible to regulate the internal position of the manifold (up-down and laterally). **For manifolds with circulating pump.** Sheet frame and cover thickness 1 mm for a high constructive solidity.





NEW

ART. 192

ART.	HEIGHT (mm)	WIDTH (mm)	DEPTH (mm)	CODE	
192	290	330	90	87192OA09	5
192	310	430	90	87192OB09	5
192	330	530	90	87192OC09	5
192	330	630	90	87192OD09	5

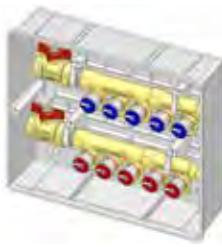
White painted RAL 9010 manifold cabinet. Thanks to the internal brackets, it is possible to adjust the position of the manifold both in height and laterally.

### ASSEMBLY ART. 192 WITH MANIFOLDS 227-228-229 3/4" + BALL VALVES 3/4"

Goods not available in stock.  
The cabinets are assembled at the time of order processing.



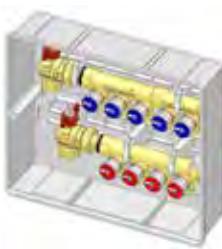
**LEFT** connection without valves



**RIGHT** connection without valves

**LEFT** connection with 2 straight ball valves 347 3/4"

**RIGHT** connection with 2 straight ball valves 347 3/4"



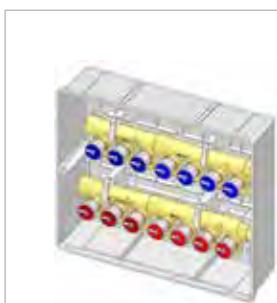
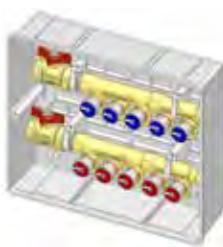
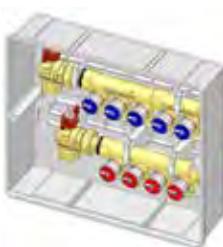
**LEFT** connection with 362 and 225 3/4" ball valves

**RIGHT** connection with 362 and 225 3/4" ball valves

Outlets	Hot water circuits					Cold water circuits					
	Sink	2 <sup>nd</sup> Sink	Shower	Bidet	Washing Machine	Sink	2 <sup>nd</sup> Sink	Shower	Bidet	Washing Machine	WC
3	•		•	•			•	•	•	•	•
4	•		•	•	•		•	•	•	•	•
5	•	•	•	•	•	•	•	•	•	•	•
3			•	•	•	•	•	•	•	•	•
4	•	•	•	•		•	•	•	•	•	•
3	•		•	•		•	•	•	•	•	•
4	•	•	•	•		•	•	•	•	•	•
3	•		•	•		•	•	•	•	•	•
4	•	•	•	•		•	•	•	•	•	•
5	•	•	•	•	•	•	•	•	•	•	•
3			•	•	•	•	•	•	•	•	•
4	•		•	•	•	•	•	•	•	•	•
5	•	•	•	•	•	•	•	•	•	•	•
3			•	•	•	•	•	•	•	•	•
4	•	•	•	•	•	•	•	•	•	•	•
3	•		•	•		•	•	•	•	•	•
4	•	•	•	•		•	•	•	•	•	•
3	•		•	•		•	•	•	•	•	•
4	•	•	•	•		•	•	•	•	•	•
3	•		•	•		•	•	•	•	•	•
4	•	•	•	•		•	•	•	•	•	•
5	•	•	•	•	•	•	•	•	•	•	•
3			•	•	•	•	•	•	•	•	•
4	•		•	•	•	•	•	•	•	•	•
5	•	•	•	•	•	•	•	•	•	•	•
3			•	•	•	•	•	•	•	•	•
4	•	•	•	•	•	•	•	•	•	•	•

## ASSEMBLY ART. 192 WITH MANIFOLDS 227-228-229 1" + BALL VALVES 1"

Goods not available in stock.  
The cabinets are assembled at the time of order processing.

**LEFT** connection without valves**RIGHT** connection without valves**LEFT** connection with 2 straight ball valves 347 1"**RIGHT** connection with 2 straight ball valves 347 1"**LEFT** connection with 362 and 225 1" ball valves**RIGHT** connection with 362 and 225 1" ball valves

Outlets	Hot water circuits					Cold water circuits					
	Sink	2 <sup>nd</sup> Sink	Shower	Bidet	Washing Machine	Sink	2 <sup>nd</sup> Sink	Shower	Bidet	Washing Machine	Wc
3	•		•	•		•		•	•	•	•
	•		•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
			•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
4	•		•	•		•		•	•	•	•
	•		•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
			•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
5	•		•	•		•		•	•	•	•
	•		•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
			•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
3			•	•	•	•		•	•	•	•
			•	•	•	•		•	•	•	•
			•	•	•	•		•	•	•	•
			•	•	•	•		•	•	•	•
			•	•	•	•		•	•	•	•
4	•		•	•	•	•		•	•	•	•
	•		•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
			•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
3	•		•	•	•	•		•	•	•	•
	•		•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
			•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
4	•		•	•	•	•		•	•	•	•
	•		•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
			•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
5	•		•	•	•	•		•	•	•	•
	•		•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
			•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
3			•	•	•	•		•	•	•	•
			•	•	•	•		•	•	•	•
			•	•	•	•	•	•	•	•	•
			•	•	•	•		•	•	•	•
			•	•	•	•	•	•	•	•	•
4	•		•	•	•	•		•	•	•	•
	•		•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
			•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
3	•		•	•	•	•		•	•	•	•
	•		•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
			•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
4	•		•	•	•	•		•	•	•	•
	•		•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
			•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
5	•		•	•	•	•		•	•	•	•
	•		•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
			•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
3			•	•	•	•		•	•	•	•
			•	•	•	•		•	•	•	•
			•	•	•	•	•	•	•	•	•
			•	•	•	•		•	•	•	•
			•	•	•	•	•	•	•	•	•
4	•		•	•	•	•		•	•	•	•
	•		•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
			•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
5	•		•	•	•	•		•	•	•	•
	•		•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
			•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
3			•	•	•	•		•	•	•	•
			•	•	•	•		•	•	•	•
			•	•	•	•	•	•	•	•	•
			•	•	•	•		•	•	•	•
			•	•	•	•	•	•	•	•	•
4	•		•	•	•	•		•	•	•	•
	•		•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
			•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
5	•		•	•	•	•		•	•	•	•
	•		•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•
			•	•	•	•		•	•	•	•
	•	•	•	•	•	•	•	•	•	•	•



ART. 202

ART.	SIZE	CODE	BOX		
202	3/4"	87202AE05	100		
202	1"	87202AF05	100		
202	3/4"	87202AE06	100		
202	1"	87202AF06	100		

Female end connection for manifolds. 3/8" female – 1/2" female outlets.



ART. 268

ART.	SIZE	CODE	BOX		
268	3/4"	87268AE05	100		
268	1"	87268AF05	100		
268	1"1/4"	87268AG05	100		
268	3/4"	87268AE06	100		
268	1"	87268AF06	100		
268	1"1/4"	87268AG06	100		

Male terminal connection with anti-leakage gasket, 3/8"F and 1/2"F outlets.



ART. 203

ART.	SIZE	CODE	BOX		
203	3/4"	87203AE05	100		
203	1"	87203AF05	100		
203	3/4"	87203AE06	100		
203	1"	87203AF06	100		

Male end connection for manifolds. 3/8" female - 1/2" female outlets.



ART. 199

ART.	SIZE	CODE	BOX		
199	1"	87199AF06	50		
199	1"1/4"	87199AG06	50		

Male terminal union. Revolving connection, built-in interception valve, 3/8" outlet and 1/2" outlet for drain cock.



ART. 174

ART.	SIZE	CODE	BOX		
174	1"	87174AF06	5		

1" adjustable by-pass. For underfloor manifolds. With revolving connection.



ART. 204

ART.	SIZE	CODE	BOX		
204	1"	87204AF06	10		

Male-female intermediate fitting. Revolving connection, built-in air vent and 1/2" outlet for drain cock.



ART. 198

ART.	SIZE	CODE	BOX		
198	1"	87198AF06	50		
198	1"1/4"	87198AG06	50		

Male intermediate fitting with revolving connection. Used to join the manifolds.

ART.	SIZE	CODE	BOX		
205	1"	87205AF06	1	20	

Male-female intermediate fitting. Revolving connection, automatic air vent, thermometer and drain cock.



ART. 209

ART.	SIZE	CODE			
209	1"	87209AF06	1	20	
209	1"1/4	87209AG06	1	20	

Revolving terminal connection with automatic air vent and drain cock.



ART. 269

ART.	SIZE	CODE			
269 C/701	1"	87269AF06701	1	25	
269	1"	87269AF06	1	25	
269	1"1/4	87269AG06	1	25	

Terminal connection with anti-leakage gasket, automatic or manual air vent and drain cock.



ART. 208

ART.	SIZE	CODE		
208	3/4"	87208AE06	50	
208	1"	87208AF06	50	
208	1"1/4	87208AG06	50	

Bracket complete with anti-vibration supports. Interaxe between the 2 manifolds: 210 mm.



ART. 208L

ART.	SIZE	CODE		
208L	1"	87208AF06L	20	

Bracket complete with anti-vibration supports. Inter-axe between the 2 manifolds: 210 mm. Allow the installation of manifolds in cabinets with 110mm. depth (Art. 197). The lower side increasing the space for the passage of pipes and solving the bending problem of pipe connection.



ART. 206

ART.	TEMPERATURE RANGE	CODE			
206	0-60°C	872060060	1	100	
206	0-80°C	872060080	1	100	
206	0-120°C	872060120	1	100	

Thermometer with spring clip, 40 mm diameter.



ART. 287

ART.	TEMPERATURE RANGE	CODE			
287	0-120°C	872870120	1	100	

Thermometer with spring clip, 60 mm diameter.



ART. 208H

ART.	SIZE	CODE		
208H	1"	87208AF06H	20	

Bracket complete with anti-vibration supports. Interaxe between the 2 manifolds: 260 mm. It allows the installation of circulators with 180 mm. length.



ART. 201

ART.	SIZE	CODE			
201	1/2"	87201AD05	10	500	
201	3/4"	87201AE05	10	400	
201	1"	87201AF05	5	200	
201	1"1/4	87201AG05	10	100	
201	1/2"	87201AD06	10	500	
201	3/4"	87201AE06	10	400	
201	1"	87201AF06	5	200	
201	1"1/4	87201AG06	2	100	

Blind end cap for manifolds. Sizes: 1/2 - F3/4 F - 1" F - 1"1/4 F.

## ACCESSORIES FOR MANIFOLDS



ART. 172

ART.	SIZE	CODE	
172	1/2"	87172AD06	1

Drain cock.



ART. 207

ART.	SIZE	FINISH	CODE		
207	3/8"	BRASS	87207AC05	10	400
207	3/8"	NICHEL PLATED	87207AC06	10	400

Cockpit for thermometer art. 206 and art. 287.



ART. 173

ART.	SIZE	CODE		
173	3/4"	87173AE05	10	400
173	1"	87173AF06	10	100
173	1"1/4	87173AG06	10	100

End cap with o-ring.



ART. 185

ART.	SIZE	CODE	
185	1"	87185AF06	100

Thermometer cap with gasket for manifold connections (thermometer art. 206 0-60° included).



ART. 215

ART.	SIZE	COLOUR	CODE		
215	1"	RED	87215AF11	5	30
215	1"	BLUE	87215AF12	5	30

Full bore ball valve with tail, red/blue coated Aluminum T-handle, flat seat connection. Double O-ring, anti-blow out stem. Flat seat tail makes these valves perfect for underfloor heating system. Thread ISO 228.



ART. 216

ART.	SIZE	COLOUR	CODE		
216	1"	RED	87216AF11	1	10
216	1"	BLUE	87216AF12	1	10
216	1"1/4"	RED	87216AG11	1	10
216	1"1/4	BLUE	87216AG12	1	10

Full bore ball valve **with revolving connection**. Tail with o-ring seat. With thermometer (thermometer art. 206 0-60° included). Thread ISO 228.

ART. 225

ART.	SIZE	COLOUR	CODE	
225	1"	RED	87225AF11	6
225	1"	BLUE	87225AF12	6

Full bore angle ball valve, red/blue coated Aluminum T-handle, M/F connection thread, Double O-ring, anti-blow out stem. Thread ISO 228.



ART. 226

ART.	SIZE	COLOUR	CODE		
226	1"	RED	87226AF11	1	10
226	1"	BLUE	87226AF12	1	10

Full bore angle ball valve. **Revolving connection**. Tail with plane seat. With thermometer (thermometer art. 206 0-60° included). Thread ISO 228.

ART. 236

ART.	SIZE	CODE		
236	3/4"-3/8"	87236LB05	10	200
236	3/4"-1/2"	87236LC05	10	200
236	1"-3/8"	87236LD05	10	200
236	1"-1/2"	87236LE05	10	200
236	1"-3/4"	87236LF05	10	200
236	3/4"-3/8"	87236LB06	10	200
236	3/4"-1/2"	87236LC06	10	200
236	1"-3/8"	87236LD06	10	200
236	1"-1/2"	87236LE06	10	200
236	1"-3/4"	87236LF06	10	200

Hollow end cap for manifolds. Sizes: 3/4 male for 3/8 female - 3/4 male for 1/2 F - 1" male for 3/8 female - 1" male for 1/2 female - 1" male for 3/4 female.



ART. 221

ART.	SIZE	BRASS FINISH CODE	CHROME FINISH CODE				
221	1/2"	87221AD05	87221AD06	10	500		
221	3/4"	87221AE05	87221AE06	10	400		
221	1"	87221AF05	87221AF06	5	200		
221	1"1/4	87221AG05	87221AG06	10	100		

Blind head cap for flanged manifolds. Connection: 1/2" M - 3/4M - 1" M - 1"1/4 M.



ART. 234

ART.	SIZE	CODE		
234	3/4-3/4	87234LD06	10	50
234	1"-1"	87234LG06	10	50

Three-piece male/female eccentric. For coplanar manifolds. **Flat connection to mount the motorized zone valves.**



ART. 238

ART.	SIZE	CODE		
238	3/8"	87238AC05	10	200
238	1/2"	87238AD05	10	200
238	24x1,5	87238OO05	10	200
238	3/4"	87238AE05	10	200
238	3/8"	87238AC06	10	200
238	1/2"	87238AD06	10	200
238	24x1,5	87238OO06	10	200
238	3/4"	87238AE06	10	200

Blind cap for manifold's side outlets with EPDM gasket.



ART. 235

ART.	SIZE	CODE		
235	3/4-3/4	87235LD06	1	40
235	3/4-1"	87235LE06	1	40
235	1"-1"	87235LG06	1	40

Three-piece male eccentric. For coplanar manifolds. **Flat connection to mount the motorized zone valves.**

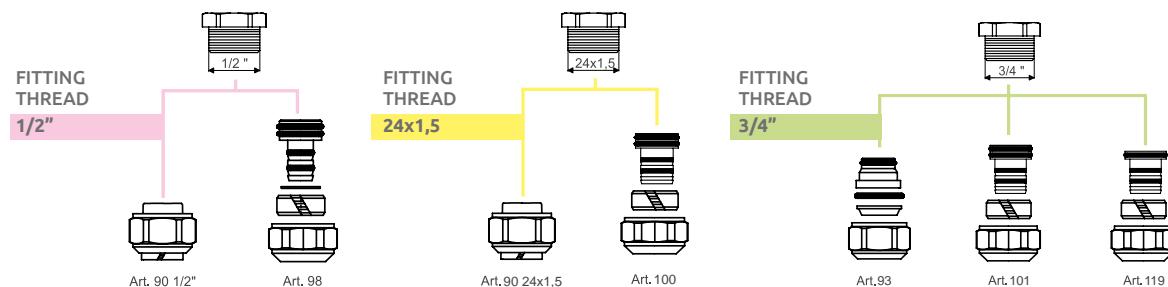


ART. 217

ART.	SIZE	CONNECTION THREAD	CODE		
217	1/2	24x1,5	87217RD06	10	200
217	1/2	3/4	87217LC06	10	200

Male fitting for manifolds. With O-ring. Mountable on the bar manifolds art. 1101, 1102, 1103, 1104, 1105.

## **SELECTION OF FITTINGS ACCORDING TO VALVES AND LOCKSHIELDS THREADS**



ART. 90

ART.	PIPE SIZE	CONNECTION THREAD	CODE			
90	10	1/2"	81090FC06	1	250	
90	12	1/2"	81090FD06	1	250	
90	14	1/2"	81090FE06	1	250	
90	15	1/2"	81090FF06	1	250	
90	16	1/2"	81090FG06	1	250	
90	10	24x1,5	81090GB06	1	250	
90	12	24x1,5	81090GC06	1	250	
90	14	24x1,5	81090GD06	1	250	
90	15	24x1,5	81090GE06	1	250	
90	16	24x1,5	81090GF06	1	250	
90	18	24x1,5	81090GG06	1	250	

Patent-pending fitting SICURBLOC for copper pipe.



ART. 98

ART.	PIPE SIZE	EXT. PIPE SIZE	INT. PIPE SIZE	CONNECTION THREAD	CODE		
98	16x1,5	16	13	1/2"	81098GI06	1	250
98	14x2	14	10	1/2"	81098BN06	1	250
98	16x2	16	12	1/2"	81098GH06	1	250
98	16x2,2	16	11,6	1/2"	81098BO06	1	250
98	16x2,25	16	11,5	1/2"	81098BO06	1	250

## Fitting for Pex and Pex-Al-Pex pipe.



ART. 100

ART.	PIPE SIZE	EXT. PIPE SIZE	INT. PIPE SIZE	CONNECTION THREAD	CODE	
100	18x2,5	18	13	24X1,5	81100GG06	1 250
100	20x2,5	20	15	24X1,5	81100GK06	1 250
100	12x1,1	12	9,8	24X1,5	81100GB06	1 250
100	12X2	12	8	24X1,5	81100BM06	1 250
100	14X2	14	10	24X1,5	81100BN06	1 250
100	16X2	16	12	24X1,5	81100GH06	1 250
100	18X2	18	14	24X1,5	81100GJ06	1 250
100	20X2	20	16	24X1,5	81100BQ06	1 250
100	16X2,2	16	11,6	24X1,5	81100BO06	1 250
100	16X2,25	16	11,5	24X1,5	81100BO06	1 250
100	18X2,2	18	13,6	24X1,5	81100BP06	1 250
100	20X2,25	20	15,5	24X1,5	81100BR06	1 250
100	16X1,5	16	13	24X1,5	81100GI06	1 250
100	20X1,9	20	16,2	24X1,5	81100GN06	1 250
100	16X2,6 rehau rautitan	16,2	11	24X1,5	81100GL06	1 250
100	17x2	17	13	24x1,5	81100BS06	1 250
100	20x2,9	20	14,2	24x1,5	81100GM06	1 250
100	25x2,5	20	15	1"	81100GO06	1 150
100	26x3	20	14	1"	81100GP06	1 150

Fitting for Pex and Pex-Al-Pex pipe.



ART. 101

ART.	PIPE SIZE	EXT. PIPE SIZE	INT. PIPE SIZE	CONNECTION THREAD	CODE		
101	18x2,5	18	13	3/4"	81101GG06	1	250
101	20x2,5	20	15	3/4"	81101GK06	1	250
101	12x1,1	12	9,8	3/4"	81101GB06	1	250
101	12X2	12	8	3/4"	81101BM06	1	250
101	14X2	14	10	3/4"	81101BN06	1	250
101	16X2	16	12	3/4"	81101GH06	1	250
101	18X2	18	14	3/4"	81101GJ06	1	250
101	20X2	20	16	3/4"	81101BQ06	1	250
101	16X2,2	16	11,6	3/4"	81101BO06	1	250
101	16X2,25	16	11,5	3/4"	81101BO06	1	250
101	18X2,2	18	13,6	3/4"	81101BP06	1	250
101	20X2,25	20	15,5	3/4"	81101BR06	1	250
101	16X1,5	16	13	3/4"	81101GI06	1	250
101	20X1,9	20	16,2	3/4"	81101GN06	1	250
101	16X2,6 rehaus rautitan	16,2	11	3/4"	81101GL06	1	250
101	17x2	17	13	3/4"	81101BS06	1	250
101	20x2,9	20	14,2	3/4"	81101GM06	1	250



Fitting for Pex and Pex-Al-Pex pipe. Long nut and adapter with **4 o-rings**.



ART. 119

ART.	PIPE SIZE	EXT. PIPE SIZE	INT. PIPE SIZE	FITTING THREAD	CODE		
119*	12x1,1	12	9,8	3/4"	81119GB06	1	250
119**	16x1,5	16	13	3/4"	81119GI06	1	250
119**	16x2	16	12	3/4"	81119GH06	1	250
119**	17x2	17	13	3/4"	81119BS06	1	250

Fitting for Pex and Pex-Al-Pex pipe. Compact adapter available with **1 O-ring** or **3 O-rings** version.



ART. 111

ART.	CODE	
111	87111OO06	1

Key.



ART. 114

ART.	CODE	
114	87114OO06	1

Screwdriver for lockshields



ART. 112

ART.	CODE	
112	87112OO06	1

Key for tails.



ART. 116

ART.	CODE	
116	87116OO06	1

Wrench for fittings. One side Hexagon 24 for 1/2" fittings; the other side Hexagon 27 for 24x1,5 fittings.



ART. 113

ART.	CODE	
113	87113OO06	1

Key for the external hexagon of the patent-pending tail art.940. Es. 18.



ART. 117

ART.	CODE	
117	87117OO06	1

Wrench for fittings. One side Hexagon 27 for 24x1,5 fittings; the other side Hexagon 30 for EUROCONUS fittings.



# C

## UNDERFLOOR HEATING SYSTEMS PRODUCTS AND COMPONENTS

---



**C1** THERMAL-ACOUSTIC  
INSULATION  
page 90



**C4** DEHUMIDIFIERS  
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**C2** PEX AND MULTILAYER  
PIPES  
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**C5** CONTROLLED  
MECHANICAL  
VENTILATION  
page 97



**C3** ACCESSORIES  
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ART. P105

ART.	TOTAL THICKNESS	INSULATING THICKNESS	HEATED SURFACE (mm)	EPS	CODE	N. PANELS	SMQ
P105	32 mm	10 mm	1400x800	200	88P1053099	22	24,64
P105	42 mm	20 mm	1400x800	150	88P1054099	16	17,92
P105	52 mm	30 mm	1400x800	150	88P1055099	12	13,44
P105	62 mm	40 mm	1400x800	150	88P1056099	10	11,20
P105	72 mm	50 mm	1400x800	150	88P1057099	8	8,96

**Thermoformed insulating panel** in sintered expanded polystyrene foam, EPS pre-formed, CE marked in compliance with UNI EN 13163 standard, with thermoformed trampling leaf, thickness 600 micron with 22 mm embossed reliefs. It is suitable for pipes with 16 mm and 17 mm external diameter; it has multiple circuits with 50 mm pitch and overlapping edges to joint the panels firmly.



ART. P106

ART.	TOTAL THICKNESS	INSULATING THICKNESS	ACOUSTIC INSULATION mm=dB	HEATED SURFACE (mm)	CODE	N. PANELS	SMQ
P106	47 mm	25 mm	50=31	1200x800	88P1065399	11	10,56
P106	57 mm	35 mm	50=32	1200x800	88P1066399	9	8,64

**Thermal and acoustic insulating panel** in EPS pre-formed sintered expanded polystyrene foam with double density (EPS200 + stretch), in compliance with EN 13163 Annex ZA standard. It is provided with a 600 micron walkable thermoformed shell with 22 mm reliefs. The edges are overlapping to joint the panels firmly. 50 mm pitch and multiple circuits. Suitable for 16-17 mm pipe.



ART. P107

ART.	TOTAL THICKNESS	INSULATING THICKNESS	HEATED SURFACE (mm)	EPS	CODE	N. PANELS	SMQ
P107	30 mm	10 mm	800x600	250	88P1072099	16	7,68

Panel with hollow reliefs in recycled plastic including elastic EPS of blue colour, in compliance with Standard EN 13163.

The hollow reliefs allow the surface screed to wrap the panel, thus calculating the thickness of the screed from the base of the insulating panel and making it sufficient a height above the panel of only 10 mm.  
Suitable for 16mm and 17mm pipe; 50 mm pitch and multiple circuits.



ART. P107A

ART.	TOTAL THICKNESS	HEATED SURFACE (mm)	CODE	N. PANELS	SMQ
P107A	15 mm	1200x600	88P1072099A	22	15,84

Lowered panel with hollow reliefs in recycled plastic, no insulation, including an adhesive film for application on existing floor.

The hollow reliefs allow the surface screed to wrap the panel, thus calculating the thickness of the screed from the base of the insulating panel and making it sufficient a height above the panel of only 10 mm.  
Suitable for 16mm and 12mm pipe; 50 mm pitch and multiple circuits.



ART. P109

ART.	THICKNESS	HEATED SURFACE(mm)	EPS	CODE	N. PANELS	SMQ
P109	20 mm	10.000x1.000	150	88P1090020	1	10
P109	30 mm	10.000x1.000	150	88P1090030	1	10
P109	40 mm	10.000x1.000	150	88P1090040	1	10

**Flat insulating panel in rolls** in EPS sintered expanded polystyrene foam, CE marked in compliance with UNI EN 13163 standard, laminated with a reflective film with a squared framework for providing 50 mm pitch and multiple circuits and with adhesive edges to fix the panels. Rolls are 10 m long. Suitable for 16-20 mm pipe.



ART. P105SG

ART.	TOTAL THICKNESS	INSULATING THICKNESS	HEATED SURFACE (mm)	EPS	CODE	N. PANELS	SMQ
P105SG	32 mm	10 mm	1400x800	500	88P105SG3099	22	24,64
P105SG	52 mm	30 mm	1450x800	500	88P105SG5099	12	13,44

**Thermoformed insulation panel** in sintered expanded polystyrene **EPS 500 with graphite** additive. 0,030 W/mk thermal conductivity, CE marked in compliance with EN 13163 standard, complete with thermoformed laminate shell with a thickness of 600 microns and 22mm embossed reliefs.

## PEX AND MULTILAYER PIPES



ART. P198

ART.	SIZE (mm)	AMOUNT OF WATER l/m	CODE		METERS FOR PALLET	
P198	12x1,1	0,063	88P198GB20098	200m	5000	
P198	16x2	0,113	88P198GH20098	200m	3800	
P198	17x2	0,113	88P198BS20098	200m	3800	
P198	17x2	0,113	88P198BS40098	400m	3200	
P198	17x2	0,113	88P198BS60098	600m	4800	
P198	20x2	0,200	88P198BQ60098	600m	4200	

High Density Polyethylene Cross-linked **PE-Xa** pipe, consisting of three layers, manufactured according to the peroxides method and the EN ISO 15875 standard. Max. Temperature 95 ° C, working pressure 6 bar, minimum bend radius 5xD; natural colour.



ART. P200

ART.	SIZE (mm)	AMOUNT OF WATER l/m	CODE		METERS FOR PALLET	
P200	17x2	0,133	88P200BS20099	200m	2400	
P200	17x2	0,133	88P200BS40099	400m	2400	
P200	17x2	0,133	88P200BS60099	600m	2400	

High Density Polyethylene Cross-linked **PE-Xc** HD pipe, consisting of five layers, manufactured in compliance with EN ISO 15875. Max. Temperature 90°C; working pressure 8 Bar; minimum bend radius 5xD; natural colour.



ART. P197

ART.	SIZE (mm)	ALUMINIUM THICKNESS	AMOUNT OF WATER l/m	CODE		METERS FOR PALLET	
P197	16x2	0,20 mm	0,113	88P197GH10099	100m	2200	
P197	16x2	0,20 mm	0,113	88P197GH50099	500m	4000	
P197	20x2	0,20 mm	0,200	88P197BQ10099	100m	1900	
P197	20x2	0,20 mm	0,200	88P197BQ50099	500m	2500	
P197	26x3	0,30 mm	0,314	88P197GP05099	50m	750	
P197	32x3	0,60 mm	0,531	88P197GQ05099	50m	500	

Multilayer Polyethylene **PERT-AL-PERT** pipe, manufactured in compliance with UNI EN ISO 21003 standard; white colour; Working temperature 70°C, Working pressure 6 Bar, Max temperature 95°C. PERT Polyethylene: Polyethylene of raised temperature resistance. Butt-welded aluminium core.



ART. P193

ART.	SIZE (mm)	ALUMINIUM THICKNESS	AMOUNT OF WATER l/m	CODE		METERS FOR PALLET	
P193	16x2	0,30 mm	0,113	88P193GH20099	200m	2400	
P193	16x2	0,30 mm	0,113	88P193GH50099	500m	6000	
P193	20x2	0,40 mm	0,200	88P193BQ10099	100m	1400	
P193	26x3	0,60 mm	0,314	88P193GP05099	50m	600	
P193	32x3	0,80 mm	0,531	88P193GQ05099	50m	500	

Multilayer Cross-linked Polyethylene **PE-Xc/AL/PE-Xb** pipe, manufactured in compliance with UNI EN ISO 21003 standard; suitable for sanitary and heating systems. Working temperature 70°C; 10 Bar pressure; max. temperature 95°C; in compliance with DVGW W542 standards. Butt-welded aluminium core. The pipe inner part is made of PE-Xc, the external one of PE-Xb. The aluminium minimum thickness is 0,3 mm.



ART. P100

ART.	SIZE	CODE	
P100	h. 150 mm	88P1000O99	50 m
P100	h. 250 mm	88P1002599	50 m

Insulating adhesive perimeter strip made of closed-cell polyethylene foam, suitable for the installation of radiant panels. It absorbs the thermal dilatations of the panel and the film prevents the cements mixture from seeping in the lower part of the panel. Available in 50 mt rolls only.



ART. P118

ART.	SIZE	CODE	
P118	8 mm	88P118802099	20 m

Insulating adhesive perimeter strip for reduced thicknesses screeds in closed cell expanded polyethylene foam. It absorbs the thermal dilatations of the panel. Available in 20 m rolls.



ART. P215

ART.	SIZE	CODE	
P215	16-18	88P215BG99	50
P215	20	88P215BH99	50

Polyamide 90° pipe bend for Ø 16-17-18-20 mm pipes; it can be placed during or after pipe installations and it is ideal for piping near manifolds.



ART. P216

ART.	SIZE	CODE	
P216	16-17 mm	88P216OO99	100 pcs.

Pipe fixing clip to be positioned between the reliefs. Suitable for thermoformed insulating panel art. P105 and P106.



ART. P108

ART.	SIZE	THICKNESS	CODE	
P108	h. 150 mm	8 mm	88P108FA99L	25 m

Insulating adhesive perimeter strip made of closed-cell polyethylene foam, **L pre-formed and ideal for heat-insulating panels**. It absorbs the thermal dilatations of the panel and the film prevents the cements mixture from seeping in the lower part of the panel. Suitable for panel art. P106. Available in 25 mt rolls.



ART. P211

ART.	SIZE	CODE	
P211	140x2 m	88P211OO99	280 smq

Polyethylene film. 0,10 mm Thickness. Available in 280 smq rolls. It is used below insulating panels to prevent moisture infiltration or in dry installations systems to avoid the friction between two different metals or components.



ART. P201

ART.	SIZE	THICKNESS	CODE		PALLET
P201	50	16-17	88P2011799	32 m	896 m
P201	50	20	88P2012099	32 m	896 m

Impact-resistant plastic and self adhesive bar for Ø 16-17 and 20 mm pipes; 50 mm pitch and multiple circuits; 2 mt long.



ART. P202

ART.	SIZE	CODE	
P202	16-17-20 mm	88P202OO99	500 pcs.

Clip to manually fix Ø 16-17-20 mm pipes on flat panels.

## ACCESSORIES



ART. P203

ART.	PIPE SIZE	CODE	
P203	16-17-20 mm	88P203OO99	300 pcs.

Clips to automatically fix the pipe. Made of plastic and adhesive-joined. Insertion with clip fixing tool. Ideal for flat panels.



ART. P212

ART.	PIPE SIZE	CODE	
P212	16-17-20 mm	88P2122O99	1000

Clip to be hooked to the grid with 3 mm wire, which enables to bury Ø 16-17-20 mm pipes in concrete.

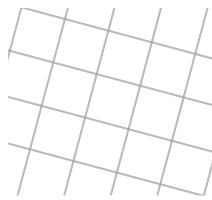


ART. P203  
+  
ART. P204  
=  
TIME  
SAVING

ART. P204

ART.	CODE	
P204	88P204OO99	1

Pipe fixing tool with clips art. P203. It permits an upright position whilst working minimizing fatigue.



ART. P219

ART.	CODE	
P219	88P219OO99	50 mq

Glass fiber mesh. Size: 40x40 mm. Rolls: 50 mq, h=1 mt. It allows a better uniformity during the ripening step of the screed.



ART. P214

ART.	SIZE	CODE	
P214	8 mm	88P214OO99	100

Panel locking plug with 8 mm diameter for flat panels.



ART. P205

ART.	CODE	
P205	88P205OO99	1
P205 with case	88P205OO98	1

Unwinder for pipes with max. 20 mm diameter and 600 mt. length. It can be supplied in a wooden case for housing and transportation.



ART. P217

ART.	CODE	
P217	88P217OO99	2 mt

Expansion joint in expanded Polyethylene, density 50 kg/mc. H-shaped profile, adhesive stripe, red coloured. 2 mt. bar.



ART. P226

ART.	CODE	
P226	88P2260699	6 kg

Macro Synthetic Fiber made from extrusion of polypropylene-based synthetic polymers, with "wavy" profile, optimized for increasing the adhesion to cementitious matrix of the conglomerate. It reinforces concrete, increasing its ductility and toughness.



ART. P207

ART.	CODE	
P207	88P207OO99	0,6 kg

Polypropylene fibers flakes to protect against plastic shrinkage cracks. The fibers must be added to the dry components before the mixture or to the ready dough in the cement mixer before casting; the minimum dosage recommended is a bag of 0.6 kg per m<sup>3</sup> of concrete.



ART. P220

ART.	DOSAGE	CODE	
P220	1,5 %	88P2200199	lt. 1

Corrosion inhibitor liquid with bactericide to be used to fill in the system. It prevents carbonates to adhere and protects common metals from oxidation and corrosion. It contains a strong biocide able to considerably reduce the algae and biological products development in heating systems. Art. P220 forms a monomolecular protective film on the walls of the heating and cooling systems and removes the thermal and gaseous strains due to the coupling of different metals. Suitable for a good maintenance of the hydraulic circuit system. Dosage: 1,5% of the total water in the system.



ART. P206

ART.	CODE	
P206	88P2061099	tank10 L.

Fluidising additive used to prepare cement mixtures. It reduces the use of water by 20-30%. It improves the density, thermal conductivity and workability of the screed. Dosage: 1 kg. per 100 kg. of cement. Chloride-free.

## RANGE OF DEHUMIDIFIERS

Range of dehumidifiers for radiant air conditioning systems, in the versions for recessed wall mounting and for ceiling mounting.

**Technical characteristics:**

- Structure in galvanized steel plate
- Regenerative synthetic filter under G3 class
- Single-phase multispeed centrifugal fan
- Reciprocating hermetic compressor
- Ecological gas R134a
- Electronic led display board for management and control of all operating functions
- High silence level
- The models for ceiling mounting are also available in the cooling “-C” version with integrated unit



SIZE (mm)			Weight (kg)
L	H	D	
623	250	695	35

**ART. P408-220C**

ART.	DESCRIPTION	CONDENSED HUMIDITY [lt/24h]	NOMINAL AIRFLOW RATE [mc/h]	AVAILABLE SENSITIVE POWER [Watt]	CODE	
P408-220C	Ceiling mounting equipment with integrated unit	22	220	840	88P408DHS220C	1



SIZE (mm)		
L	H	D
803	260	622

**ART. P408-300 / ART. P408-300C**

ART.	DESCRIPTION	CONDENSED HUMIDITY [lt/24h]	NOMINAL AIRFLOW RATE [mc/h]	AVAILABLE SENSITIVE POWER [Watt]	CODE	
P408-300	Ceiling mounting	34	300	-	88P408DHS300	1
P408-300C	Ceiling mounting equipment with integrated unit	34	300	960	88P408DHS300C	1



SIZE (mm)		
L	H	D
858	309	708

**ART. P408-500 / ART. P408-500C**

ART.	DESCRIPTION	CONDENSED HUMIDITY [lt/24h]	NOMINAL AIRFLOW RATE [mc/h]	AVAILABLE SENSITIVE POWER [Watt]	CODE	
P408-500	Ceiling mounting	68	500	-	88P408DHS500	1
P408-500C	Ceiling mounting equipment with integrated unit	68	500	1800	88P408DHS500C	1



SIZE (mm)		
L	H	D
402	622	203

**ART. P409-200**

ART.	DESCRIPTION	CONDENSED HUMIDITY [lt/24h]	NOMINAL AIRFLOW RATE [mc/h]	AVAILABLE SENSITIVE POWER [Watt]	CODE	
P409-200	Built-in wall system	14	200	-	88P409DHP200	1



SIZE (mm)		
L	H	D
730	732	203

**ART. P409-300 / ART. P409-300C**

ART.	DESCRIPTION	CONDENSED HUMIDITY [lt/24h]	NOMINAL AIRFLOW RATE [mc/h]	AVAILABLE SENSITIVE POWER [Watt]	CODE	
P409-300	Built-in wall system	34	300	-	88P409DHP300	1
P409-300C	Built-in wall system with integrated unit	34	300	960	88P409DHP300C	1

## ACCESSORIES FOR CEILING MOUNTING DEHUMIDIFIERS

CODE	DESCRIPTION	TO COMBINE WITH ART.		
88P409200PWB	Structure in galvanized steel plate	P409-200	1	
88P409200PFP	Front grille in lacquered wood	P409-200	1	
88P409300PWB	Structure in galvanized steel plate	P409-300/300C	1	
88P409300PFP	Front grille in lacquered wood	P409-300/300C	1	

## ACCESSORIES FOR DEHUMIDIFIERS

ART.	CODE	DESCRIPTION	
P418	88P4180153	Electronic built-in humidifier	1

## PERFORMANCE

MODEL:		P408-220	P408-220C	P408-300	P408-300C	P408-500	P408-500C
CONDENSED HUMIDITY	l/24h		22		34		68
EVAPORATOR CAPACITY	W		1020				
HEAT LOAD OF WATER	W	870	1820				
NOMINAL WATER FLOW RATE	m <sup>3</sup> /h	0,34	0,39	0,18	0,26	0,36	0,52
WATER PRESSURE DROP	kPa	30		12	25	16	26
SENSIBLE COOLING CAPACITY	W	-	840	-	960	-	1800
ELECTRICAL SUPPLY	V/ph/Hz			230/1/50			
TOTAL POWER INPUT	W	350		460		880	
ABSORBED CURRENT	A	2		3		4,9	
FAN							
TYPE				Double inlet centrifugal fan			
AVAILABLE FAN SPEEDS				H/M/L			
NOMINAL FAN SPEED SET		M		M		M	
NOMINAL AIRFLOW RATE	m <sup>3</sup> /h	220		300		500	
EXTERNAL STATIC PRESSURE	Pa	20		~30		~30	
COMPRESSOR							
TYPE				Reciprocating hermetic			
REFRIGERANT	Type			R134a			
	g	340		360			
OPERATING RANGE							
INLET AIR TEMPERATURE	°C	15÷32		10÷32		10÷32	
INLET WATER TEMPERATURE (WHEN DEHUMIDIFYING)	°C	10÷21		10÷21		10÷21	
NOISE LEVEL							
NOISE PRESSURE LEVEL	Distance	1 mt.		3 mt.		3mt.	
	dB(A)	42		47		39	

## PERFORMANCE

MODEL:		P409-200	P409-300	P409-300C
CONDENSED HUMIDITY	l/24h	14		34
NOMINAL WATER FLOW RATE	mc/h	0,08	0,18	0,26
WATER PRESSURE DROP	kPa	2,3	12	25
SENSIBLE COOLING CAPACITY	W	-	-	960
ELECTRICAL SUPPLY	V/ph/Hz		230/1/50	
TOTAL POWER INPUT	W	320		460
ABSORBED CURRENT	A	1,9		3
FAN				
TYPE			Double inlet centrifugal fan	
AVAILABLE FAN SPEEDS			H/M/L	
NOMINAL FAN SPEED SET			M	
NOMINAL AIRFLOW RATE	m <sup>3</sup> /h	220		300
EXTERNAL STATIC PRESSURE	Pa	20		~30
COMPRESSOR				
TYPE			Reciprocating hermetic	
REFRIGERANT	Tipo		R134a	
OPERATING RANGE				
INLET AIR TEMPERATURE	°C	8÷32		10÷32
INLET WATER TEMPERATURE (WHEN DEHUMIDIFYING)	°C	10÷21		10÷21
NOISE LEVEL:				
NOISE PRESSURE LEVEL	Distance	3 mt.		3 mt.
	dB(A)	34		38



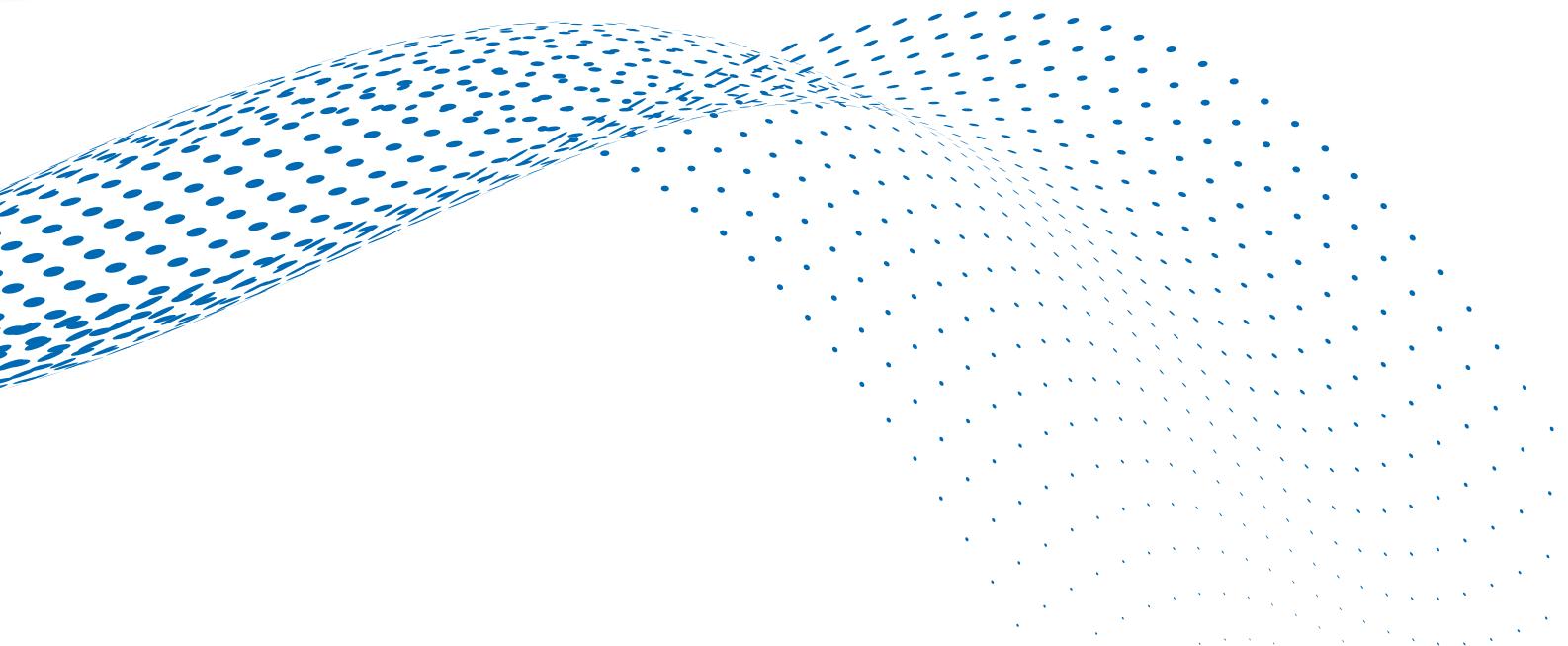
ART. P450

ART.	DESCRIPTION	EFFICIENCY CERAMIC HEAT EXCHANGER	NOMINAL AIRFLOW RATE [mc/h]	POWER CONSUMPTION [Watt]	CODE	
P450	Single Room	93%	60	8,9	88P450SR60	1

**Reversible flow heat-recovery unit** complete with ceramic-type heat exchanger. Swing front panel to avoid undesired air return when the product is switched off. Highly silent model. Condensate drain not required. DC motor on ball bearings with reduced consumption and long-term reliability. Separate double filters at air inlet and outlet. Duct variable in length from 250 to 500 mm. Maximum allowable length 3 mt. (2,5 mt. if a 90° bend is present). Visual indicators for commands reception and filters cleaning. Operating mode adjustable by remote control. Buzzer indicator for commands reception.

## PERFORMANCE

MODEL:		P450	
SIZE	Ø mm	160	
VOLTAGE	Volt	220-240	
FREQUENCY SIGNAL	Hz	50-60	
FLOW RATE	m <sup>3</sup> /h	in: 60	out: 60
MAX PRESSURE	mm H <sub>2</sub> O	3,7	
MAX PRESSURE	Pa	36	
POWER	W	9	
NOISE LEVEL	dB(A) <sup>3m</sup>	23	



# D

## TEMPERATURE REGULATION AND CONTROL PRODUCTS AND COMPONENTS

---



**D1** WIRELESS CONTROL  
ROOM TEMPERATURE  
SYSTEMS  
page 100



**D3** WIRED CONTROL  
ROOM TEMPERATURE  
AND SYSTEMS  
page 101



**D2** WIRED CONTROL  
ROOM TEMPERATURE  
SYSTEMS  
page 100



ART. P413



ART. P414

ART.	VOLTAGE	CODE	
P413	BATTERY POWER	88P4130199	1

Battery-powered **weekly electronic radio frequency chronothermostat**. Setting range 2°C - 35°C; daily programs with 3 temperature levels. For Heating and Conditioning. To be combined with art. P414.

ART.	VOLTAGE	CODE	
P414	230 volt	88P4140653	1

**Radiofrequency remote actuator** with 6 channels on a DIN rail. It is designed to run air conditioning units, receiving control signals from thermostats and chronothermostats via radio frequency or wire. It has 6 relays to control up to 6 zone valves; an additional relay for the connection to the circulating pump automatically starts the circulating pump when at least one of the 6 outputs is active.



ART. P308



ART. P411

ART.	VOLTAGE	OUTLETS	CODE	
P308	230 volt	6	88P3080653	1
P308*	230 - 24 volt	6	88P3080654	1
P308	230 volt	12	88P3081253	1
P308*	230 - 24 volt	12	88P3081254	1
P308	230 - 24 volt	8	88P3080854P	1

**Relay module, 6 or 12 ways**, for underfloor heating systems. It receives the signal from the room thermostat and addresses it to the electrothermic actuator. It allows to rationalize the wire passage in the manifold box.

\* The codes marked by an asterisk are capable of receiving wire passage voltage. All actuators must bear the same power voltage.



ART. P410



ART. P412

ART.	VOLTAGE	CODE	
P410	BATTERY POWER	88P4100199	1

Battery-powered **daily digital chronothermostat** with lock-in time band pointers. Setting range 5°C - 35°C. For Heating and Conditioning.

ART.	VOLTAGE	CODE	
P412	BATTERY POWER	88P4120199	1

Battery-powered **weekly electronic chronothermostat**. Setting range 2°C - 35°C; daily programs with 3 temperature levels. For Heating and Conditioning.



ART. P415

ART.	VOLTAGE	CODE	
P415	230 volt	88P4150153	1

**Chronothermostat with weekly programming** and integrated GSM module. Thanks to the integrated GSM module you can manage the chronothermostat remotely by sending sms from your mobile phone. Setting range 2°C - 35°C; daily programs with 3 temperature levels. For Heating and Conditioning.



ART. P416

ART.	VOLTAGE	CODE	
P416	BATTERY POWER	88P4160199	1

**Electronic ambient thermostat** with LCD display. Setting range 2°C - 35°C.



ART. P417

ART.	VOLTAGE	CODE	
P417	BATTERY POWER	88P4170199	1

**Flush-mounting thermostat** with LCD display and battery-supply. The product is provided with frames, to make it suitable for plates of the most common domestic range. Setting range 2°C - 35°C. For Heating and Conditioning. The package contains white and anthracite grey frames.



ART. P311

ART.	VOLTAGE	CODE	
P311	230 volt	88P3110153	1

**Electromechanical room thermostat** with on-off signal light and switch. Setting range 5°C - 30°C.

## D3

## WIRED CONTROL ROOM TEMPERATURE AND HUMIDITY SYSTEMS



ART. P418

ART.	VOLTAGE	CODE	
P418	230 volt	88P4180153	1

**Electronic flush-mounting humidistat with power supply.** The product is provided with frames, to make it suitable for plates of the most common domestic range. Setting range 30+90 RH. The package contains white and anthracite grey frames.



ART. P419

ART.	VOLTAGE	CODE	
P419	BATTERY POWER	88P4190199	1

**Weekly programmable thermostat with built-in humidity sensor** for temperature regulation and room humidity control. Temperature setting range 2°C - 35°C, humidity setting range 30+90 RH, daily programs with 3 temperature levels. For heating and air conditioning.



# E

## FLOW RATE AND TEMPERATURE CONTROL VALVES



**E1** BALANCING VALVES FOR  
HYDRAULIC CIRCUITS AND  
HYDRAULIC COMPENSATORS  
page 104



**E2** THERMOSTATIC MIXERS,  
SHOCK ABSORBERS,  
MIXING VALVES  
page 106

For **solar** thermostatic mixing and diverting valves see chapter H.



ART. C298

ART.	SIZE	DN	KVS	CODE		
C298	1" M-1" F	20	5,10	92C298AE05	1	10

Calibration and balancing valve for heating, cooling and sanitary systems. Equipped with a calibration indicator and antitampering setting lock. When the value of the valve is set, it can be opened or closed, but not at a higher kv value than the set one. PN20, max. working temperature 120°C, EPDM gaskets, brass body. 1" M e 1" F connections (revolving nut).



ART. C299

ART.	SIZE	DN	KVS	CODE		
C299	1/2"	15	3,55	92C299AD05	1	20
C299	3/4"	20	5,10	92C299AE05	1	10
C299	1"	25	8,80	92C299AF05	1	10
C299	1" 1/4	32	14,10	92C299AG05	1	5
C299	1" 1/2	40	19,50	92C299AH05	1	5
C299	2"	50	31,50	92C299AJ05	1	5

Calibration and balancing valve for heating, cooling and sanitary systems. Equipped with a calibration indicator and antitampering setting lock. When the value of the valve is set, it can be opened or closed, but not at a higher kv value than the set one. PN20, max. working temperature 120°C, EPDM gaskets, brass body.



ART. C300

ART.	SIZE	DN	KVS	CODE		
C300	1/2"	15	3,55	92C300AD05	1	20
C300	3/4"	20	5,10	92C300AE05	1	10
C300	1"	25	8,80	92C300AF05	1	10
C300	1" 1/4	32	14,10	92C300AG05	1	5
C300	1" 1/2	40	19,50	92C300AH05	1	5
C300	2"	50	31,50	92C300AJ05	1	5

Calibration and balancing valve with threaded connections and self-sealing measuring sockets for heating, cooling and sanitary systems. Equipped with a calibration indicator and antitampering setting lock. When the value of the valve is set, it can be opened or closed, but not at a higher kv value than the set one. PN20, max. working temperature 120°C, EPDM gaskets, brass body.



ART. C301

ART.	DN	KVS	CODE	
C301	65	93,50	92C301AK05	1
C301	80	110,00	92C301AL05	1
C301	100	190,00	92C301AN05	1
C301	125	301,00	92C301AP05	1
C301	150	425,00	92C301AR05	1

Calibration and balancing valve with flanged connections and self-sealing measuring sockets for heating, cooling and sanitary systems. Flanged body in cast iron. Equipped with a calibration indicator and antitampering setting lock. When the value of the valve is set, it can be opened or closed, but not at a higher kv value than the set one. PN16, max. working temperature 120°C, EPDM gaskets.



ART. C302

ART.	DN	KVS	CODE	
C302	200	600	92C302AS05	1
C302	250	1210	92C302AT05	1
C302	300	1521	92C302AU05	1

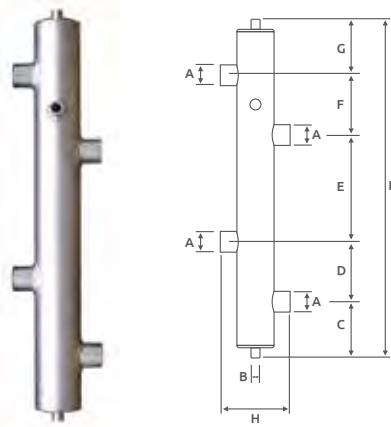
Calibration and balancing valve with flanged connections and self-sealing measuring sockets for heating, cooling and sanitary systems. Flanged body in cast iron. PN16, max. working temperature 120°C, teflon and EPDM gaskets.



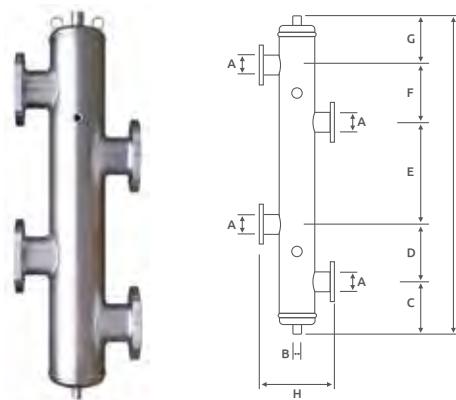
ART. C320

ART.	CODE	
C320	92C3200199	1

Pump delivery and pressure meter. Suitable for balancing of heating, cooling and sanitary circuits. The device can store and transfer data to an excel file via Bluetooth.



ART. C303



ART. C304

ART.	SIZE	CODE	
C303	1"	92C303AF06	1
C303	1"1/4	92C303AG06	1
C303	1"1/2	92C303AH06	1
C303	2"	92C303AJ06	1

ART.	A	B	C	D	E	F	G	H	I
C303	1"	3/8"	127	150	150	150	127	135	704
C303	1"1/4	3/8"	127	150	250	150	127	175	804
C303	1"1/2	3/8"	127	150	250	150	127	175	804
C303	2"	3/8"	127	150	350	150	127	201	904

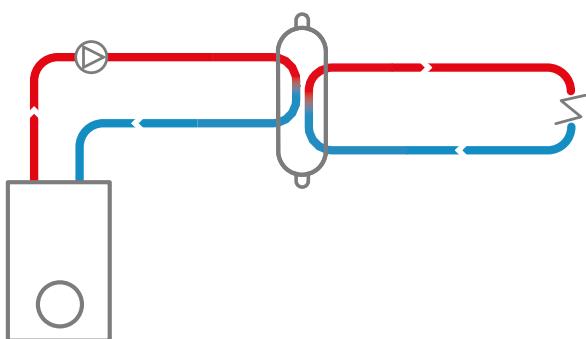
Hydraulic separator for heating systems. It is used to keep the primary and the secondary hydraulic circuits separated, allowing them to operate autonomously. Threaded female connections. Max.working pressure 10 bar, max. working temperature 100°C.

ART.	DN	CODE	
C304	50	92C304AJ06	1
C304	65	92C304AK06	1
C304	80	92C304AL06	1
C304	100	92C304AN06	1

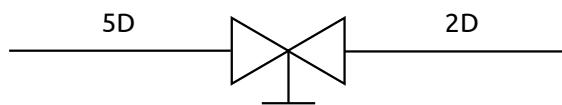
ART.	A	B	C	D	E	F	G	H	I
C304	DN50	1/2"	163	150	350	150	172	314	985
C304	DN65	1/2"	163	150	350	150	172	314	985
C304	DN80	1/2"	222	200	300	200	231	340	1153
C304	DN100	1/2"	237	200	300	200	246	368	1183

Hydraulic separator for heating systems. It is used to keep the primary and the secondary hydraulic circuits separated, allowing them to operate autonomously. Flanged connections. Max.working pressure 10 bar, max.working temperature 100°C.

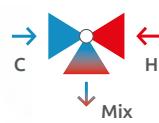
### HYDRAULIC SEPARATOR INSTALLATION SCHEME



### BALANCING VALVE INSTALLATION SCHEME



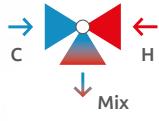
For a correct installation of the balancing valve, leave a draft of pipe of length equal to 5 times the nominal diameter upstream the valve, equal to twice downstream. Such drafts must be linear, without curves or diameter changes to avoid turbulences which can compromise the regulations.



ART. 148

ART.	SIZE	Kv m³/h	CODE			
148	1/2"	1,5	90148AD05	1	10	
148	3/4"	2	90148AE05	1	10	
148	1"	3	90148AF05	1	10	

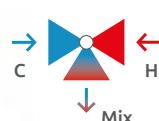
Thermostatic mixer, with male threaded union connections. Max. working pressure 10 bars, max. working temperature 85°C, temperature setting on mixed way 30-60°C. Side hot/cold water inlets, **lower mixed way**.



ART. 149

ART.	SIZE	Kv m³/h	CODE			
149	1/2"	1,5	90149AD05	1	10	
149	3/4"	2	90149AE05	1	10	
149	1"	3	90149AF05	1	10	

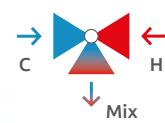
Thermostatic mixer with female connections. Max. working pressure 10 bars, max. working temperature 85°C, temperature setting on mixed way 30-60°C. Side hot/cold water inlets, **lower mixed way**.



ART. 165

ART.	SIZE	Kv m³/h	CODE			
165	3/4"	2	90165AE05	1	10	

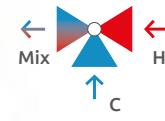
Thermostatic mixer with male threaded union connections, **check valve on hot/cold ways**. Max. working pressure 10 bars, max. working temperature 85°C. Temperature setting on mixed way 30-60°C. Side hot/cold water inlets, **lower mixed way**.



ART. 166

ART.	SIZE	Kv m³/h	CODE			
166	3/4"	1,5	90166AD05	1	10	
166	1"	2	90166AE05	1	10	
166	1 1/4"	3	90166AF05	1	10	

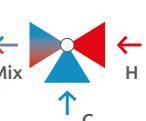
Thermostatic mixer with male connections. Max. working pressure 10 bars, max. working temperature 85°C, temperature setting on mixed way 30-60°C. Side hot/cold water inlets, **lower mixed way**.



ART. 142

ART.	SIZE	Kv m³/h	CODE			
142	1/2"	1,5	90142AD05	1	10	
142	3/4"	2	90142AE05	1	10	

Thermostatic mixer, with male threaded union connections. Max. working pressure 10 bars, max. working temperature 85°C, temperature setting on mixed way 30-60°C. Hot water side inlet, cold water lower inlet, **side mixed way**.

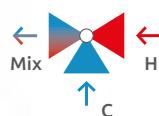


ART. 143

ART.	SIZE	Kv m³/h	CODE			
143	1/2"	1,5	90143AD05	1	10	
143	3/4"	2	90143AE05	1	10	

Thermostatic mixer with female connections. Max. working pressure 10 bars, max. working temperature 85°C, temperature setting on mixed way 30-60°C. Hot water side inlet, cold water lower inlet, **side mixed way**.

## THERMOSTATIC MIXERS, SHOCK ABSORBERS, MIXING VALVES



ART. 144



ART. 145

ART.	SIZE	Kv m³/h	CODE		
144	3/4"	2	90144AE05	1	10

Thermostatic mixer, with male threaded union connections, **check valves on hot/cold water ways**. Max. working pressure 10 bars, max. working temperature 85°C, temperature setting on mixed way 30-60°C. Hot water side inlet, cold water lower inlet, **side mixed way**.

ART.	SIZE	Kv m³/h	CODE		
145	3/4"	1,5	90145AD05	1	10
145	1"	2	90145AF05	1	10

Thermostatic mixer with male connections. Max. working pressure 10 bars, max. working temperature 85°C, temperature setting on mixed way 30-60°C. Hot water side inlet, cold water lower inlet, **side mixed way**.



ART. S119

ART.	SIZE	CODE	
S119	1/2"	91S119AD06	10

Shock absorber, connection 1/2", in stainless steel, capacity 0-16 l.



**IMPORTANT!** Items highlighted with “●” will be replaced with new models. Subscribe to ICMA Newsletter on our website [www.icmaspa.it](http://www.icmaspa.it) to stay updated about all latest news.



# F

## WATER & GAS NETWORK PRODUCTS AND COMPONENTS



**F1** PRESSURE REDUCERS FOR WATER  
page 110



**F7** EQUIPMENT FOR PRESS-FITTINGS SEMPIGAS AND SEMPITER MULTILAYER PIPING  
page 135



**F2** FILTERS AND NON RETURN VALVES, GATE VALVES, MAGNETIC DIRT SEPARATORS, CHECK AND FOOT VALVES  
page 112



**F8** UNIVERSAL FITTINGS FOR MULTILAYER PIPE, PEX AND COPPER  
page 136



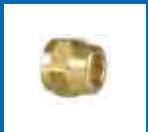
**F3** BALL VALVES/MINI BALL VALVES  
page 117



**F9** FITTINGS  
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**F4** MULTILAYER GAS PIPE AND SEMPIGAS PRESS FITTINGS, WITH TH PROFILE  
page 120



**F10** FITTINGS FOR COOLING SYSTEMS  
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**F5** MULTILAYER PIPE AND SEMPITER PRESS FITTINGS, MULTICLIP TH, H, U  
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**F11** SCREW FITTINGS WITH O-RING SEAL FOR COPPER PIPING, FOR WATER AND GAS  
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**F6** UNDER-SINK REGULATING VALVES  
page 134



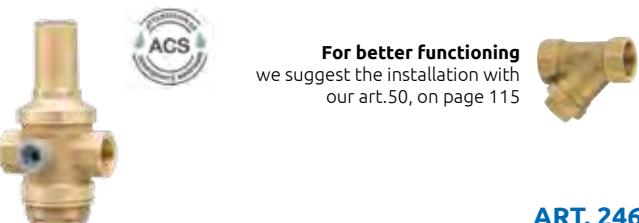
**For better functioning**  
we suggest the installation with  
our art.50, on page 115



ART. 245

ART.	SIZE	CODE			
245	1/2"	91245AD05	1	20	
245	3/4"	91245AE05	1	10	
245	1"	91245AF05	1	10	
245	1" 1/4	91245AG05	1	5	
245	1" 1/2	91245AH05	1	5	
245	2"	91245AJ05	1	1	

Pressure reducer with female tail connections. Two 1/4" connections for manometers. Piston technology, 18/10 inox steel. Max.inlet pressure 40 bar, adjustable outlet pressure from 1 bar to 6 bar (company setting 3 bar), max. working temperature 90°C. The product complies with the EN1567 standard.



**For better functioning**  
we suggest the installation with  
our art.50, on page 115

ART. 246

ART.	SIZE	CODE			
246	1/2"	91246AD05	1	20	
246	3/4"	91246AE05	1	20	
246	1"	91246AF05	1	10	
246	1" 1/4	91246AG05	1	5	
246	1" 1/2	91246AH05	1	5	
246	2"	91246AJ05	1	5	
246	2"1/2	91246AK05	1	5	

Female pressure reducer. Two 1/4" connections for manometers. Piston technology, 18/10 inox steel. Max. inlet pressure 40 bar, adjustable outlet pressure from 1 bar to 6 bar (company setting 3 bar), max. working temperature 90°C. The product complies with the EN1567 standard.



**For better functioning**  
we suggest the installation with  
our art.50, on page 115

ART. 245 + ART. 243

ART.	SIZE	CODE			
245+243	1/2"	91245AD05 243	1	20	
245+243	3/4"	91245AE05 243	1	10	
245+243	1"	91245AF05 243	1	10	
245+243	1" 1/4	91245AG05 243	1	5	
245+243	1" 1/2	91245AH05 243	1	5	
245+243	2"	91245AJ05 243	1	1	

Pressure reducer with female tail connections. Two 1/4" connections for manometers. Piston technology, 18/10 inox steel. Max.inlet pressure 40 bar, adjustable outlet pressure from 1 bar to 6 bar (company setting 3 bar), max. working temperature 90°C. **With pressure gauge.** The product complies with the EN1567 standard.



**For better functioning**  
we suggest the installation with our  
art.50, on page 115

ART. 246 + ART. 243

ART.	SIZE	CODE			
246+243	1/2"	91246AD05 243	1	20	
246+243	3/4"	91246AE05 243	1	20	
246+243	1"	91246AF05 243	1	10	
246+243	1" 1/4	91246AG05 243	1	5	
246+243	1" 1/2	91246AH05 243	1	5	
246+243	2"	91246AJ05 243	1	5	
246+243	2"1/2	91246AK05 243	1	5	

Female pressure reducer. Two 1/4" connections for manometers. Piston technology, 18/10 inox steel. Max. inlet pressure 40 bar, adjustable outlet pressure from 1 bar to 6 bar (company setting 3 bar), max. working temperature 90°C. **With pressure gauge.** The product complies with the EN1567 standard.

## PRESSURE REDUCERS FOR WATER



**For better functioning**  
we suggest the installation with  
our art.50, on page 115



ART. 271

ART.	SIZE	CODE		
271	1/2"	91271AD05	1	10
271	3/4"	91271AE05	1	10
271	1"	91271AF05	1	5
271	1" 1/4	91271AG05	1	5

Pressure reducer with male tail connections. Two 1/4" connections for manometers. Piston technology, 18/10 inox steel. Max. inlet pressure 40 bar, adjustable outlet pressure from 1 bar to 6 bar (company setting 3 bar), max. working temperature 90°C. The product complies with the EN1567 standard.



**For better functioning**  
we suggest the installation with  
our art.50, on page 115



ART. 247

ART.	SIZE	CODE		
247	1/2"	91247AD06	1	50
247	3/4"	91247AE06	1	50

Female pressure reducer. 1/4" connection for manometer. Piston technology, max.inlet pressure 16 bar, adjustable outlet pressure from 1 bar to 4 bar (company setting 3 bar), max. working temperature 90°C.



**For better functioning**  
we suggest the installation with  
our art.50, on page 115



ART. 271 + ART. 243

ART.	SIZE	CODE		
271+243	1/2"	91271AD05 243	1	10
271+243	3/4"	91271AE05 243	1	10
271+243	1"	91271AF05 243	1	5
271+243	1" 1/4	91271AG05 243	1	5

Pressure reducer with male tail connections. Two 1/4" connections for manometers. Piston technology, 18/10 inox steel. Max.inlet pressure 40 bar, adjustable outlet pressure from 1 bar to 6 bar (company setting 3 bar), max. working temperature 90°C. **With pressure gauge.** The product complies with the EN1567 standard.



**For better functioning**  
we suggest the installation with  
our art.50, on page 115



ART. 248

ART.	SIZE	CODE		
248	1/2"	91248AD06	1	50
248	3/4"	91248AE06	1	50

Female pressure reducer. Piston technology, max.inlet pressure 16 bar, adjustable outlet pressure from 1 bar to 4 bar (company setting 3 bar), max. working temperature 90°C.



ART. 750

ART.	FEMALE SIZE	MALE SIZE	CODE			
750	1/2"	3/4"	83750AD05	1	10	
750	3/4"	1"	83750AE05	1	10	
750	1"	1"1/4	83750AF05	1	10	
750	1"1/4	1"1/2	83750AG05	1	10	
750	1"1/2	-	83750AH05	1	5	
750	2"	-	83750AJ05	1	5	

Self-cleaning, female/female and male/male water filter, with removable filtering cartridge in stainless steel, pressure gauge and drain cock, with rubber connection. Filtering degree 100 µ. Max. working pressure 25 bars, Max. working temperature 90°C. **The connections bear female/male thread on both sides, up to 1"1/4 female.** The sizes 1"1/2 and 2" are available with female thread only. Replacement filtering cartridge art.752.



ART. 751

ART.	SIZE	CODE			
751	1/2"	83751AD05	1	10	
751	3/4"	83751AE05	1	10	
751	1"	83751AF05	1	10	
751	1"1/4	83751AG05	1	5	

Self-cleaning water filter with male unions. Removable filtering cartridge in stainless steel, pressure gauge and drain cock with rubber connection. Filtering degree 100 µ. Max. working pressure 25 bars. Max. working temperature 90°C. Replacement filtering cartridge art.752.



ART. 752

ART.	FEMALE SIZE	CODE		
752	1/2" - 3/4"	83752AD01	1	
752	1" - 1"1/4	83752AF01	1	
752	1"1/2 - 2"	83752AH01	1	

Cartridge for filter art. 750 and art. 751.



ART. 745

ART.	SIZE	CODE			
745	3/4"	82745AE05	1	10	
745	1"	82745AF05	1	10	
745	1"1/4	82745AG05	1	5	
745	1"1/2	82745AH05	1	5	
745	2"	82745AJ05	1	5	

F/F dirt separator for heating/cooling systems, equipped with ball drain cock and rubber holder. Max. working pressure 10 bars, max. working temperature 110°C, stainless steel mesh.



ART. 746

ART.	SIZE	CODE			
746	3/4"	82746AE05	1	10	
746	1"	82746AF05	1	10	
746	1"1/4	82746AG05	1	5	
746	1"1/2	82746AH05	1	5	
746	2"	82746AJ05	1	5	

**F-F dirt separator** for heating and cooling systems provided with a removable magnetic cartridge to collect ferrous impurities and a drain cock with hose. Max. working pressure 10 bars, Max. working temperature 110°C, stainless steel mesh. **Magnetic field strength of 10.500 Gauss.**



**ART. 747**

ART.	SIZE	FINISH	CODE		
747	3/4"	BRASS	82747AE05	1	10
747	3/4"	NICKEL PLATED	82747AE06	1	10
747	3/4"	BRASS	82747AE05 146	1	10
747	3/4"	NICKEL PLATED	82747AE06 146	1	10
747	3/4"	HIGH CHROME	82747AE07	1	10
747	3/4"	WHITE	82747AE13	1	10

**Magnetic compact dirt separator for under-boiler installation** with a removable magnetic cartridge to collect ferrous impurities and a drain cock with hose. Max. working pressure 10 bars, Max. working temperature 110°C, stainless steel mesh. **Magnetic field strength of 10.500 Gauss.**  
● Complete with 3/4" F-F connection fitting to boiler. (See photo on the next page).



**ART. 748**

ART.	SIZE	FINISH	CODE		
748	3/4"	BRASS	82748AE05	1	10
748	3/4"	NICKEL PLATED	82748AE06	1	10
748	3/4"	BRASS	82748AE05 146	1	10
748	3/4"	NICKEL PLATED	82748AE06 146	1	10
748	3/4"	HIGH CHROME	82748AE07	1	10
748	3/4"	WHITE	82748AE13	1	10

**Magnetic compact dirt separator for under-boiler installation** with a removable magnetic cartridge to collect ferrous impurities and a drain cock with hose. Max. working pressure 10 bars, Max. working temperature 110°C, stainless steel mesh. **Magnetic field strength of 10.500 Gauss.**  
● Complete with 3/4" F-F connection fitting to boiler. (See photo on the next page).



● 3/4" F-F connection fitting to boiler.



**ART. 744**

ART.	SIZE	CODE		
744	3/4" - 1"	82744AE05*	1	10
744	1"1/4 - 1"1/2 - 2"	82744AG05	1	10

Magnetic candle for dirt separator art. 746. It can also be installed on the dirt separator art. 745 to be converted into a magnetic one. **Magnetic field strength of 10.500 Gauss.**

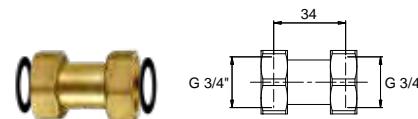
\*Also compatible with ICMA dirt remover art 747 with brass finish.



**ART. 749**

ART.	SIZE	FINISH	CODE		
749	1/2"	NICKEL PLATED	82749AD06	1	10
749	1/2"	HIGH CHROME	82749AD07	1	10
749	1/2"	WHITE	82749AD13	1	10

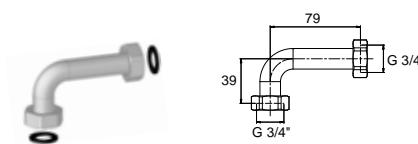
Magnetic candle for dirt separator art. 747. It can also be installed on the dirt separator art. 748 to be converted into a magnetic one. **Magnetic field strength of 10.500 Gauss.**



**ART. 755**

ART.	SIZE	FINISH	CODE	
755	3/4"	BRASS	82755AE05	1
755	3/4"	NICKEL PLATED	82755AE06	1
755	3/4"	HIGH CHROME	82755AE07	1
755	3/4"	WHITE	82755AE13	1

Straight fitting with revolving nut for compact dirt separator/boiler connection. Including two flat seat gaskets.



**ART. 756**

ART.	SIZE	FINISH	CODE	
756	3/4"	BRASS	82756AE05	1
756	3/4"	NICKEL PLATED	82756AE06	1

Elbow fitting with revolving nut for compact dirt separator/boiler connection. Including two flat seat gaskets.



ART. 753

WALL ART. CONNECTION SIZE	BOILER CONNECTION SIZE	FINISH	CODE			
753	3/4" M	3/4" F	NICKEL PLATED	82753AE06	1	10

Under-boiler magnetic filter equipped with interception ball valve. Max. working pressure 10 bar, max working temperature 110°C.

**Magnetic field strength of 12.000 Gauss.**



ART. 758

ART.	SIZE	CODE			
758	1/2" M	82758AD06	1	12	

Proportional polyphosphate doser. Max. pressure 8 bar, working temperature 5°C-45°C. 1/2" orientable connections both horizontal and vertical.



ART. 762

ART.	SIZE	CODE			
762	3/4"	82762AE06	1	30	

Condensate neutralizer for condensing boilers. Max. pressure 3bar, max. flow rate 3 l/h, working temperature 5°C - 55°C. Connection 3/4". Equipped with a straight fitting and an elbow fitting for boiler connection.



ART. 82KITDUO

ART.	CODE		
KITDUO	82KITDUO	1	

Boiler protection kit composed of Polyphosphate doser art. 758 + Under-boiler Magnetic Filter art. 753.



ART. 82KITTRIO

ART.	CODE		
KITTRIO	82KITTRIO	1	

Boiler protection kit composed of Polyphosphate doser art. 758 + Condensate Neutralizer art. 762 + Under-boiler Magnetic Filter art. 753.



X 6



ART. 759

ART.	CODE		
759	82759AD06	1	

Refill cartridge for Polyphosphate doser art. 758. The package contains No. 6 refill cartridges.



X 6



ART. 763

ART.	CODE		
763	82763AE06	1	

Refill cartridge for Condensate Neutralizer art. 763. The package contains No. 6 refill cartridges.



ART. 82KITTRIO

ART.	CODE		
KITTRIO	82KITTRIO	1	

Boiler protection kit composed of Polyphosphate doser art. 758 + Condensate Neutralizer art. 762 + Under-boiler Magnetic Filter art. 753.



ART. 50

ART.	SIZE	FILTER DEGREE	CODE			
50	1/4"	200 µ	83050AB05200	20	180	
50	3/8"	200 µ	83050AC05200	20	180	
50	1/2"	200 µ	83050AD05200	20	120	
50	3/4"	200 µ	83050AE05200	20	100	
50	1"	200 µ	83050AF05200	10	60	
50	1/4"	400 µ	83050AB05	20	180	
50	3/8"	400 µ	83050AC05	20	180	
50	1/2"	400 µ	83050AD05	20	120	
50	3/4"	400 µ	83050AE05	20	100	
50	1"	400 µ	83050AF05	10	60	
50	1"1/4	500 µ	83050AG05	10	40	
50	1"1/2	500 µ	83050AH05	5	30	
50	2"	500 µ	83050AJ05	2	20	
50	2"1/2	500 µ	83050AK05	-	14	
50	3"	500 µ	83050AL05	-	9	
50	4"	500 µ	83050AN05	-	4	

Y strainer to hold impurities. Filter degree 400-500 micron. On demand: 200 µ.



ART. 53

ART.	SIZE	CODE			
53	1/2"	83053AD05	1	250	
53	3/4"	83053AE05	1	120	
53	1"	83053AF05	1	80	
53	1"1/4	83053AG05	1	70	
53	1"1/2	83053AH05	1	50	
53	2"	83053AJ05	1	25	
53	2"1/2	83053AK05	1	18	
53	3"	83053AL05	1	14	
53	4"	83053AN05	1	8	

Non return valve, "MONDIAL". Brass shutter.



ART. 96

ART.	SIZE	FILTER DEGREE	CODE			
96	3/4"	1000 µ	83096AE05	20	100	
96	1"	1000 µ	83096AF05	20	100	

Y strainer to hold impurities with flat seat. Filter degree 400 micron.  
Recommended to protect domestic flowmeters.



ART. 118

ART.	SIZE	CODE			
118	1/2"	83118AD05	1	250	
118	3/4"	83118AE05	1	120	
118	1"	83118AF05	1	80	
118	1"1/4	83118AG05	1	70	
118	1"1/2	83118AH05	1	50	
118	2"	83118AJ05	1	25	
118	2"1/2	83118AK05	1	18	
118	3"	83118AL05	1	14	
118	4"	83118AN05	1	8	

Filter for non return valve.



ART. 40

ART.	SIZE	CODE			
40	1/4"	83040AB05	20	180	
40	3/8"	83040AC05	20	180	
40	1/2"	83040AD05	20	180	
40	3/4"	83040AE05	20	160	
40	1"	83040AF05	20	100	
40	1"1/4	83040AG05	10	70	
40	1"1/2	83040AH05	10	50	
40	2"	83040AJ05	5	30	
40	2"1/2	83040AK05	5	20	
40	3"	83040AL05	-	14	
40	4"	83040AN05	-	10	

Brass gate valve. Full bore passage PN 10.



ART. 41

ART.	SIZE	CODE			
41	1/2"	83041AD05	20	140	
41	3/4	83041AE05	20	100	
41	1"	83041AF05	10	70	
41	1"1/4	83041AG05	10	40	
41	1"1/2	83041AH05	5	35	
41	2"	83041AJ05	5	20	
41	2"1/2	83041AK05	-	15	
41	3"	83041AL05	-	10	
41	4"	83041AN05	-	6	

Brass gate valve. Full bore passage PN 20.



ART. 52

ART.	SIZE	CODE			
52	3/8"	83052AC05	1	150	
52	1/2"	83052AD05	1	150	
52	3/4"	83052AE05	1	100	
52	1"	83052AF05	1	100	
52	1"1/4	83052AG05	1	60	
52	1"1/2	83052AH05	1	50	
52	2"	83052AJ05	1	25	
52	2"1/2	83052AK05	1	18	
52	3"	83052AL05	1	10	
52	4"	83052AN05	1	5	

Check valve with rubber seat.



ART. 51

ART.	SIZE	CODE			
51	3/8"	83051AC05	1	150	
51	1/2"	83051AD05	1	150	
51	3/4"	83051AE05	1	100	
51	1"	83051AF05	1	100	
51	1"1/4	83051AG05	1	60	
51	1"1/2	83051AH05	1	50	
51	2"	83051AJ05	1	25	
51	2"1/2	83051AK05	1	18	
51	3"	83051AL05	1	10	
51	4"	83051AN05	1	5	

Check valve with metallic seat.



ART. 49

ART.	SIZE	CODE			
49	1/2"	83049AD05	1	150	
49	3/4"	83049AE05	1	100	
49	1"	83049AF05	1	100	
49	1"1/4	83049AG05	1	60	
49	1"1/2	83049AH05	1	50	
49	2"	83049AJ05	1	25	
49	2"1/2	83049AK05	1	18	
49	3"	83049AL05	1	10	
49	4"	83049AN05	1	5	

Brass foot valve with pattern filter.



ART. 347

ART.	SIZE	PN	COLOUR	CODE			
347	1/2"	50	RED	87347AD11	6	60	
347	3/4"	40	RED	87347AE11	4	40	
347	1/2"	50	WHITE	87347AD13	6	60	
347	3/4"	40	WHITE	87347AE13	4	40	
347	1"	40	RED	87347AF11	5	30	
347	1" 1/4	30	RED	87347AG11	3	18	

Full bore ball valve with pipe tail, red/white coated Aluminum T-handle, M/F connection thread, double O-ring anti-blow out stem. Thread ISO 228.



ART. 347 WITH LEVER

ART.	SIZE	PN	CODE	
347	1" 1/2	30	87347AH11	1
347	2"	25	87347AJ11	2

Full bore ball valve with pipe tail, red coated Aluminum lever, M/F connection thread, double O-ring anti-blow stem. Thread ISO 228.



ART. 348

ART.	SIZE	PN	COLOUR	CODE			
348	1/2"	50	RED	87348AD11	6	60	
348	3/4"	40	RED	87348AE11	4	40	
348	1/2"	50	WHITE	87348AD13	6	60	
348	3/4"	40	WHITE	87348AE13	4	40	

Full bore ball valve with pipe tail, red/white coated Aluminum T-handle, M/F connection thread, double O-ring anti-blow out stem. Thread ISO 228.



ART. 349

ART.	SIZE	PN	CODE			
349	3/8"	50	87349AC11	15	150	
349	1/2"	50	87349AD11	10	100	
349	3/4"	40	87349AE11	6	60	
349	1"	40	87349AF11	6	36	
349	1" 1/4	30	87349AG11	4	24	

Full bore ball valve, red coated Aluminum T-handle, F/F connection thread, double O-ring anti-blow stem. Thread ISO 228.



ART. 350

ART.	SIZE	PN	CODE			
350	3/8"	50	87350AC11	10	100	
350	1/2"	50	87350AD11	6	60	
350	3/4"	40	87350AE11	6	60	
350	1"	40	87350AF11	6	36	
350	1" 1/4	30	87350AG11	4	24	
350	1" 1/2	30	87350AH11	-	2	
350	2"	25	87350AJ11	-	1	

Full bore ball valve, red coated Aluminum lever, F/F connection thread, double O-ring anti-blow stem. Thread ISO 228.



ART. 351

ART.	SIZE	PN	CODE			
351	3/8"	50	87351AC11	15	150	
351	1/2"	50	87351AD11	10	100	
351	3/4"	40	87351AE11	6	60	
351	1"	40	87351AF11	6	36	
351	1" 1/4	30	87351AG11	4	24	

Full bore ball valve, red coated Aluminum T-handle, M/F connection thread, double O-ring anti-blow stem. Thread ISO 228.



ART. 352

ART.	SIZE	PN	CODE			
352	3/8"	50	87352AC11	10	100	
352	1/2"	50	87352AD11	6	60	
352	3/4"	40	87352AE11	4	40	
352	1"	40	87352AF11	6	36	
352	1" 1/4	30	87352AG11	2	20	
352	1" 1/2	30	87352AH11	-	2	
352	2"	25	87352AJ11	-	1	

Full bore ball valve, red coated Aluminum lever, M/F connection thread, double O-ring anti-blow stem. Thread ISO 228.



ART. 215

ART.	SIZE	COLOUR	CODE		
215	1"	RED	87215AF11	5	30
215	1"	BLUE	87215AF12	5	30

Full bore ball valve with pipe tail, red/blue coated Aluminum T-handle, flat seat connection. Double O-ring anti-blow out stem. Flat seat tail makes these valves perfect for underfloor heating system. Thread ISO 228.



ART. 226

ART.	SIZE	COLOUR	CODE		
226	1"	RED	87226AF11	1	10
226	1"	BLUE	87226AF12	1	10

Full bore angle ball valve. **Revolving connection**. Tail with flat seat with thermometer (thermometer art. 206 0-60° included). Thread ISO 228.



ART. 216

ART.	SIZE	COLOUR	CODE		
216	1"	RED	87216AF11	1	10
216	1"	BLUE	87216AF12	1	10
216	1"1/4"	RED	87216AG11	1	10
216	1"1/4"	BLUE	87216AG12	1	10

Full bore ball valve **with revolving connection**. Tail with O-ring seat with thermometer (thermometer art. 206 0-60° included). Thread ISO 228.



ART. 361

ART.	SIZE	PN	COLOUR	CODE		
361	1/2"	50	RED	87361AD11	6	60
361	1/2"	50	WHITE	87361AD13	6	60
361	3/4"	40	RED	87361AE11	4	40
361	3/4"	40	WHITE	87361AE13	4	40
361	1"	40	RED	87361AF11	6	

Full bore angle ball valve, red/white coated Aluminum T-handle, M/F connection thread, double O-ring anti-blow out stem. Thread ISO 228.



ART. 225

ART.	SIZE	COLOUR	CODE	
225	1"	RED	87225AF11	6
225	1"	BLUE	87225AF12	6

Full bore angle ball valve, red/blue coated Aluminum T-handle, M/F connection thread, double O-ring anti-blow out stem. Thread ISO 228.



ART. 362

ART.	SIZE	PN	COLOUR	CODE		
362	1/2"	50	RED	87362AD11	6	60
362	3/4"	40	RED	87362AE11	4	40
362	1/2"	50	WHITE	87362AD13	6	60
362	3/4"	40	WHITE	87362AE13	4	40

Full bore angle ball valve, red/white coated Aluminum T-handle, M/F connection thread, double O-ring anti-blow out stem. Thread ISO 228.



ART. 276

ART.	SIZE	COLOUR	CODE			
276	3/4"x3/4"	RED	87276AE11	1	20	
276	3/4"x1"	RED	87276AEAF11	1	10	

Ball valve with revolving nut and flat seat.



ART. 277

ART.	SIZE	COLOUR	CODE			
277	3/4"	BLACK	87277AE05	1	10	

Ball valve with built-in strainer. Filter degree 400 micron. Revolving nut and flat seat. Male 3/4" / Female 1". Recommended to protect domestic flowmeters.



ART. 311

ART.	SIZE	CODE		
311	1/4	89311AB07	20	
311	3/8	89311AC07	20	
311	1/2	89311AD07	20	
311	3/4	89311AE07	15	

Female mini-ball valve. Black plastic handle.



ART. 312

ART.	SIZE	CODE		
312	1/4	89312AB07	20	
312	3/8	89312AC07	20	
312	1/2	89312AD07	20	
312	3/4	89312AE07	15	

Male/female mini-ball valve. Black, plastic handle.

# Serie **Sempigas**<sup>®</sup>

**ICMA presents a range of press-fittings for GAS installations.**

**Icma SEMPIGAS** fittings offer the highest safety in domestic gas installations, enabling to realize domestic gas and lpg supply systems **SAFELY, SIMPLY AND QUICKLY.**

The SEMPIGAS fittings **ADVANTAGES** are:

- **Quick and reliable installation** compared to traditional systems
- **High flow rate** thanks to the low internal roughness of the fitting
- **Complete range** with many sizes
- **High quality** materials

Icma SEMPIGAS fittings are available in 16 -20 -25 - 26 - 32 sizes.

## Technical features:

### Gas category

Natural GAS and LPG

### Max. operating pressure

0,5 bar

### Temperature Range

from -20°C to +70°C

Thanks to the surface treatment, SEMPIGAS fittings are resistant to corrosion in saline atmospheres (they are not affected by marine saltwater agents).

**The SEMPIGAS fittings and pipes system in the sizes 16 - 20 – 26 mm. complies with norm UNI 11344:2016 as certified by KIWA certification body.**

# CERTIFICATE



Numero KIP0/8495/03  
Emesso 04.03.2020  
Rapporto 130100/9/  
Sostituisce KIP0/8495/02  
Prima emissione 25.06.2013  
Contratto K10-14  
Pagina 1 di 1

**CERTIFICATO DI PRODOTTO KIWA-UNI**  
**PRODUCT CERTIFICATE KIWA-UNI**  
Kiwa Cermet Italia dichiara che i prodotti  
Kiwa Cermet Italia hereby declare that the products  
Sistemi di tubazioni multistrato metallo plastica e raccordi per installazione interna per il trasporto del gas  
Metal/plastic multilayer piping systems and fittings for indoor installation for the conveyance of gaseous fuels  
Marchio del sistema/System Trade mark: **Icma Sempigas**

Diametro e spessore d' parete Nominal DN and wall thickness	Strati Layers Material	Tipo Type	Raccordi Fittings
DN 16x2,0 Al0,40	PE-Xc/A /Pe-Xb	MOP 0,5GAS	Brass press fittings profile TH
DN 20x2,0 Al0,40	PE-Xc/A /Pe-Xb	MOP 0,5GAS	Brass press fittings profile TH
DN 26x3,0 Al0,60	PE-Xc/A /Pe-Xb	MOP 0,5GAS	Brass press fittings profile TH

Sistema Costruito da/System Manufactured by: **Icma S.p.A.**  
Cuggiono (MI), Italia

In base ai test di tipo nonché alle ispezioni periodiche condotte da Kiwa sono ritenuti conformi ai requisiti del Documento Tecnico KI-0410 Rev. 11, Annex K10 Rev. 01 basato sulla norma UNI 11344:2016 e su noi marchi Kiwa-UNI. La validità di questo certificato è soggetta al risultato positivo delle sorveglianze per odiche.

Based upon type tests and on Kiwa's periodic factory inspections the products are considered in compliance with the requirement of Technical Document KI-0410, Rev. 11, Annex K10 Rev. 01, based on the standard UNI 11344:2016 and consequently marked Kiwa-UNI. The validity of this certificate is subject to the positive result of periodic surveillance visits.

Il presente certificato viene rilasciato in accordo al Regolamento Kiwa Cermet Italia per la Certificazione di prodotto ed è composto da 1 pagina.  
This certificate is issued in accordance with the Kiwa Cermet Italia regulations for Product Certification and consists of 1 page.

Chief Operating Officer  
Giampaolo Belotti  
Dott. ingegnere dei sistemi (B.I.)  
Data digitazione da SELEZIONE GIAMPAOLO  
Data 10/05/2020 10:14:14

**kiwa**   
**IT-TD-Ki0410**



**kiwa**   
**IT-DT-Ki0410**



ART. P195

ART.	SIZE	THICKNESS ALUMINUM	CODE		METERS FOR BENCH	
P195	16x2	<b>0,40 mm</b>	88P195GH05099	50 m	1000	
P195	20x2	<b>0,50 mm</b>	88P195BQ05099	50 m	1000	
P195	26x3	<b>0,60 mm</b>	88P195GP02599	25 m	525	

Multilayer Cross-linked Polyethylene **PE-Xc/AL/PE-Xb gas pipe**, manufactured in conformity with UNI 11344 and certified by DVGW. Butt-welded aluminium core. The pipe inner part is made of PE-Xc, the external one of PE-Xb. Colour: yellow. **The aluminum high thickness prevents accidental perforations of the pipe.**



ART. P194

ART.	SIZE	THICKNESS ALUMINUM	THICKNESS SHEATH	CODE		METERS FOR BENCH	
P194	16x2	<b>0,40 mm</b>	19/25	88P194GH05099	50m	1050	
P194	20x2	<b>0,50 mm</b>	23/28	88P194BQ05099	50m	900	
P194	26x3	<b>0,60 mm</b>	28/34	88P194GP02599	25m	450	

Multilayer Cross-linked Polyethylene **PE-Xc/AL/PE-Xb gas pipe with yellow sheath**, manufactured in conformity with UNI 11344 and certified by DVGW; Butt-welded aluminium core. The pipe inner part is made of PE-Xc, the external one of PE-Xb. **The aluminum high thickness prevents accidental perforations of the pipe.**



26x3  
NEW

ART. 450

ART.	SIZE	SIZE	CODE		
450	16x2	16x2	81450GH06	50	
450	20x2	20x2	81450BQ06	40	
450	25x2,5	25x2,5	81450GO06	30	
450	26x3	26x3	81450GP06	30	
450	32x3	32x3	81450GQ06	10	
450	16x2	20x2	81450BQGH06	40	
450	20x2	26x3	81450GPBQ06	20	
450	25x2,5	20x2	81450GOBQ06	20	
450	32x3	25x2,5	81450GQGO06	15	
450	32x3	26x3	81450GQGP06	10	

SEMPIGAS® double straight press-fitting, with same or reduced size.



ART. 451

ART.	SIZE	SIZE	CODE		
451	1/2"	16x2	81451ADGH06	50	
451	1/2"	20x2	81451ADBQ06	50	
451	3/4"	20x2	81451AEBQ06	40	
451	3/4"	25x2,5	81451AEGO06	30	
451	3/4"	26x3	81451AEQP06	30	
451	1"	25x2,5	81451AFGO06	20	
451	1"	32x3	81451AFQQ06	15	

SEMPIGAS® female straight press-fitting.



ART. 452

ART.	SIZE	SIZE	CODE		
452	• 1/2"	16x2	81452ADGH06	50	
452	• 1/2"	20x2	81452ADBQ06	50	
452	• 3/4"	20x2	81452AEBQ06	40	
452	• 3/4"	25x2,5	81452AEGO06	30	
452	• 3/4"	26x3	81452AEQP06	30	
452	1"	25x2,5	81452AFGO06	15	
452	1"	26x3	81452AFGP06	20	
452	1"	32x3	81452AFQQ06	15	

SEMPIGAS® male straight press-fitting.

• Conical thread ISO 7-1



ART. 453

ART.	SIZE	SIZE	CODE		
453	16x2	16x2	81453GH06	50	
453	20x2	20x2	81453BQ06	40	
453	26x3	26x3	81453GP06	20	
453	25x2,5	25x2,5	81453GO06	20	
453	32x3	32x3	81453GQ06	10	

SEMPIGAS® double elbow press-fitting.



32x3  
NEW

ART. 454

ART.	SIZE	SIZE	CODE	
454	● 1/2"	16x2	81454ADGH06	40
454	● 1/2"	20x2	81454ADBQ06	40
454	● 3/4"	20x2	81454AEBQ06	30
454	● 3/4"	25x2,5	81454AEGO06	15
454	● 3/4"	26x3	81454AEGP06	20
454	1"	32x3	81454AFGQ06	10

SEMPIGAS® male elbow press-fitting.

● Conical thread ISO 7-1



32x3  
NEW

ART. 455

ART.	SIDE SIZE	CENTRAL SIZE	SIDE SIZE	CODE	
456	16x2	16x2	16x2	81456GH06	30
456	20x2	20x2	20x2	81456BQ06	20
456	26x3	26x3	26x3	81456GP06	10
456	32x3	32x3	32x3	81456GQ06	10
456	16x2	16x2	20x2	81456GHGBQ06	20
456	16x2	16x2	26x3	81456GHGHP06	15
456	20x2	20x2	26x3	81456BQBQGP06	10
456	25x2,5	20x2	20x2	81456GOBQBQ06	10
456	32x3	25x2,5	25x2,5	81456GQQGOG06	10
456	20x2	16x2	20x2	81456BQGHGBQ06	20
456	25x2,5	16x2	25x2,5	81456GOGHGO06	10
456	25x2,5	20x2	25x2,5	81456GOBQGO06	10
456	26x3	16x2	26x3	81456GPGHGP06	10
456	26x3	20x2	26x3	81456GPBQGP06	10
456	32x3	25x2,5	32x3	81456GQQGOQ06	10
456	32x3	26x3	32x3	81456GQQPGQ06	10
456	20x2	20x2	16x2	81456BQBQGH06	20
456	25x2,5	25x2,5	16x2	81456GOGOGH06	10
456	25x2,5	25x2,5	20x2	81456GOGOBOQ06	10

SEMPIGAS® TEE press-fitting.



32x3  
NEW

ART. 456

ART.	SIZE	SIZE	CODE	
455	1/2"	16x2	81455ADGH06	40
455	1/2"	20x2	81455ADBQ06	40
455	3/4"	20x2	81455AEBQ06	30
455	3/4"	25x2,5	81455AEGO06	20
455	3/4"	26x3	81455AEGP06	20
455	1"	32x3	81455AFGQ06	10

SEMPIGAS® female elbow press-fitting.



32x3  
NEW

ART. 458

ART.	SIZE	SIZE	CODE	
458	1/2"	16x2	81458ADGH06	20
458	1/2"	20x2	81458ADBQ06	20
458	3/4"	20x2	81458AEBQ06	15
458	3/4"	25x2,5	81458AEGO06	10
458	3/4"	26x3	81458AEGP06	10
458	1"	32x3	81458AFGQ06	10

SEMPIGAS® female TEE press-fitting.



ART. 459

ART.	SIZE	SIZE	HEIGHT	CODE	
459	1/2"	16x2	57	81459ADGH06	20
459	1/2"	20x2	57	81459ADBQ06	20

SEMPIGAS® press-fitting for wall plate fixing.



ART. 460

ART.	SIZE	SIZE	CODE	
460	1/2"	16x2	81460ADGH06	50
460	3/4"	16x2	81460AEGH06	30
460	3/4"	20x2	81460AEBQ06	30

SEMPIGAS® press-fitting with rotating nut for flat seat connections.



**ART. 461**

ART.	SIZE	SIZE	CODE	
461	1/2"	16x2	81461ADGH06	50
461	1/2"	20x2	81461ADBQ06	40
461	3/4"	16x2	81461AEGH06	30
461	3/4"	20x2	81461AEBQ06	40
461	3/4"	25x2,5	81461AEGO06	20
461	7/8"	20X2	81461AQBQ06	20
461	7/8"	25x2,5	81461AQGO06	15
461	1"	32X3	81461AFGQ06	20

SEMPIGAS® press-fitting with gas meter connection and rotating nut pierced for plumbing.



**ART. 462**

ART.	SIZE	SIZE	CODE	
462	3/4"	16x2	81462AEGH06	20
462	3/4"	20x2	81462AEBQ06	20
462	7/8"	20x2	81462AQBQ06	20
462	7/8"	25x2,5	81462AQGO06	15
462	7/8"	32x3	81462AQGQ06	10

SEMPIGAS® press-fitting with gas meter connection, rotating nut pierced for plumbing and air vent valve.



**ART. 463**

ART.	SIZE	SIZE	CODE	
463	3/4"	16x2	81463AEGH06	20
463	3/4"	20x2	81463AEBQ06	20
463	7/8"	20x2	81463AQBQ06	20
463	7/8"	25x2,5	81463AQGO06	20

SEMPIGAS® press-fitting with gas meter connection, rotating nut pierced for plumbing and pressure check outlet.



**ART. 464**

ART.	SIZE	SIZE	CODE	
464	1/2"	16x2	81464ADGH06	40
464	1/2"	20x2	81464ADBQ06	30
464	3/4"	16x2	81464AEGH06	30
464	3/4"	20x2	81464AEBQ06	20
464	3/4"	25x2,5	81464AEGO06	20

SEMPIGAS® elbow press-fitting with gas meter connection and rotating nut pierced for plumbing.



**ART. 465**

ART.	SIZE	SIZE	CODE	
465	3/4"	16x2	81465AEGH06	20
465	3/4"	20x2	81465AEBQ06	20
465	7/8"	20x2	81465AQBQ06	20
465	7/8"	25x2,5	81465AQGO06	10

SEMPIGAS® elbow press-fitting with gas meter connection, rotating nut pierced for plumbing and air vent valve.



**ART. 466**

ART.	SIZE	SIZE	CODE	
466	3/4"	16x2	81466AEGH06	20
466	3/4"	20x2	81466AEBQ06	20
466	7/8"	20x2	81466AQBQ06	20
466	7/8"	25x2,5	81466AQGO06	20

SEMPIGAS® elbow press-fitting with gas meter connection, rotating nut pierced for plumbing and pressure check outlet.

# Sempiter

ICMA presents a series of pressed fittings for hot water and heating systems designed and conceived to provide an ongoing guarantee of the utmost:

- **Hygiene**, drinking water quality is 100% guaranteed.
- **Safety in installation**: if not pressed, it leaks.

## Hygiene

Every one of us is exposed to a variety of sources of pollution every day, and the home environment offers all kinds of sources of contamination, often underestimated, which can strike anyone indiscriminately, including precisely the categories of people who need to avoid contamination (children, seniors, pregnant women). For instance, children absorb pollutants with greater intensity than adults. But there is something simple we can do to help solve the problem.

The **SEMPITER®** series differs from conventional products in that it implements measures for protecting users' health through careful selection of materials and processes with the aim of preventing potentially hazardous substances from being released into drinking water. The brass commonly used contains lead, zinc and arsenic, substances which are gradually released into drinking water due to chemical reactions

**SEMPITER®** is a special chemical treatment applied to pipe fittings to prevent all forms of interaction with water at any point in the fitting, unlike other systems such as sealing with tin. The **SEMPITER®** treatment is distributed evenly in even the most difficult points of the product. The **SEMPITER®** series blocks transfer of lead, zinc, arsenic and all substances present in the brass, inhibiting all electrolytic chemical processes forever, as tests of ageing conducted in independent laboratories have proven that the **SEMPITER® process does not degrade with the passage of time**.

The system therefore offers maximum protection of drinking water no matter what material is used. Hygiene is also guaranteed using sealing O-rings made of EPDM Perox certified for use with drinking water, and no grease is used in product assembly.



## Safety in installation

While the above explains the hygienic reasons for preferring **SEMPITER®** pipe fittings, there are also important technical reasons for choosing our pipe fittings:

- **AISI 304 DIN EN 10088-2 stainless steel bushing** subjected to a solubilisation process resistant to the aggression of alkalis of cement and chalk dioxide.
- **Large inspection opening** on the gold strike plate to accentuate the contrast between the pipe and the fitting and facilitate visual inspection of the pipe position prior to pressing.
- **Application of “zero defect” O-rings**, controlled using rules from the automotive industry. Final inspection of the presence of o-rings in 100% of the o-rings applied.
- **EPDM Perox o-rings mix** permitting use of the same product in hot water and heating systems without worrying about dripping.
- **Very high resistance to corrosion** of the materials employed, with a surface hardness of more than 500 Vickers, even greater than chrome-plating or high resistance steel.
- **Very low surface roughness** and inspection for sharp corners while work is underway to prevent lime scale build-up.
- **Product solidity.** The **SEMPITER®** treatment makes it possible to achieve the health standards other manufacturers achieve using composite plastic materials, but without giving up the security of brass.

In the **SEMPITER®** series the fitting will leak if not pressed, preventing errors in installation. This result can only be obtained with very precise mechanical processing, which very few companies can obtain.

## The system

**SEMPITER®** pipe fittings with **MULTIFIVE** pipes come together to grant a SAFE, QUICK, CONVENIENT pressing system which can be used in combination with all ICMA products: manifolds, valves and products for heating systems, tap water distribution and refrigeration systems.

The **SEMPITER®** system guarantees:

- Pressing of pipe fittings with grippers with a TH,H, U profile
- Resistance to chemical and electrolytic corrosion
- Low load loss due to reduced surface roughness
- Non-toxicity
- Hermetic seal
- Conformity to all European standards governing pipes and pipe fittings in distribution grids and specifically:

UNI EN 712	Pull-out test
UNI EN 713	Test of resistance to internal pressure during folding
UNI EN 1254-3	Fittings for plastic pipes with compression terminals
UNI EN 12293	Tests on thermal cycles
UNI EN 12294	Vacuum test
UNI EN 12295	Test on pressure cycles

For all threading on **SEMPITER®** pipe fittings, we recommend use of liquid teflon rather than hemp, especially in combination with materials with different thermal dilations (such as ferrous materials), as required by standard ISO 21003, and in no case do we recommend installation with products with conical threading.



ART. P190

ART.	SIZE (mm)	THICKNESS ALUMINUM	INSULATION THICKNESS	WATER CONTENT L/M	CODE		METERS FOR BENCH	
P190	16x2	<b>0,30 mm</b>	6	0,113	88P190GH05006	50 m	600	
P190	20x2	<b>0,40 mm</b>	6	0,200	88P190BQ05006	50 m	600	
P190	26x3	<b>0,60 mm</b>	10	0,314	88P190GP05010	50 m	400	
P190	32x3	<b>0,80 mm</b>	10	0,531	88P190GQ02510	25 m	200	

Multilayer Cross-linked Polyethylene **PE-Xc/AL/PE-Xb** pipe, with closed-cell expanded polyethylene white sheath with scratch-resistant external finishing manufactured in compliance with UNI EN ISO 21003 standard; suitable for sanitary and heating systems. Working temperature 70°C; 10 Bar pressure; max. temperature 95°C; in compliance with DVGW W542 standards. Butt-welded aluminium core. The pipe inner part is made of PE-Xc, the external one of PE-Xb. The aluminium minimum thickness is 0,3 mm.



ART. P191

ART.	SIZE (mm)	THICKNESS ALUMINUM	INSULATION THICKNESS	WATER CONTENT L/M	CODE		METERS FOR BENCH	
P191	16x2	<b>0,30 mm</b>	6	0,113	88P191GH05006	50 m	600	
P191	20x2	<b>0,40 mm</b>	6	0,200	88P191BQ05006	50 m	600	
P191	26x3	<b>0,60 mm</b>	10	0,314	88P191GP05010	50 m	400	
P191	32x3	<b>0,80 mm</b>	10	0,531	88P191GQ02510	25 m	200	

Multilayer Cross-linked Polyethylene **PE-Xc/AL/PE-Xb** pipe, with closed-cell expanded polyethylene with scratch-resistant external finishing manufactured in compliance with UNI EN ISO 21003 standard; suitable for sanitary and heating systems. Working temperature 70°C; 10 Bar pressure; max. temperature 95°C; in compliance with DVGW W542 standards. Butt-welded aluminium core. The pipe inner part is made of PE-Xc, the external one of PE-Xb. The aluminium minimum thickness is 0,3 mm. **Coating color: red.**



ART. P192

ART.	SIZE (mm)	THICKNESS ALUMINUM	INSULATION THICKNESS	WATER CONTENT L/M	CODE		METERS FOR BENCH	
P192	16x2	<b>0,30 mm</b>	6	0,113	88P192GH05006	50 m	600	
P192	20x2	<b>0,40 mm</b>	6	0,200	88P192BQ05006	50 m	600	
P192	26x3	<b>0,60 mm</b>	10	0,314	88P192GP05010	50 m	400	
P192	32x3	<b>0,80 mm</b>	10	0,531	88P192GQ02510	25 m	200	

Multilayer Cross-linked Polyethylene **PE-Xc/AL/PE-Xb** pipe, with closed-cell expanded polyethylene with scratch-resistant external finishing manufactured in compliance with UNI EN ISO 21003 standard; suitable for sanitary and heating systems. Working temperature 70°C; 10 Bar pressure; max. temperature 95°C; in compliance with DVGW W542 standards. Butt-welded aluminium core. The pipe inner part is made of PE-Xc, the external one of PE-Xb. The aluminium minimum thickness is 0,3 mm. **Coating color: blue.**

## MULTILAYER PIPE AND SEMPITER PRESS FITTINGS, MULTICLIP TH, H, U



ART. P193

ART.	SIZE (mm)	THICKNESS ALUMINUM	WATER CONTENT L/M	CODE		METERS FOR BENCH	
P193	16x2	<b>0,30 mm</b>	0,113	88P193GH20099	200 m	2400	
P193	16x2	<b>0,30 mm</b>	0,113	88P193GH50099	500 m	6000	
P193	20x2	<b>0,40 mm</b>	0,200	88P193BQ10099	100 m	1400	
P193	26x3	<b>0,60 mm</b>	0,314	88P193GP05099	50 m	600	
P193	32x3	<b>0,80 mm</b>	0,531	88P193GQ05099	50 m	500	

Multilayer Cross-linked Polyethylene **PE-Xc/AL/PE-Xb** pipe, manufactured in compliance with UNI EN ISO 21003 standard; suitable for sanitary and heating systems. Working temperature 70°C; 10 Bar pressure; max. temperature 95°C; in compliance with DVGW W542 standards. Butt-welded aluminium core. The pipe inner part is made of PE-Xc, the external one of PE-Xb. The aluminium minimum thickness is 0,3 mm.



ART. P196

ART.	SIZE (mm)	THICKNESS ALUMINUM	INSULATION THICKNESS	WATER CONTENT L/M	CODE		METERS FOR BENCH	
P196	16x2	<b>0,20 mm</b>	6	0,113	88P196GH05006	50 m	600	
P196	16x2	<b>0,20 mm</b>	6	0,113	88P196GH10006	100 m	1100	
P196	20x2	<b>0,20 mm</b>	6	0,200	88P196BQ05006	50 m	600	
P196	20x2	<b>0,20 mm</b>	6	0,200	88P196BQ10006	100 m	900	
P196	26X3	<b>0,50 mm</b>	10	0,314	88P196GP05010	50 m	400	
P196	32X3	<b>0,50 mm</b>	10	0,531	88P196GQ02510	25 m	200	

Multilayer Polyethylene **PERT-AL-PERT** pipe, with closed-cell expanded polyethylene white sheath with scratch-resistant external finishing, manufactured in compliance with UNI EN ISO 21003 standard; white colour; Working temperature 70°C, Working pressure 6 Bar, Max temperature 95°C. PERT Polyethylene: Polyethylene of raised temperature resistance. Butt-welded aluminium core.



ART. P197

ART.	SIZE (mm)	THICKNESS ALUMINUM	WATER CONTENT L/M	CODE		METERS PER BUNDLE	METERS FOR BENCH	
P197	16x2	<b>0,20 mm</b>	0,113	88P197GH10099	100 m		2200	
P197	16x2	<b>0,20 mm</b>	0,113	88P197GH50099	500 m		4000	
P197	20x2	<b>0,20 mm</b>	0,200	88P197BQ10099	100 m		1900	
P197	20x2	<b>0,20 mm</b>	0,200	88P197BQ50099	500 m		2500	
P197	26x3	<b>0,30 mm</b>	0,314	88P197GP05099	50 m		750	
P197	32x3	<b>0,60 mm</b>	0,531	88P197GQ05099	50 m		500	
P197	40x3,5	<b>0,50 mm</b>	0,854	88P197GS00599	5 m (1 barra)	20 m		
P197	50x4	<b>0,50 mm</b>	1,385	88P197GT00599	5 m (1 barra)	10 m		

Multilayer Polyethylene **PERT-AL-PERT** pipe, manufactured in compliance with UNI EN ISO 21003 standard; white colour; Working temperature 70°C, Working pressure 6 Bar, Max temperature 95°C. PERT Polyethylene: Polyethylene of raised temperature resistance. Butt-welded aluminium core.



ART. 400

ART.	SIZE	SIZE	CODE	
400	16x2	16x2	81400GH06	50
400	18x2	18x2	81400GJ06	40
400	20x2	20x2	81400BQ06	40
400	25x2,5	25x2,5	81400GO06	30
400	26x3	26x3	81400GP06	30
400	32x3	32x3	81400GQ06	10
400	40x3,5	40x3,5	81400GS06	10
400	50x4	50x4	81400GT06	5
400	20x2	16x2	81400BQGH06	40
400	18x2	16x2	81400GJGH06	40
400	26x2	16x2	81400GPGH06	20
400	20x2	18x2	81400BQGJ06	40
400	25x2,5	16x2	81400GOGH06	20
400	25x2,5	20x2	81400GOBQ06	20
400	26x3	20x2	81400GPBQ06	20
400	26x3	18x2	81400GPGJ06	20
400	32x3	16x2	81400GQGH06	20
400	32x3	20x2	81400GQBQ06	15
400	32x3	25x2,5	81400GQGO06	15
400	32x3	26x3	81400GQGP06	15
400	40x3,5	26x3	81400GSGP06	5
400	40x3,5	32x3	81400GSGQ06	5
400	50x4	40x3,5	81400GTGS06	10

SEMPITER® double straight press-fitting, with same or reduced size.



ART. 401

ART.	SIZE	SIZE	CODE	
401	1/2"	16x2	81401ADGH06	50
401	1/2"	18x2	81401ADGJ06	50
401	1/2"	20x2	81401ADBQ06	50
401	3/4"	16x2	81401AEGH06	40
401	3/4"	18X2	81401AEGJ06	40
401	3/4"	20x2	81401AEBQ06	40
401	3/4"	25X2,5	81401AEGO06	30
401	3/4"	26x3	81401AEGP06	30
401	1"	25X2,5	81401AFGO06	20
401	1"	26x3	81401AFGP06	20
401	1"	32x3	81401AFGQ06	15
401	1"1/4	32x3	81401AGGQ06	10
401	1"1/4	40x3,5	81401AGGS06	15
401	1"1/2	50x4	81401AHGT06	15

SEMPITER® female straight press-fitting. **Thread ISO 228-1.**



ART. 402

ART.	SIZE	SIZE	CODE	
402	1/2"	16x2	81402ADGH06	50
402	1/2"	18x2	81402ADGJ06	50
402	1/2"	20x2	81402ADBQ06	50
402	3/4"	16x2	81402AEGH06	40
402	3/4"	18x2	81402AEGJ06	40
402	3/4"	20x2	81402AEBQ06	40
402	3/4"	25x2,5	81402AEGO06	30
402	3/4"	26x3	81402AEGP06	30
402	1"	25x2,5	81402AFGO06	20
402	1"	26x3	81402AFGP06	20
402	1"	32x3	81402AFGQ06	15
402	1"1/4	32x3	81402AGGQ06	15
402	1"1/4	40x3,5	81402AGGS06	10
402	1"1/2	50x4	81402AHGT06	10

SEMPITER® male straight press-fitting. **Thread ISO 228-1.**

## MULTILAYER PIPE AND SEMPITER PRESS FITTINGS, MULTICLIP TH, H, U



ART. 403

ART.	SIZE	SIZE	CODE	
403	16x2	16x2	81403GH06	50
403	18x2	18x2	81403GJ06	40
403	20x2	20x2	81403BQ06	40
403	25x2,5	25x2,5	81403GO06	20
403	26x3	26x3	81403GP06	20
403	32x3	32x3	81403GQ06	10
403	40x3,5	40x3,5	81403GS06	5
403	50x4	50x4	81403GT06	5

SEMPITER® double elbow press-fitting.



ART. 405

ART.	SIZE	SIZE	CODE	
405	1/2"	16x2	81405ADGH06	40
405	1/2"	18x2	81405ADGJ06	40
405	1/2"	20x2	81405ADBQ06	40
405	3/4"	16x2	81405AEGH06	30
405	3/4"	18x2	81405AEGJ06	30
405	3/4"	20x2	81405AEBQ06	30
405	3/4"	25x2,5	81405AEGO06	20
405	3/4"	26x3	81405AEGP06	20
405	1"	25x2,5	81405AFGO06	15
405	1"	26x3	81405AFGP06	15
405	1"	32x3	81405AFGQ06	10
405	1"1/4	32x3	81405AGGQ06	5
405	1"1/4	40x3,5	81405AGGS06	5
405	1"1/2	50x4	81405AHGT06	5

SEMPITER® female elbow press-fitting. **Thread ISO 228-1.**



ART. 404

ART.	SIZE	SIZE	CODE	
404	1/2"	16x2	81404ADGH06	40
404	1/2"	18x2	81404ADGJ06	40
404	1/2"	20x2	81404ADBQ06	40
404	3/4"	16x2	81404AEGH06	30
404	3/4"	18x2	81404AEGJ06	30
404	3/4"	20x2	81404AEBQ06	30
404	3/4"	25x2,5	81404AEGO06	20
404	3/4"	26x3	81404AEGP06	20
404	1"	25x2,5	81404AFGO06	20
404	1"	26x3	81404AFGP06	20
404	1"	32x3	81404AFGQ06	10
404	1"1/4	32x3	81404AGGQ06	5
404	1"1/4	40x3,5	81404AGGS06	5
404	1"1/2	50x4	81404AHGT06	5

SEMPITER® male elbow press-fitting. **Thread ISO 228-1.**



ART. 406

ART.	SIDE SIZE	CENTRAL SIZE	SIDE SIZE	CODE	
406	16x2	16x2	16x2	81406GH06	30
406	18x2	18x2	18x2	81406GJ06	20
406	20x2	20x2	20x2	81406BQ06	20
406	25x2,5	25x2,5	25x2,5	81406GO06	10
406	26x3	26x3	26x3	81406GP06	10
406	32x3	32x3	32x3	81406GQ06	10
406	40x3,5	40x3,5	40x3,5	81406GS06	5
406	50x4	50x4	50x4	81406GT06	5
406	16x2	16x2	20x2	81406GHGBQ06	20
406	16x2	16x2	25x2,5	81406GHGHO06	15
406	16x2	16x2	26x3	81406GHGHP06	15
406	18x2	18x2	16x2	81406GJGJH06	30
406	20x2	20x2	25x2,5	81406BQBQQ06	10
406	20x2	20x2	26x3	81406BQBQQP06	10
406	20x2	20x2	32x3	81406BQBQQ06	10
406	25x2,5	25x2,5	32x3	81406GOGOGQ06	10
406	26x3	26x3	32x3	81406GPGPQ06	10
406	16x2	18x2	16x2	81406GHGJH06	30
406	16x2	20x2	16x2	81406GHBQGH06	20
406	20x2	25x2,5	20x2	81406BQGOBQ06	10
406	20x2	26x3	20x2	81406BQGPBQ06	10
406	25x2,5	32x3	25x2,5	81406GOGQQ06	10
406	26x3	32x3	26x3	81406GPGQQP06	10
406	18x2	16x2	18x2	81406GJGHGJ06	30
406	20x2	16x2	20x2	81406BQGHBQ06	20
406	20x2	18x2	20x2	81406BQGJBQ06	20
406	25x2,5	16x2	25x2,5	81406GOHGO06	10
406	25x2,5	20x2	25x2,5	81406GOBQGO06	10
406	26x3	16x2	26x3	81406GPGHGP06	10
406	26x3	20x2	26x3	81406GPBQGP06	10
406	32x3	16x2	32x3	81406GQGHGQ06	10
406	32x3	20x2	32x3	81406GQBQQQ06	10
406	32x3	25x2,5	32x3	81406GQQOGQ06	10
406	32x3	26x3	32x3	81406GQGPGQ06	10
406	40x3,5	26x3	40x3,5	81406GSGPGS06	5
406	40x3,5	32x3	40x3,5	81406GSGQGS06	5
406	50x4	32x3	50x4	81406GTGQGT06	5
406	50x4	40x3,5	50x4	81406GTGSGT06	5
406	16X2	25x2,5	25x2,5	81406GHGOGO06	10
406	20x2	20x2	18x2	81406BQBQQJ06	20
406	20x2	20x2	16x2	81406BQBQGH06	20
406	25x2,5	25x2,5	20x2	81406GOGOBQ06	10
406	26x3	26x3	16x2	81406GPGPGH06	10

ART.	SIDE SIZE	CENTRAL SIZE	SIDE SIZE	CODE	
406	25x2,5	32x3	32x3	81406GOGQQ06	10
406	26x3	26x3	20x2	81406GPGPBQ06	10
406	32x3	32x3	20x2	81406GQQQBQ06	10
406	32x3	32x3	26x3	81406GQQGP06	10
406	16x2	20x2	25x2,5	81406GHBQGO06	15
406	20x2	16x2	25x2,5	81406BQGHGO06	15
406	20x2	25x2,5	32x3	81406BQGOQ06	10
406	25x2,5	20x2	32x3	81406GOBQGQ06	10
406	20x2	16x2	26x3	81406GOBQGP06	15
406	16x2	20x2	26x3	81406GHBQGP06	15
406	20x2	26x3	32x3	81406BQGPQ06	10
406	26x3	20x2	32x3	81406GPBQQ06	10

SEMPITER® TEE press-fitting.



ART. 407

ART.	SIZE	SIZE	CODE	
407	1/2"	16x2	81407ADGH06	20
407	1/2"	18x2	81407ADGJ06	20
407	1/2"	20x2	81407ADBQ06	20
407	3/4"	16x2	81407AEGH06	15
407	3/4"	18x2	81407AEIJ06	15
407	3/4"	20x2	81407AEBQ06	15
407	3/4"	25x2,5	81407AEGO06	10
407	3/4"	26x3	81407AEGP06	10
407	1"	26x3	81407AFGP06	10
407	1"	32x3	81407AFGQ06	10
407	1"1/4	32x3	81407AGGQ06	5
407	1"1/4	40x3,5	81407AGGS06	5
407	1"1/2	50x4	81407AHGT06	5

SEMPITER® male TEE press-fitting. Thread ISO 228-1.



ART. 408

ART.	SIZE	SIZE	CODE	
408	1/2"	16x2	81408ADGH06	20
408	1/2"	18x2	81408ADGJ06	20
408	1/2"	20x2	81408ADBQ06	20
408	3/4"	16x2	81408AEGH06	20
408	3/4"	20x2	81408AEBQ06	15
408	3/4"	25x2,5	81408AEGO06	10
408	3/4"	26x3	81408AEGP06	10
408	1"	26x3	81408AFGP06	10
408	1"	32x3	81408AFGQ06	10
408	1"1/4	32x3	81408AGGQ06	5
408	1"1/4	40x3,5	81408AGGS06	5
408	1"1/2	50x4	81408AHGT06	5

SEMPITER® female TEE press-fitting. **Thread ISO 228-1.**



ART.	SIZE	SIZE	HEIGHT (L)	CODE	
410	1/2"	16x2	52,5	81410ADGH06	20
410*	1/2"	16x2	40	81410ADGH0640	20
410	1/2"	18x2	52,5	81410ADGJ06	20
410	1/2"	20x2	52,5	81410ADBQ06	20

SEMPITER® press-fitting for wall plate fixing. **Thread ISO 228-1.**

ART.	WHEELBASE	CODE	
411	75-150	814117506	25

Wall bracket with set of 6 screws.



ART. 412

ART.	WHEELBASE	CODE	SIZE	
412	75-150	81412ADGH7506	1/2"-16x2	1 20
412	75-150	81412ADBQ7506	1/2"-20x2	1 20
412*	75-150	81412ADGH750640	1/2"-16x2-H40	1 20

Kit for wall mounting consisting of bracket + SEMPITER® fittings art. 410.  
**Thread ISO 228-1.**

\*Assembled with article 81410ADGH0640.



ART. 432

ART.	WHEELBASE	CODE	
432	100	8143210006	30
432	150	8143215006	30

Shaped bracket for plasterboard installation.



ART. 433

ART.	WHEELBASE	CODE	SIZE	
433	100	81433ADGH10006	1/2"-16x2	15
433	150	81433ADGH15006	1/2"-16x2	15
433*	100	81433ADGH1000640	1/2"-16x2-H40	15
433*	150	81433ADGH1500640	1/2"-16x2-H40	15

Kit for wall mounting consisting of bracket for plasterboard installation + SEMPITER® fittings art. 410. **Thread ISO 228-1.**

\*Assembled with article 81410ADGH0640.



ART. 422

ART.	SIZE	SIZE	CODE	
422	1/2"	16x2	81422ADGH06	20
422	1/2"	20x2	81422ADBQ06	20

Female T-offset fitting.



ART. 415

ART.	SIZE	SIZE	CODE	
415	1/2"	16x2	81415ADGH06	50
415	24X1,5	16x2	81415RAGH06	40
415	24X1,5	20x2	81415RABQ06	40
415	3/4" euroconus	16x2	81415AEGH06	40
415	3/4" euroconus	20x2	81415AEBQ06	40

SEMPITER® press-fitting, with revolving nut for manifolds and valves branch connections. **Thread ISO 228-1.**



ART. 423

ART.	SIZE	SIZE	WHEELBASE	CODE	
423	1/2"	16x2	75-150	81423ADGH7506	1 20
423	1/2"	20X2	75-150	81423ADBQ7506	1 20

Mounting bracket assembled with 2 offset fittings.



ART. 416

ART.	SIZE	SIZE	CODE	
416	1/2"	16x2	81416ADGH06	50
416	1/2"	20x2	81416ADBQ06	50
416	3/4"	16x2	81416AEGH06	40
416	3/4"	20x2	81416AEBQ06	40
416	3/4"	26x3	81416AEQP06	20
416	1"	26x3	81416AFGP06	20
416	1"	32x3	81416AFGQ06	20

SEMPITER® press-fitting with revolving nut for flat seat connections. **Thread ISO 228-1.**



ART. 425

ART.	SIZE	SIZE	CODE	
425	1/2"	16x2	81425ADGH06	20
425	1/2"	20x2	81425ADBQ06	20

Flanged elbow 90° with "U" 180°. Wheelbase 50 mm.



ART. 417

ART.	SIZE	CODE	
417	16x2	81417GH06	50
417	20x2	81417BQ06	50
417	26x3	81417GP06	50
417	32x3	81417GQ06	20

SEMPITER® end plug.

## MULTILAYER PIPE AND SEMPITER PRESS FITTINGS, MULTICLIP TH, H, U



ART. 418

ART.	SIZE	SIZE	CODE	
418	16x2	15	81418GHGE06	40

SEMPITER® chrome-plated elbow fittings for radiator connection.



ART. 413

ART.	SIZE	CODE	
413	16x2	81413GH06	5
413	20x2	81413BQ06	5
413	20x2-16x2	81413BQGH06	5

SEMPITER® **full bore cock for built-in installation**. Flat seat in EPDM Perox.



ART. 419

ART.	SIZE	SIZE	CODE	
419	16x2	15	81419GHGE06	20

SEMPITER® chrome-plated TEE fittings for radiator connection.



ART. 515

ART.	SIZE	CODE	
515	1/2"	81515AD06	5
515	3/4"	81515AE06	5

**Full bore cock for built-in installation** with female connections and flat seat.



ART. 409

ART.	SIZE	CODE	
409	16x2	81409GH06	5
409	20x2	81409BQ06	5

SEMPITER® **full bore cock for built-in installation**. Screw with shutter with conical seal in EPDM Perox. **Compact model**.



ART. 414

ART.	CODE		
414	81414GH06	1	20

Extension for built-in cock for articles 413 and 515.



ART. 431

ART.	CODE		
431	81431GH05	1	20

Extension for built-in cock for article 409.



ART. 516

ART.	SIZE	CODE		
516	1/2" - 10 mm	90516AD07	1	40

Angle regulating valve, shutter-type, **with filter**, adjustable connection for copper tubing and chromed steel rosette.



ART. 519

ART.	SIZE	CODE		
519	1/2" - 3/8"	90519AC07	1	50
519	1/2" - 1/2"	90519AD07	1	50
*519	1/2" - 3/4"	90519AE07	1	50

Angle regulating valve, shutter-type, flat seat connection for flexible pipe and chromed steel rosette.

**\*3/4" connection for washing machine**



ART. 517

ART.	SIZE	CODE		
517	1/2" - 10 mm	90517AD07	1	50

Angle regulating valve, shutter-type, adjustable connection for copper tubing and chromed steel rosette.



ART. 520

ART.	SIZE	CODE		
520	1/2" - 10 mm	90520AC07	1	50

Angle regulating valve, shutter-type, fixed connection for copper tubing and chromed steel rosette.



ART. 518

ART.	SIZE	CODE		
518	3/8" - 1/2"	90518AC07	1	50
518	1/2" - 1/2"	90518AD07	1	50

Angle regulating valve, shutter-type, **with filter**, flat seat connection for flexible pipe and chromed steel rosette.



**NEW**  
**ART. 470**

ART.	CODE	SIZE	PACK
470	814703253	1	

Universal radial Power-Press SE wired press-machine for joint pressing of pipes sized 10-110 mm. Thrust force 32 kN. Electromechanical drive with 450 W universal motor. 220 Volt supply.



**NEW**  
**ART. K470**

ART.	CODE	SIZE	PACK
K470	81K470GHBQGP	1	

Kit consisting of Electric Power-Press SE art. 470 + 3 jaws sized 16, 20 and 26 mm.



**NEW**  
**ART. K471**

ART.	CODE	SIZE	PACK
K471	81K471GHBQGP	1	

Kit consisting of Mini-Press 22 V ACC battery-operated radial press-machine + 3 jaws sized 16, 20 and 26 mm for joint pressing of press-fittings for pipes sized 10-40 mm. Thrust force 22 kN. Electro-hydraulic drive with powerful battery motor 21.6 V, 380 W. Automatic return after complete pressing.



**ART. 427**

ART.	SIZE	CODE	PACK
427	16	81427GH20	1
427	20	81427BQ20	1
427	26	81427GP20	1
427	32	81427GQ20	1

Gauge - deburring tool 16-20-26-32.



**NEW**  
**ART. 473**

ART.	SIZE	CODE	PACK
473	16	81473GH20	1
473	18	81473GJ20	1
473	20	81473BQ20	1
473	25	81473GO20	1
473	26	81473GP20	1
473	32	81473GQ20	1
473	40	81473GS20	1

Jaws TH Power-Press SE wired press-machine art. 470.



**NEW**  
**ART. 472**

ART.	SIZE	CODE	PACK
472	16	81472GH20	1
472	18	81472GJ20	1
472	20	81472BQ20	1
472	25	81472GO20	1
472	26	81472GP20	1
472	32	81472GQ20	1
472	40	81472GS20	1

Jaws TH for Mini-Press 22 V ACC battery-operated radial press-machine included in the kit art. K471.



**ART. 424**

ART.	CODE	PACK
424	81424GH20	1

Shears for plastic pipes up to diameter 42.



**ART. 429**

ART.	SIZE	SIZE	CODE	PACK
429	16	2	81429GH20	1
429	20	2	81429BQ20	1
429	26	3	81429GP20	1
429	32	3	81429GQ20	1

Bending spring for pipes 16-20-26-32.



ART. 530 - ART. 540

ART.	SIZE	CODE			
530	16X2	81530ADGH06	1	100	
540	20X2	81540RABQ06	1	50	

Double straight fitting.



ART. 533 - ART. 543

ART.	SIZE	CODE			
533	16X2	81533ADGH06	1	100	
543	20X2	81543RABQ06	1	50	

Double elbow.



ART. 531 - ART. 541 - ART. 591

ART.	SIZE	CODE			
531	1/2" M - 16x2	81531ADGH06	1	100	
541	1/2" M - 20x2	81541RDBQ06	1	100	
531	3/4" M - 16x2	81531AEGH06	1	100	
541	3/4" M - 20x2	81541REBQ06	1	100	
541	1" M - 16x2	81541RFGH06	1	50	
541	1" M - 20x2	81541RFBQ06	1	50	
591	3/4" M - 26x3	81591AEGP06	1	50	
591	1" M - 26x3	81591AFGP06	1	50	
591	1" M - 32x3	81591AFQQ06	1	25	
591	1"1/4M - 32x3	81591AGGQ06	1	25	

Male straight fitting.

ART.	SIZE	CODE			
534	1/2" M - 16x2	81534ADGH06	1	100	
544	1/2" M - 20x2	81544RDBQ06	1	100	
534	3/4" M - 16x2	81534AEGH06	1	100	
544	3/4" M - 20x2	81544REBQ06	1	50	
594	3/4" M - 26x3	81594AEGP06	1	50	
594	1" M - 26x3	81594AFGP06	1	50	
594	1" M - 32x3	81594AFQQ06	1	50	
594	1"1/4M - 32x3	81594AGGQ06	1	25	

Male elbow.



ART. 532 - ART. 542

ART.	SIZE	CODE			
532	1/2" F - 16x2	81532ADGH06	1	100	
532	3/4" F - 16x2	81532AEGH06	1	50	
542	1/2" F 20x2	81542RDBQ06	1	100	
542	3/4" F - 20x2	81542REBQ06	1	100	
542	1" F - 16x2	81542RFGH06	1	50	
542	1" F - 20x2	81542RFBQ06	1	50	

Female straight fitting.

ART. 535 - ART. 545

ART.	SIZE	CODE			
535	1/2" F - 16x2	81535ADGH06	1	100	
545	1/2" F - 20x2	81545RDBQ06	1	100	
545	3/4" F - 16x2	81545REGH06	1	50	
545	3/4" F - 20x2	81545REBQ06	1	50	

Female elbow.

## UNIVERSAL FITTINGS FOR MULTILAYER PIPE, PEX AND COPPER



ART. 536 - ART. 546

ART.	SIZE	CODE		
536	16X2	81536ADGH06	1	50
546	20X2	81546RABQ06	1	50

TEE fitting.



ART. 539 - ART. 549

ART.	SIZE	CODE		
539	1/2"F - 16x2	81539ADGH06	1	50
549	1/2"F - 20x2	81549RABQ06	1	50

Flanged elbow.



ART. 537 - ART. 547

ART.	SIZE	CODE		
537	1/2"M - 16x2	81537ADGH06	1	50
547	1/2"M - 20x2	81547RDBQ06	1	50
537	3/4"M - 16x2	81537AECH06	1	50
547	3/4"M - 20x2	81547REBQ06	1	50

Male TEE fitting.



ART. 500

ART.	SIZE	CONNECTION THREAD	CODE		
500	1/2"	1/2"	81500AD06	10	200
500	24x1,5	24x1,5	81500RA06	10	200
500	3/4"	3/4"	81500EK06	10	200
500	1"	1"	81500AF06	5	100

Double straight fitting.



ART. 538 - ART. 548

ART.	SIZE	CODE		
538	1/2"F - 16x2	81538ADGH06	1	50
548	1/2"F - 20x2	81548RDBQ06	1	50
548	3/4"F - 16x2	81548REGH06	1	50
548	3/4"F - 20x2	81548REBQ06	1	50

Female TEE fitting.



ART. 501

ART.	SIZE	CONNECTION THREAD	CODE		
501	3/8"M - 1/2"	1/2"	81501LA06	10	300
501	1/2"M - 1/2"	1/2"	81501AD06	10	200
501	3/4"M - 1/2"	1/2"	81501LC06	10	200
501	3/8"M - 24x1,5	24x1,5	81501RC06	10	200
501	1/2"M - 24x1,5	24x1,5	81501RD06	10	200
501	3/4"M - 24x1,5	24x1,5	81501RE06	10	200
501	1"M - 24x1,5	24x1,5	81501RF06	5	100

Male straight fitting.



ART. 502

ART.	SIZE	CONNECTION THREAD	CODE		
502	3/8" F - 1/2"	1/2"	81502LA06	10	200
502	1/2" F - 1/2"	1/2"	81502AD06	10	300
502	3/4" F - 1/2"	1/2"	81502LC06	15	200
502	3/8" F - 24x1,5	24x1,5	81502RC06	10	200
502	1/2" F - 24x1,5	24x1,5	81502RD06	10	200
502	3/4" F - 24x1,5	24x1,5	81502RE06	10	200
502	1" F - 24x1,5	24x1,5	81502RF06	5	100
502	3/4" F - 1"	1"	81502LE06	5	100
502	1" F - 1"	1"	81502AF06	5	200

Female straight fitting.



ART. 503

ART.	SIZE	CONNECTION THREAD	CODE		
503	1/2"	1/2"	81503AD06	5	200
503	24x1,5	24x1,5	81503RA06	5	100

Double elbow.



ART. 504

ART.	SIZE	CONNECTION THREAD	CODE		
504	3/8" M-1/2"	1/2"	81504LA06	10	200
504	1/2" M-1/2"	1/2"	81504AD06	5	200
504	3/4" M-1/2"	1/2"	81504LC06	10	150
504	3/8" M-24x1,5	24x1,5	81504RC06	10	200
504	1/2" M-24x1,5	24x1,5	81504RD06	5	200
504	3/4" M-24x1,5	24x1,5	81504RE06	10	150

Male elbow.



ART. 505

ART.	SIZE	CONNECTION THREAD	CODE		
505	3/8" F-1/2"	1/2"	81505LA06	10	150
505	1/2" F-1/2"	1/2"	81505AD06	10	150
505	3/8" F-24x1,5	24x1,5	81505RC06	10	150
505	1/2" F-24x1,5	24x1,5	81505RD06	10	150
505	3/4" F-24x1,5	24x1,5	81505RE06	5	100

Male-Female elbow.



ART. 506

ART.	SIZE	CONNECTION THREAD	CODE		
506	1/2"	1/2"	81506AD06	5	100
506	24x1,5	24x1,5	81506RA06	5	100

TEE fitting.



ART. 507

ART.	SIZE	CONNECTION THREAD	CODE		
507	3/8" M-1/2"	1/2"	81507LA06	5	100
507	1/2" M-1/2"	1/2"	81507AD06	5	100
507	3/4" M-1/2"	1/2"	81507LC06	5	200
507	3/8" M-24x1,5	24x1,5	81507RC06	5	100
507	1/2" M-24x1,5	24x1,5	81507RD06	5	100
507	3/4" M-24x1,5	24x1,5	81507RE06	5	100

Male TEE fitting.

## UNIVERSAL FITTINGS FOR MULTILAYER PIPE, PEX AND COPPER



ART. 508

ART.	SIZE	CONNECTION THREAD	CODE			
508	3/8" F-1/2"	1/2"	81508LA06	5	100	
508	1/2" F-1/2"	1/2"	81508AD06	5	100	
508	3/8" F-24x1,5	24x1,5	81508RC06	5	100	
508	1/2" F-24x1,5	24x1,5	81508RD06	5	100	
508	3/4" F-24x1,5	24x1,5	81508RE06	5	150	

Female TEE fitting.



ART. 511

ART.	SIZE	CONNECTION THREAD	CODE			
511	1/2"	1/2"	81511AD06	5	200	
511	1/2"	24x1,5	81511RD06	5	250	

105° elbow.



ART. 509

ART.	SIZE	CONNECTION THREAD	CODE			
509	1/2"	1/2"	81509AD06	5	100	
509	24x1,5	24x1,5	81509RA06	5	100	

Cross.



ART. 513

ART.	SIZE	CONNECTION THREAD	CODE			
513	1/2"	1/2"	81513AD06	5	100	

100° extended elbow.



ART. 510

ART.	SIZE	CONNECTION THREAD	CODE			
510	1/2"	1/2"	81510AD06	5	100	
510	1/2"	24x1,5	81510RD06	5	100	

Flanged elbow.



ART. 1200

ART.	SIZE	BRASS FINISH CODE	NICKELED FINISH CODE	BOX		
1200	1/2" F-1/2" F	811200AD05	811200AD06	50		
1200	3/4" F-3/4" F	811200AE05	811200AE06	40		
1200	1" F-1" F	811200AF05	811200AF06	20		
1200	1"1/4F-1"1/4F	811200AG05	811200AG06	10		
1200	1"1/2F-1"1/2F	811200AH05	811200AH06	8		
1200	2" F-2" F	811200AJ05	811200AJ06	3		

Female-female elbow.



ART. 1203

ART.	SIZE	CODE	BOX		
1203	1/2" F-3/8" F-1/2" F	811203ADACAD05	20		
1203	3/4" F-1/2" F-3/4" F	811203AEADAE05	25		
1203	1" F-3/4" F-1" F	811203AFAEAF05	10		
1203	1/2" F-3/8" F-1/2" F	811203ADACAD06	20		
1203	3/4" F-1/2" F-3/4" F	811203AEADAE06	25		
1203	1" F-3/4" F-1" F	811203AFAEAF06	10		

Female TEE reduction fitting.



ART. 1201

ART.	SIZE	BRASS FINISH CODE	NICKELED FINISH CODE	BOX		
1201	1/2" M-1/2" F	811201AD05	811201AD06	50		
1201	3/4" M-3/4" F	811201AE05	811201AE06	40		
1201	1" M-1" F	811201AF05	811201AF06	20		
1201	1"1/4M-1"1/4F	811201AG05	811201AG06	10		
1201	1"1/2M-1"1/2F	811201AH05	811201AH06	5		
1201	2" M-2" F	811201AJ05	811201AJ06	5		

Male-female elbow.



ART. 808

ART.	SIZE	BRASS FINISH CODE	NICKELED FINISH CODE	BOX		
808	3/8"	85808AC05	85808AC06	150		
808	1/2"	85808AD05	85808AD06	100		
808	3/4"	85808AE05	85808AE06	50		
808	1"	85808AF05	85808AF06	40		
808	1"1/4	85808AG05	85808AG06	25		
808	1"1/2	85808AH05	85808AH06	20		
808	2"	85808AJ05	85808AJ06	5		

Three pieces elbow radiator union. With O-ring.



ART. 818

ART.	SIZE	BRASS FINISH CODE	NICKELED FINISH CODE	BOX		
818	3/8"	85818AC05	85818AC06	150		
818	1/2"	85818AD05	85818AD06	100		
818	3/4"	85818AE05	85818AE06	100		
818	1"	85818AF05	85818AF06	40		
818	1"1/4	85818AG05	85818AG06	25		
818	1"1/2	85818AH05	85818AH06	20		
818	2"	85818AJ05	85818AJ06	10		

Three pieces straight radiator union. With O-ring.



ART. 796

ART.	SIZE	CODE		
796	1"1/2 F 1"F	82796AF05	1	10

Flat seat Female-Female union with revolving nut and gasket. Reduction from 1 1/2" F (flat seat connection) to 1" F.



ART. 797

ART.	SIZE	CODE		
797	1" F 1" 1/2 M	82797AF05	1	20

Flat seat Male-Female connector with gaskets on both sides. Reduction from 1" 1/2 M to 1" F.



ART. 798

ART.	SIZE	CODE		
798	1"1/2 F 1" M	82798AF05	1	10

Flat seat Male-Female union with revolving nut and gasket. Reduction from 1" 1/2 F to 1" M.



ART. 789

ART.	SIZE	CODE		
789	1/2" F - 1" F	82789AD05	1	100
789	3/4" F - 1"1/2 F	82789AE05	1	50
789	1" F - 1"1/2 F	82789AF05	1	50

Female-female flat seat union with nut and gasket. Circulation groups connection.



ART. 792

ART.	SIZE	CODE	
792	1/2" M-3/4" F	82792AD05	200
792	3/4" M-1" F	82792AE05	100
792	1" M-1"1/4 F	82792AF05	50
792	1"1/4 M-1"1/2 F	82792AG05	40

Male-Female flat seat union with gasket and nut.



ART. 1210

ART.	SIZE	BRASS FINISH CODE	NICKELLED FINISH CODE		
1210	3/8"	811210AC05	811210AC06	10	200
1210	1/2"	811210AD05	811210AD06	10	150
<b>1210L</b>	<b>1/2"</b>	<b>811210AD05L</b>	<b>811210AD06L</b>	<b>10</b>	<b>100</b>
1210	3/4"	811210AE05	811210AE06	-	80
1210	1"	811210AF05	811210AF06	-	40
1210	1"1/4	811210AG05	811210AG06	-	25
1210	1"1/2	811210AH05	811210AH06	-	20
1210	2"	811210AJ05	811210AJ06	-	12

Nipples. Extended version for 1/2" size available, code **1210L**.



ART. 1211

ART.	SIZE	BRASS FINISH CODE	NICKELED FINISH CODE					
1211	3/8"-1/2"	811211ACAD05	811211ACAD06	10	150			
1211	1/2"-3/4"	811211ADAE05	811211ADAE06	-	80			
1211	1/2"-1"	811211ADAF05	811211ADAF06	-	60			
1211	3/4"-1"	811211AEAF05	811211AEAF06	-	50			
1211	3/4"-1"1/4	811211AEAG05	811211AEAG06	-	30			
1211	1"-1"1/4	811211AFAG05	811211AFAG06	-	25			
1211	1"-1"1/2	811211AFAH05	811211AFAH06	-	20			
1211	1"1/4-1"1/2	811211AGAH05	811211AGAH06	-	20			
1211	1"1/2-2"	811211AHAJ05	811211AHAJ06	-	10			

Reduction nipples.



ART. 1212

ART.	SIZE	BRASS FINISH CODE	NICKELED FINISH CODE					
1212	1/2" M-3/8" F	811212ACAD05	811212ACAD06	10	200			
1212	3/4" M-3/8" F	811212ACAE05	811212ACAE06	-	150			
1212	1" M-3/8" F	811212ACAF05	811212ACAF06	-	100			
1212	3/4" M-1/2" F	811212ADAE05	811212ADAE06	-	150			
1212	1" M-1/2" F	811212ADAF05	811212ADAF06	-	100			
1212	1"1/4M-1/2" F	811212ADAG05	811212ADAG06	-	50			
1212	1"1/2M-1/2" F	811212ADAH05	811212ADAH06	-	10			
1212	2" M-1/2" F	811212ADAJ05	811212ADAJ06	-	10			
1212	1" M-3/4" F	811212AEAF05	811212AEAF06	-	100			
1212	1"1/4M-3/4" F	811212AEAG05	811212AEAG06	-	50			
1212	1"1/2M-3/4" F	811212AEAH05	811212AEAH06	-	25			
1212	2" M-3/4" F	811212AEAJ05	811212AEAJ06	-	10			
1212	1"1/4M-1" F	811212AFAG05	811212AFAG06	-	50			
1212	1"1/2M-1" F	811212AFAH05	811212AFAH06	-	10			
1212	2" M-1" F	811212AFAJ05	811212AFAJ06	-	10			
1212	1"1/2M-1"1/4F	811212AGAH05	811212AGAH06	-	10			
1212	2" M-1"1/4F	811212AGAJ05	811212AGAJ06	-	10			
1212	2" M-1"1/2F	811212AHAJ05	811212AHAJ06	-	10			
1212	2"1/2M-1"1/2F	811212AHAK05	811212AHAK06	-	10			
1212	2"1/2M-2" F	811212AJAK05	811212AJAK06	-	10			

Male-female reduction fitting.



ART. 1213

ART.	SIZE	BRASS FINISH CODE	NICKELED FINISH CODE					
1213	3/8"	811213AC05	811213AC06	10	100			
1213	1/2"	811213AD05	811213AD06	10	80			
1213	3/4"	811213AE05	811213AE06	-	70			
1213	1"	811213AF05	811213AF06	-	50			
1213	1"1/4	811213AG05	811213AG06	-	15			
1213	1"1/2	811213AH05	811213AH06	-	10			
1213	2"	811213AJ05	811213AJ06	-	8			

Female sleeve fitting.



ART. 1214

ART.	SIZE	BRASS FINISH CODE	NICKELED FINISH CODE				
1214	3/8"-1/2"	811214ACAD05	811214ACAD06	10	100		
1214	1/2"-3/4"	811214ADAE05	811214ADAE06	-	100		
1214	1/2"-1"	811214ADAF05	811214ADAF06	-	70		
1214	3/4"-1"	811214AEAF05	811214AEAF06	-	50		
1214	3/4"-1"1/4	811214AEAG05	811214AEAG06	-	40		
1214	1"-1"1/4	811214AFAG05	811214AFAG06	-	40		
1214	1"-1"1/2	811214AFAH05	811214AFAH06	-	10		
1214	1"-2"	811214AFAJ05	811214AFAJ06	-	8		
1214	1"1/4-1"1/2	811214AGAH05	811214AGAH06	-	10		
1214	1"1/4-2"	811214AGAJ05	811214AGAJ06	-	8		
1214	1"1/2-2"	811214AHAJ05	811214AHAJ06	-	8		

Female-female reduction sleeve fitting.



ART. 1215

ART.	SIZE	CODE				
1215	1/2"M-3/8"F	811215ADAC05	10	200		
1215	3/4"M-1/2"F	811215AEAD05	10	150		
1215	1"M-1/2"F	811215AFAD05	-	150		
1215	1"M-3/4"F	811215AFAE05	-	150		
1215	1"1/4M-1"F	811215AGAF05	-	120		
1215	1"1/2M-1"F	811215AHAF05	-	100		

Male-female reduction ring nut.



ART. 237

ART.	SIZE	BRASS FINISH CODE	NICKELED FINISH CODE				
237	1/2"	87237AD05	87237AD06	10	500		
237	3/4"	87237AE05	87237AE06	-	400		
237	1"	87237AF05	87237AF06	-	150		

Male end plug for manifolds. Sizes 1/2" male - 3/4 male - 1" male.

F



ART. 221

ART.	SIZE	BRASS FINISH CODE	NICKELED FINISH CODE				
221	1/2"	87221AD05	87221AD06	10	500		
221	3/4"	87221AE05	87221AE06	10	400		
221	1"	87221AF05	87221AF06	5	200		
221	1"1/4	87221AG05	87221AG06	10	100		

Blind head cap for flanged manifolds. Connection: 1/2"M - 3/4M - 1"M - 1"1/4 M



ART. 201

ART.	SIZE	CODE		
201	1/2	87201AD05	10	500
201	3/4	87201AE05	10	400
201	1"	87201AF05	5	200
201	1" 1/4	87201AG05	10	100
201	1/2	87201AD06	10	500
201	3/4	87201AE06	10	400
201	1"	87201AF06	5	200
201	1"1/4	87201AG06	2	100

Blind end cap for manifolds. Sizes: 1/2" female - 3/4" female - 1" female - 1"1/4 female.



ART. 238

ART.	SIZE	CODE		
238	3/8"	87238AC05	10	200
238	1/2"	87238AD05	10	200
238	24x1,5	87238OO05	10	200
238	3/4"	87238AE05	10	200
238	3/8"	87238AC06	10	200
238	1/2"	87238AD06	10	200
238	24x1,5	87238OO06	10	200
238	3/4"	87238AE06	10	200

Blind cap for manifold's side outlets with EPDM gasket.



ART. 521

ART.	SIZE	DIAMETER	CODE	
521	1/2 F	10	81521BCAD05	500
521	1/2 F	14	81521BEAD05	500

Female hose part.



ART. 522

ART.	SIZE	DIAMETER	CODE	
522	1/2 M	10	81522BCAD05	500
522	1/2 M	14	81522BEAD05	500

Male hose part.



ART. 19

ART.	SIZE	BRASS FINISH CODE		
19	3/8"x10	81019AC01005	10	500
19	3/8"x15	81019AC01505	10	400
19	3/8"x20	81019AC02005	10	350
19	3/8"x30	81019AC03005	10	300
19	3/8"x40	81019AC04005	10	200
19	3/8"x50	81019AC05005	10	150
19	3/8"x60	81019AC06005	10	100
19	3/8"x80	81019AC08005	10	100
19	3/8"x100	81019AC10005	10	70
19	1/2"x10	81019AD01005	-	300
19	1/2"x15	81019AD01505	-	250
19	1/2"x20	81019AD02005	-	200
19	1/2"x25	81019AD02505	-	200
19	1/2"x30	81019AD03005	-	200
19	1/2"x40	81019AD04005	-	100
19	1/2"x50	81019AD05005	-	100
19	1/2"x60	81019AD06005	-	100
19	1/2"x70	81019AD07005	-	100
19	1/2"x80	81019AD08005	-	50
19	1/2"x100	81019AD10005	-	50
19	3/4"x10	81019AE01005	-	200
19	3/4"x15	81019AE01505	-	150
19	3/4"x20	81019AE02005	-	150
19	3/4"x25	81019AE02505	-	150
19	3/4"x30	81019AE03005	-	100
19	3/4"x40	81019AE04005	-	100
19	3/4"x50	81019AE05005	-	100
19	3/4"x60	81019AE06005	-	100
19	3/4"x80	81019AE08005	-	50
19	3/4"x100	81019AE10005	-	40
19	1"x10	81019AF01005	-	150
19	1"x15	81019AF01505	-	100
19	1"x20	81019AF02005	-	100
19	1"x30	81019AF03005	-	50
19	1"x40	81019AF04005	-	50
19	1"x50	81019AF05005	-	50
19	1"x80	81019AF08005	-	30
19	1"x100	81019AF10005	-	25

Male-female extender in turned brass.



ART. 20

ART.	SIZE	BRASS FINISH CODE		
20	3/8" M-1/2" F	81020ACAD05	300	
20	1/2" M-3/4" F	81020ADAE05	200	
20	3/4" M-1" F	81020AEAF05	100	

Reduced male-female extender in turned brass.



ART. 1200

ART.	SIZE	CODE		
1200	1/2" F-1/2" F	811200AD07	50	
1200	3/4" F-3/4" F	811200AE07	40	
1200	1" F-1" F	811200AF07	20	

Chromed female-female elbow.



ART. 1201

ART.	SIZE	CODE		
1201	1/2" M-1/2" F	811201AD07	50	
1201	3/4" M-3/4" F	811201AE07	40	
1201	1" M-1" F	811201AF07	20	

Chromed male-female elbow.



ART. 1202

ART.	SIZE	CODE		
1202	1/2" F	811202AD07	20	
1202	3/4" F	811202AE07	25	
1202	1" F	811202AF07	15	

Chromed female TEE fitting.



ART. 1210

ART.	SIZE	CODE		
1210	3/8"	811210AC07	10	200
1210	1/2"	811210AD07	10	150
<b>1210L</b>	<b>1/2"</b>	<b>811210AD07L</b>	<b>10</b>	<b>100</b>
1210	3/4"	811210AE07	-	80
1210	1"	811210AF07	-	40

Chromed nipples. Extended version for 1/2" size available, code **1210L**.



ART. 1211

ART.	SIZE	CODE		
1211	3/8"-1/2"	811211ACAD07	10	150
1211	1/2"-3/4"	811211ADAE07	-	80
1211	1/2"-1"	811211ADAF07	-	60
1211	3/4"-1"	811211AEAF07	-	50

Chromed reduction nipples.



ART. 1212

ART.	SIZE	CODE		
1212	1/2" M-3/8" F	811212ADAC07	10	150
1212	3/4" M-3/8" F	811212AEAC07	-	150
1212	3/4" M-1/2" F	811212AEAD07	-	150
1212	1" M-3/8" F	811212AFAC07	-	100
1212	1" M-1/2" F	811212AFAD07	-	100
1212	1" M-3/4" F	811212AFAE07	-	100

Chromed male-female reduction fitting.



ART. 1213

ART.	SIZE	CODE		
1213	3/8"	811213AC07	10	100
1213	1/2"	811213AD07	10	80
1213	3/4"	811213AE07	-	70
1213	1"	811213AF07	-	50

Chromed female sleeve fitting.



ART. 1214

ART.	SIZE	CODE		
1214	3/8"-1/2"	811214ACAD07	10	100
1214	1/2"-3/4"	811214ADAE07	-	100
1214	1/2"-1"	811214ADAF07	-	70
1214	3/4"-1"	811214AEAF07	-	50

Chromed female-female reduction sleeve fitting.



ART. 19

ART.	SIZE	CHROME FINISH CODE	
19	3/8"x10	81019AC01006	150
19	3/8"x15	81019AC01506	100
19	3/8"x20	81019AC02006	100
19	3/8"x30	81019AC03006	100
19	3/8"x40	81019AC04006	100
19	3/8"x50	81019AC05006	100
19	3/8"x60	81019AC06006	100
19	3/8"x80	81019AC08006	50
19	3/8"x100	81019AC10006	50
19	1/2"x10	81019AD01006	300
19	1/2"x15	81019AD01506	250
19	1/2"x20	81019AD02006	200
19	1/2"x25	81019AD02506	200
19	1/2"x30	81019AD03006	200
19	1/2"x40	81019AD04006	100
19	1/2"x50	81019AD05006	100
19	1/2"x60	81019AD06006	100
19	1/2"x70	81019AD07006	50
19	1/2"x80	81019AD08006	50
19	1/2"x100	81019AD10006	50
19	3/4"x10	81019AE01006	200
19	3/4"x15	81019AE01506	150
19	3/4"x20	81019AE02006	150
19	3/4"x25	81019AE02506	100
19	3/4"x30	81019AE03006	100
19	3/4"x40	81019AE04006	100
19	3/4"x50	81019AE05006	50
19	3/4"x60	81019AE06006	50
19	3/4"x80	81019AE08006	50
19	3/4"x100	81019AE10006	40
19	1"x10	81019AF01006	150
19	1"x15	81019AF01506	100
19	1"x20	81019AF02006	100
19	1"x30	81019AF03006	50
19	1"x40	81019AF04006	50
19	1"x50	81019AF05006	50
19	1"x80	81019AF08006	30
19	1"x100	81019AF10006	25

Chromed male-female extender in turned brass.



ART. 20

ART.	SIZE	CHROME FINISH CODE	
20	3/8"M-1/2"F	81020ACAD06	300
20	1/2"M-3/4"F	81020ADAE06	200
20	3/4"M-1"F	81020AEAF06	100

Chromed reduced male-female extender in turned brass.



NEW

ART. 201

ART.	SIZE	CODE		
201	1/2"	81201AD07	10	500
201	3/4"	81201AE07	10	400

Blind end cap for manifolds. Chrome finish.



NEW

ART. 237

ART.	SIZE	CODE		
237	1/2"	87237AD07	10	500
237	3/4"	87237AE07	-	400
237	1"	87237AF07	-	150

Male end plug for manifolds. Chrome finish



ART. 620

ART.	SIZE	CODE			
620	1/4"	81620AB05	10	500	
620	3/8"	81620AC05	10	300	
620	1/2"	81620AD05	10	300	
620	5/8"	81620AI05	10	200	
620	3/4"	81620AE05	10	100	

Union for fitting.



ART. 623

ART.	SIZE	CODE		
623	1/4"	81623AB05	10	
623	3/8"	81623AC05	10	
623	1/2"	81623AD05	10	
623	5/8"	81623AI05	10	
623	3/4"	81623AE05	10	

Copper gasket.



ART. 621

ART.	SIZE	CODE			
621	1/4"-3/8"	81621ABAC05	10	500	
621	3/8"-1/2"	81621ACAD05	10	300	

Reducing union for fitting.



ART. 624

ART.	SIZE	CODE		
624	1/4"	81624AB05	10	
624	3/8"	81624AC05	10	
624	1/2"	81624AD05	10	
624	5/8"	81624AI05	10	
624	3/4"	81624AE05	10	

Sealing cap.



ART. 622

ART.	SIZE	CODE			
622	1/4"	81622AB05	10	300	
622	3/8"	81622AC05	10	200	
622	1/2"	81622AD05	10	-	
622	5/8"	81622AI05	10	-	

Blind union (cap).



ART. 625

ART.	SIZE	CODE			
625	1/4"	81625AB05	10	500	
625	3/8"	81625AC05	10	500	
625	1/2"	81625AD05	10	200	
625	5/8"	81625AI05	10	200	
625	3/4"	81625AE05	10	200	

Double straight fitting.



ART. 626

ART.	SIZE	CODE			
626	1/4" - 3/8"	81626ABAC05	10	250	
626	1/4" - 1/2"	81626ABAD05	10	200	
626	1/4" - 5/8"	81626ABA105	10	250	
626	3/8" - 1/2"	81626ACAD05	10	200	
626	3/8" - 5/8"	81626ACAI05	10	-	
626	1/2" - 5/8"	81626ADAI05	10	200	
626	1/2" - 3/4"	81626ADAE05	10	150	
626	5/8" - 3/4"	81626AIAE05	10	150	

Reducing straight fitting.



ART. 628

ART.	SIZE	CODE		
628	1/4"	81628AB05	5	
628	3/8"	81628AC05	5	
628	1/2"	81628AD05	5	
628	5/8"	81628AI05	5	
628	3/4"	81628AE05	5	

Double elbow fitting.



ART. 627

ART.	SIZE	CODE			
627	1/4" M-3/8" F	81627ABAC05	10	250	
627	3/8" M-1/2" F	81627ACAD05	10	250	
627	1/2" M-3/8" F	81627ADAC05	10	250	

Male-Female straight fitting.



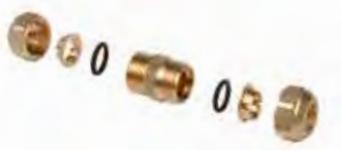
ART. 629

ART.	SIZE	CODE		
629	1/4"	81629AB05	5	
629	3/8"	81629AC05	5	
629	1/2"	81629AD05	5	
629	3/4"	81629AE05	5	

TEE fitting.

The **series 570** fittings can be used in sanitary water distribution systems (for heating or gas distribution systems)

The special HNBR seal, complying with standard EN 682, is suited for pipes containing gas or hot/cold fluids; fittings comply with standard EN1254/2.



ART. 570

ART.	SIZE	CODE		
570	12	81570ADFD05	1	50
570	14	81570RAGD05	1	50
570	15	81570RAGE05	1	50
570	16	81570RAGF05	1	50
570	18	81570HFHF05	1	50
570	22	81570MJJM05	1	50

Double straight fitting.



ART. 572

ART.	SIZE	CODE		
572	1/2" F-12	81572ADFD05	100	
572	1/2" F-14	81572RDGD05	100	
572	1/2" F-15	81572RDGE05	100	
572	1/2" F-16	81572RDGF05	100	
572	3/4" F-12	81572LCFD05	100	
572	3/4" F-14	81572REGD05	100	
572	3/4" F-15	81572REGE05	100	
572	3/4" F-16	81572REGF05	100	
572	3/4" F-18	81572AEHF05	50	
572	3/4" F-22	81572AEMJ05	50	
572	1" F-22	81572AFMJ05	50	

Female straight fitting.



ART. 571

ART.	SIZE	CODE	
571	1/2" M-12	81571ADFD05	100
571	1/2" M-14	81571RDGD05	100
571	1/2" M-15	81571RDGE05	100
571	1/2" M-16	81571RDGF05	100
571	3/4" M-12	81571LCFD05	100
571	3/4" M-14	81571REGD05	100
571	3/4" M-15	81571REGE05	100
571	3/4" M-16	81571REGF05	100
571	3/4" M-18	81571AEHF05	50
571	3/4" M-22	81571AEMJ05	50
571	1" M-18	81571AFHF05	50
571	1" M-22	81571AFMJ05	50

Male straight fitting.



ART. 575

ART.	SIZE	CODE		
575	12	81575ADFD05	1	50
575	14	81575RAGD05	1	50
575	15	81575RAGE05	1	50
575	16	81575RAGF05	1	50
575	18	81575HFHF05	1	40
575	22	81575MJJM05	1	40

Double elbow.



ART. 576

ART.	SIZE	CODE		
576	1/2" M-12	81576ADFD05	1	50
576	1/2" M-14	81576RDGD05	1	50
576	1/2" M-15	81576RDGE05	1	50
576	1/2" M-16	81576RDGF05	1	50
576	3/4" M-12	81576LCFD05	1	50
576	3/4" M-14	81576REGD05	1	50
576	3/4" M-15	81576REGE05	-	50
576	3/4" M-16	81576REGF05	-	50
576	3/4" M-18	81576AEHF05	-	40
576	3/4" M-22	81576AEMJ05	-	40

Male elbow.



ART. 577

ART.	SIZE	CODE	
577	1/2" F-12	81577ADFD05	50
577	1/2" F-14	81577RDGD05	50
577	1/2" F-15	81577RDGE05	50
577	1/2" F-16	81577RDGF05	50
577	3/4" F-12	81577LCFD05	50
577	3/4" F-14	81577REGD05	50
577	3/4" F-15	81577REGE05	50
577	3/4" F-16	81577REGF05	50
577	3/4" F-18	81577AEHF05	40
577	3/4" F-22	81577AEMJ05	40

Female elbow.



ART. 580

ART.	SIZE	CODE	
580	12	81580ADFD05	50
580	14	81580RAGD05	50
580	15	81580RAGE05	50
580	16	81580RAGF05	50
580	18	81580HFHF05	40
580	22	81580MJJM05	40

TEE fitting.



ART. 581

ART.	SIZE	CODE	
581	1/2" M-12	81581ADFD05	50
581	1/2" M-14	81581RDGD05	50
581	1/2" M-15	81581RDGE05	50
581	1/2" M-16	81581RDGF05	50
581	3/4" M-12	81581LCFD05	50
581	3/4" M-14	81581REGD05	50
581	3/4" M-15	81581REGE05	50
581	3/4" M-16	81581REGF05	50

Male TEE fitting.



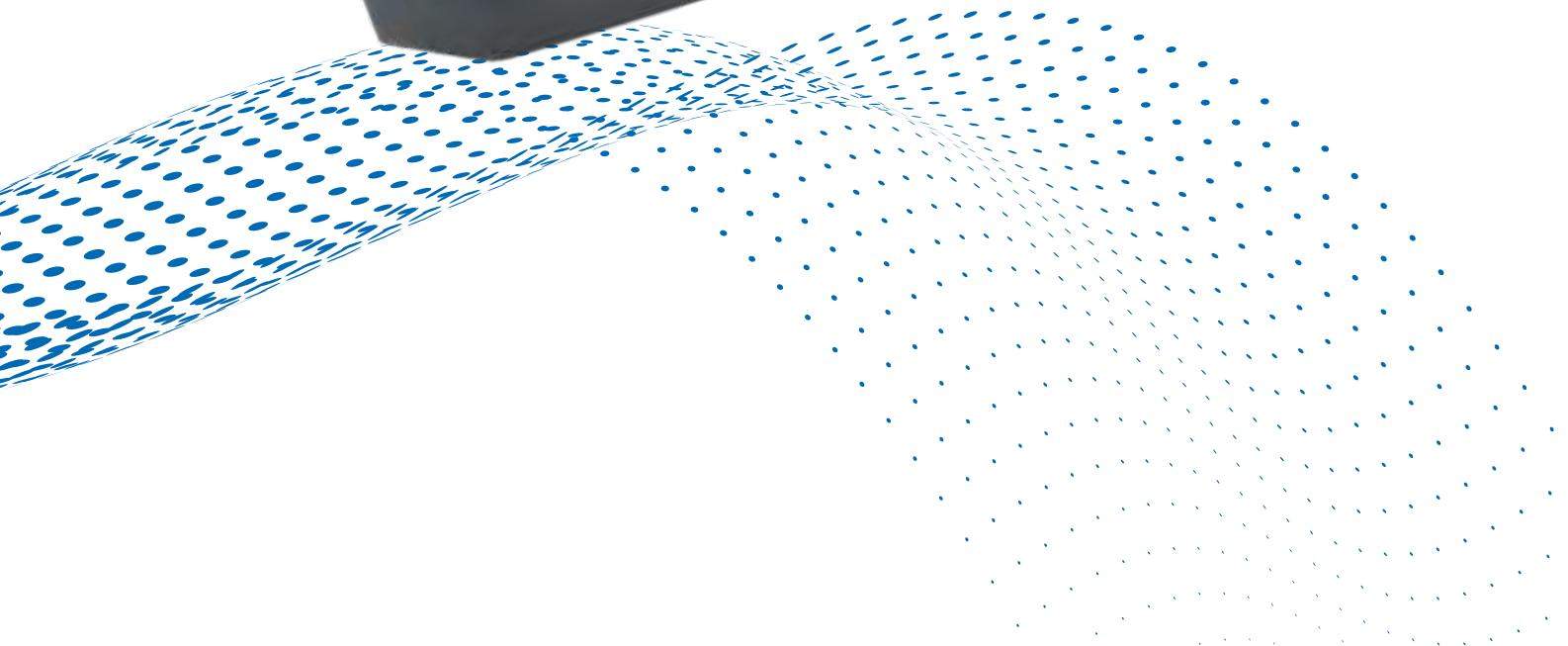
ART. 582

ART.	SIZE	CODE	
582	1/2" F-12	81582ADFD05	50
582	1/2" F-14	81582RDGD05	50
582	1/2" F-15	81582RDGE05	50
582	1/2" F-16	81582RDGF05	50
582	3/4" F-12	81582LCFD05	50
582	3/4" F-14	81582REGD05	50
582	3/4" F-15	81582REGE05	50
582	3/4" F-16	81582REGF05	50
582	3/4" F-18	81582AEHF05	40
582	3/4" F-22	81582AEMJ05	40

Female TEE fitting.



F



# G

## CENTRAL HEATING SYSTEMS (GAS, GAS-OIL AND BIO-FUEL) PRODUCTS AND COMPONENTS



**G1** PRESSURE SAFETY  
SYSTEMS  
page 154



**G5** FLUIDS SUPPLY/DISCHARGE  
SYSTEMS  
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**G2** FUEL INTERCEPTION  
VALVES  
page 157



**G6** DRAUGHT REGULATORS  
page 166



**G3** FUEL  
INTERCEPTION  
VALVES  
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**G7** FLOW AND PRESSURE  
SWITCHES, THERMOSTATS,  
INAIL INSTRUMENTS UNIT  
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**G4** AUTOMATIC FILLINGS  
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**G8** GAUGES, THERMOMETERS,  
THERMOMANOMETERS,  
VALVES FOR GAUGE,  
CURLS  
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ART. 241

ART.	SIZE	BAR	CODE			
241	1/2"	1,5	91241ADAC	1	50	
241	1/2"	1,8	91241ADBC	1	50	
241	1/2"	2	91241ADAD	1	50	
241	1/2"	2,5	91241ADAE	1	50	
241	1/2"	3	91241ADAF	1	50	
241	1/2"	3,5	91241ADAG	1	50	
241	1/2"	4	91241ADAH	1	50	
241	1/2"	5	91241ADAL	1	50	
241	1/2"	6	91241ADAN	1	50	
241	1/2"	7	91241ADAP	1	50	
241	1/2"	8	91241ADAQ	1	50	
241	1/2"	9	91241ADAR	1	50	
241	1/2"	10	91241ADAS	1	50	
241	3/4"	1,5	91241AEAC	1	50	
241	3/4"	1,8	91241AEBC	1	50	
241	3/4"	2	91241AEAD	1	50	
241	3/4"	2,5	91241AEAE	1	50	
241	3/4"	3	91241AEAF	1	50	
241	3/4"	3,5	91241AEAG	1	50	
241	3/4"	4	91241AEAH	1	50	
241	3/4"	5	91241AEAL	1	50	
241	3/4"	6	91241AEAN	1	50	
241	3/4"	7	91241AEAP	1	50	
241	3/4"	8	91241AEAQ	1	50	
241	3/4"	9	91241EAR	1	50	
241	3/4"	10	91241AEAS	1	50	
241	1"	1,5	91241AFAC	1	50	
241	1"	1,8	91241AFBC	1	50	
241	1"	2	91241AFAD	1	50	
241	1"	2,5	91241FAFE	1	50	
241	1"	3	91241AFAF	1	50	
241	1"	3,5	91241FAG	1	50	
241	1"	4	91241AFAH	1	50	
241	1"	5	91241AFAL	1	50	
241	1"	6	91241AFAN	1	50	
241	1"	7	91241AFAP	1	50	
241	1"	8	91241AFAQ	1	50	
241	1"	9	91241AFAR	1	50	
241	1"	10	91241AFAS	1	50	



ART. 242

ART.	SIZE	BAR	CODE			
242	1/2"	1,5	91242ADAC	1	50	
242	1/2"	1,8	91242ADBC	1	50	
242	1/2"	2	91242ADAD	1	50	
242	1/2"	2,5	91242ADAE	1	50	
242	1/2"	3	91242ADAF	1	50	
242	1/2"	3,5	91242ADAG	1	50	
242	1/2"	4	91242ADAH	1	50	
242	1/2"	5	91242ADAL	1	50	
242	1/2"	6	91242ADAN	1	50	
242	1/2"	7	91242ADAP	1	50	
242	1/2"	8	91242ADAQ	1	50	
242	1/2"	9	91242ADAR	1	50	
242	1/2"	10	91242ADAS	1	50	
242	3/4"	1,5	91242AEAC	1	50	
242	3/4"	1,8	91242AEBC	1	50	
242	3/4"	2	91242AEAD	1	50	
242	3/4"	2,5	91242AEAE	1	50	
242	3/4"	3	91242AEAF	1	50	
242	3/4"	3,5	91242AEAG	1	50	
242	3/4"	4	91242AEAH	1	50	
242	3/4"	5	91242AEAL	1	50	
242	3/4"	6	91242AEAN	1	50	
242	3/4"	7	91242AEAP	1	50	
242	3/4"	8	91242AEAQ	1	50	
242	3/4"	9	91242EAR	1	50	
242	3/4"	10	91242EAS	1	50	

Male/Female membrane safety valve. Calibration pressure to be specified. PN 10, max.working temperature 110°C, opening overpressure 10%, closing pressure 20%. The product complies with the Ped. 2014/68/UE norm - category IV CE n. 0425 approval.

Female/Female membrane safety valve. Calibration pressure to be specified. PN 10, max.working temperature 110°C, opening overpressure 10%, closing pressure 20%. The product complies with the Ped. 2014/68/UE norm - category IV CE n. 0425 approval.



ART. 251

ART.	SIZE	BAR	CODE		
251	1/2"	1,5	91251ADAC	1	50
251	1/2"	1,8	91251ADBC	1	50
251	1/2"	2	91251ADAD	1	50
251	1/2"	2,5	91251ADAE	1	50
251	1/2"	3	91251ADAF	1	50
251	1/2"	3,5	91251ADAG	1	50
251	1/2"	4	91251ADAH	1	50
251	1/2"	5	91251ADAL	1	50
251	1/2"	6	91251ADAN	1	50
251	1/2"	7	91251ADAP	1	50
251	1/2"	8	91251ADAQ	1	50
251	1/2"	9	91251ADAR	1	50
251	1/2"	10	91251ADAS	1	50

Female/Female membrane safety valve. 1/4" connection for pressure gauge. Calibration pressure to be specified. PN 10, max. working temperature 110°C, opening overpressure 10%, closing pressure 20%. The product complies with the Ped. 2014/68/UE norm - category IV. CE n.0425 approval.



ART. 252

ART.	SIZE	BAR	CODE		
252	1/2"	1,5	91252ADAC	1	50
252	1/2"	1,8	91252ADBC	1	50
252	1/2"	2	91252ADAD	1	50
252	1/2"	2,5	91252ADAE	1	50
252	1/2"	3	91252ADAF	1	50
252	1/2"	3,5	91252ADAG	1	50
252	1/2"	4	91252ADAH	1	50
252	1/2"	5	91252ADAL	1	50
252	1/2"	6	91252ADAN	1	50
252	1/2"	7	91252ADAP	1	50
252	1/2"	8	91252ADAQ	1	50
252	1/2"	9	91252ADAR	1	50
252	1/2"	10	91252ADAS	1	50

Male/Female membrane safety valve. 1/4" connection for pressure gauge. Calibration pressure to be specified. PN 10, max. working temperature 110°C, opening overpressure 10%, closing pressure 20%. The product complies with the Ped. 2014/68/UE norm - category IV. CE n.0425 approval.



ART. 253

ART.	SIZE	BAR	CODE		
253	1/2"	1,5	91253ADAC	1	20
253	1/2"	1,8	91253ADBC	1	20
253	1/2"	2	91253ADAD	1	20
253	1/2"	2,5	91253ADAE	1	20
253	1/2"	3	91253ADAF	1	20
253	1/2"	3,5	91253ADAG	1	20
253	1/2"	4	91253ADAH	1	20
253	1/2"	5	91253ADAL	1	20
253	1/2"	6	91253ADAN	1	20
253	1/2"	7	91253ADAP	1	20
253	1/2"	8	91253ADAQ	1	20
253	1/2"	9	91253ADAR	1	20
253	1/2"	10	91253ADAS	1	20

Female/Female membrane safety valve with 1/4" connection for pressure gauge. Equipped with a pre-mounted pressure gauge. Calibration pressure to be specified. PN 10, max. working temperature 110°C, opening overpressure 10%, closing pressure 20%. The product complies with the Ped. 2014/68/UE norm - category IV. CE n. 0425 approval.



ART. 260

ART.	INLET SIZE	OUTLET SIZE	BAR	CODE	
260	1/2	3/4"	2,5	91260ADAE	1
260	1/2	3/4"	3	91260ADAF	1
260	1/2	3/4"	3,5	91260ADAG	1
260	1/2	3/4"	4	91260ADAH	1
260	1/2	3/4"	6	91260ADAN	1
260	3/4	1"	2,5	91260AEAE	1
260	3/4	1"	3	91260AEAF	1
260	3/4	1"	3,5	91260AEAG	1
260	3/4	1"	4	91260AEAH	1
260	3/4	1"	6	91260AEAN	1
260	1"	1"1/4	2,5	91260AFAE	1
260	1"	1"1/4	3	91260AFAF	1
260	1"	1"1/4	3,5	91260AFAG	1
260	1"	1"1/4	4	91260AFAH	1
260	1"	1"1/4	6	91260AFAN	1

Membrane safety valve. Fixed setting. Body and nut made of CW617N brass. PN 10. Overpressure 10%. Closing difference 20%. Max. temperature 140°C. FF connections. INAIL approved and set - The product complies with the PED. 2014/68/UE norm - CE n. 1115 approval.



ART. 254

ART.	SIZE	BAR	CODE	
254	3/8"	Adjustable	91254AC05	1
254	1/2"	Adjustable	91254AD05	1
254	3/4"	Adjustable	91254AE05	1
254	1"	Adjustable	91254AF05	1
254	1" 1/4	Adjustable	91254AG05	1
254	1" 1/2	Adjustable	91254AH05	1
254	2"	Adjustable	91254AJ05	1
254	2" 1/2	Adjustable	91254AK05	1
254	3"	Adjustable	91254AL05	1

Female angle safety valve. With spring and conveyed discharge. Adjustable. 1-8 bar. **Metallic seat**. PN16.



ART. 256

ART.	SIZE	BAR	CODE	
256	3/8"	Adjustable	91256AC05	1
256	1/2"	Adjustable	91256AD05	1
256	3/4"	Adjustable	91256AE05	1
256	1"	Adjustable	91256AF05	1
256	1" 1/4	Adjustable	91256AG05	1
256	1" 1/2	Adjustable	91256AH05	1
256	2"	Adjustable	91256AJ05	1
256	2" 1/2	Adjustable	91256AK05	1
256	3"	Adjustable	91256AL05	1

Female angle safety valve. With spring and conveyed discharge. Adjustable. 1-8 bar. **Rubber seat**. PN16.



ART. GS01

ART.	SAFETY VALVE	MANOMETER	CODE		
GS01	242 1/2"-3	244 1/4" 0-6	91GS01OO20	1	5
GS01	242 1/2"-6	244 1/4" 0-10	91GS01AN10	1	5

Pre-assembled safety group. Automatic air vent (art. 707), 1/2" safety valve (art. 242), pressure gauge (art. 244). 3/4" F lower connections, brackets for wall-fixing. PN10, max. working temperature 110°C, opening overpressure 10%, closing pressure 20%. Safety valve CE n. 0425 approval.



ART. GS02

ART.	CODE		
GS02	91GS02OO20	1	10

Pre-assembled safety group. Automatic air vent (art. 700), 1/2" safety valve 3 bar (art. 242), pressure gauge 0-6 bar (art. 257 1/4"). 1" F lower connections. PN 10, max.working temperature 110°C, opening overpressure 10%, closing pressure 20%. Safety valve CE n. 0425 approval.



ART. GS08

ART.	SIZE	CODE		
GS08	1/2"	91GS08AD06	25	250
GS08	3/4"	91GS08AE06	10	90

Safety valve M/F for water heaters. Set calibration 8 Bars ± 0,5. Calibration at 6,7 and 11 bars on demand.



ART. GS09

ART.	SIZE	CODE		
GS09	1/2"	91GS09AD06	10	90
GS09	3/4"	91GS09AE06	10	90

Safety valve M/F with lever for water heaters. Set calibration 8 Bars ± 0,5. Calibration at 6,7 and 11 bars on demand.



ART. GS10

ART.	SIZE	BAR	CODE	
GS10	1/4"	Adjustable	91GS10AB05	1
GS10	3/8"	Adjustable	91GS10AC05	1
GS10	1/2"	Adjustable	91GS10AD05	1
GS10	3/4"	Adjustable	91GS10AE05	1
GS10	1"	Adjustable	91GS10AF05	1
GS10	1 1/4"	Adjustable	91GS10AG05	1
GS10	1 1/2"	Adjustable	91GS10AH05	1
GS10	2"	Adjustable	91GS10AJ05	1

Free release safety valve, calibration 6 Bars, adjustment 1 to 8 Bars. Metal seat, PN16, working temperature 0-200°C. Calibration pressure ± 20%.



ART. GS11

ART.	SIZE	BAR	CODE	
GS11	1/4"	Adjustable	91GS11AB05	1
GS11	3/8"	Adjustable	91GS11AC05	1
GS11	1/2"	Adjustable	91GS11AD05	1
GS11	3/4"	Adjustable	91GS11AE05	1
GS11	1"	Adjustable	91GS11AF05	1
GS11	1 1/4"	Adjustable	91GS11AG05	1
GS11	1 1/2"	Adjustable	91GS11AH05	1
GS11	2"	Adjustable	91GS11AJ05	1

Free release safety valve, calibration 6 Bars, setting 1 to 8 Bars. Teflon seat, PN16, working temperature 0-120°C. Calibration pressure ± 20%.

## G2

## MANUAL AND AUTOMATIC AIR VENTS AND DRAIN COCKS



ART. 740

ART.	SIZE	CODE		
740	3/4"	82740AE05	1	10
740	1"	82740AF05	1	10
740	1 1/4"	82740AG05	1	10
740	1 1/2"	82740AH05	1	5

High capacity deaerator, for heating/conditioning systems, with side connections. Max. working pressure 10 bars. Max. temperature 160°C.



ART. S111

ART.	SIZE	CODE		
S111	1/2"	93S111AD05	1	10
S111	3/4"	93S111AE05	1	10

High capacity deaerator with radial connector. Max. working pressure 10 bars, max. temperature 160°.



ART. 745

ART.	SIZE	CODE		
745	3/4"	82745AE05	1	10
745	1"	82745AF05	1	10
745	1"1/4	82745AG05	1	5
745	1"1/2	82745AH05	1	5
745	2"	82745AJ05	1	5

F/F dirt separator for heating/cooling systems, equipped with ball drain cock and rubber holder. Max. working pressure 10 bars, max. working temperature 110°C, stainless steel mesh.



ART. 746

ART.	SIZE	CODE		
746	3/4"	82746AE05	1	10
746	1"	82746AF05	1	10
746	1"1/4	82746AG05	1	5
746	1"1/2	82746AH05	1	5
746	2"	82746AJ05	1	5

F-F dirt separator for heating and cooling systems provided with a removable magnetic cartridge to collect ferrous impurities and a drain cock with hose. Max. working pressure 10 bars, Max. working temperature 110°C, stainless steel mesh. **Magnetic field strength of 10.500 Gauss.**



ART. 746



Standard drain cock



Drain cock for article with final code "146"

ART. 747

ART.	SIZE	FINISH	CODE		
747	3/4"	BRASS	82747AE05	1	10
747	3/4"	NICKEL PLATED	82747AE06	1	10
747	3/4"	BRASS	82747AE05 146	1	10
747	3/4"	NICKEL PLATED	82747AE06 146	1	10
747	3/4"	HIGH CHROME	82747AE07	1	10
747	3/4"	WHITE	82747AE13	1	10

**Magnetic compact dirt separator for under-boiler installation** with a removable magnetic cartridge to collect ferrous impurities and a drain cock with hose. Max. working pressure 10 bars, Max. working temperature 110°C, stainless steel mesh. **Magnetic field strength of 10.500 Gauss.**

- Complete with 3/4" F-F connection fitting to boiler. (See photo on the next page).



Drain cock for article with final code "146"

ART. 748

ART.	SIZE	FINISH	CODE		
748	3/4"	BRASS	82748AE05	1	10
748	3/4"	NICKEL PLATED	82748AE06	1	10
748	3/4"	BRASS	82748AE05 146	1	10
748	3/4"	NICKEL PLATED	82748AE06 146	1	10
748	3/4"	HIGH CHROME	82748AE07	1	10
748	3/4"	WHITE	82748AE13	1	10

**Magnetic compact dirt separator for under-boiler installation** with a removable magnetic cartridge to collect ferrous impurities and a drain cock with hose. Max. working pressure 10 bars, Max. working temperature 110°C, stainless steel mesh. **Magnetic field strength of 10.500 Gauss.**

- Complete with 3/4" F-F connection fitting to boiler. (See photo on the next page).



● 3/4" F-F connection fitting to boiler.

## MANUAL AND AUTOMATIC AIR VENTS AND DRAIN COCKS



ART. 744

ART.	SIZE	CODE			
744	3/4" - 1"	82744AE05*	1	10	
744	1"1/4 - 1"1/2 - 2"	82744AG05	1	10	

Magnetic candle for dirt separator art. 746. It can also be installed on the dirt separator art. 745 to be converted into a magnetic one. **Magnetic field strength of 10.500 Gauss.**

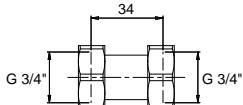
\*Also compatible with ICMA dirt remover art 747 with brass finish.



ART. 749

ART.	SIZE	FINISH	CODE			
749	1/2"	NICKEL PLATED	82749AD06	1	10	
749	1/2"	HIGH CHROME	82749AD07	1	10	
749	1/2"	WHITE	82749AD13	1	10	

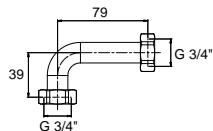
Magnetic candle for dirt separator art. 747. It can also be installed on the dirt separator art. 748 to be converted into a magnetic one. **Magnetic field strength of 10.500 Gauss.**



ART. 755

ART.	SIZE	FINISH	CODE		
755	3/4"	BRASS	82755AE05	1	
755	3/4"	NICKEL PLATED	82755AE06	1	
755	3/4"	HIGH CHROME	82755AE07	1	
755	3/4"	WHITE	82755AE13	1	

Straight fitting with revolving nut for compact dirt separator/boiler connection. Including two flat seat gaskets.



ART. 756

ART.	SIZE	FINISH	CODE		
756	3/4"	BRASS	82756AE05	1	
756	3/4"	NICKEL PLATED	82756AE06	1	

Elbow fitting with revolving nut for compact dirt separator/boiler connection. Including two flat seat gaskets.



ART. 753

ART.	WALL CONNECTION SIZE	BOILER CONNECTION SIZE	FINISH	CODE		
753	3/4" M	3/4" F	NICKEL PLATED	82753AE06	1	10

Under-boiler magnetic filter equipped with interception ball valve. Max. working pressure 10 bar, max working temperature 110°C.

**Magnetic field strength of 12.000 Gauss.**



ART. 758

ART.	SIZE	CODE			
758	1/2" M	82758AD06	1	12	

Proportional polyphosphate doser. Max. pressure 8 bar, working temperature 5°C-45°C. 1/2" orientable connections both horizontal and vertical.



ART. 762

ART.	SIZE	CODE			
762	3/4"	82762AE06	1	30	

Condensate neutralizer for condensing boilers. Max. pressure 3bar, max. flow rate 3 l/h, working temperature 5°C - 55°C. Connection 3/4". Equipped with a straight fitting and an elbow fitting for boiler connection.



**NEW**

**ART. 82KITDUO**

ART.	CODE	BOX
KITDUO	82KITDUO	1

Boiler protection kit composed of Polyphosphate doser art. 758 + Under-boiler Magnetic Filter art. 753.



**X 6**

**NEW**

**ART. 759**

ART.	CODE	BOX
759	82759AD06	1

Refill cartridge for Polyphosphate doser art. 758. The package contains No. 6 refill cartridges.



**NEW**

**ART. 82KITTRIO**

ART.	CODE	BOX
KITTRIO	82KITTRIO	1

Boiler protection kit composed of Polyphosphate doser art. 758 + Condensate Neutralizer art. 762 + Under-boiler Magnetic Filter art. 753.



**X 6**

**NEW**

**ART. 763**

ART.	CODE	BOX
763	82763AE06	1

Refill cartridge for Condensate Neutralizer art. 763. The package contains No. 6 refill cartridges.



ART. 700

ART.	SIZE	CODE					
700	3/8"	82700AC05	10	100			
700	1/2"	82700AD05	10	100			
700	3/8"	82700AC06	10	100			
700	1/2"	82700AD06	10	100			

Automatic floating air vent. Compact model.



ART. 707 + ART. 710

ART.	SIZE	CODE					
707+710	3/8"	82707AC05 710	10	50			
707+710	1/2"	82707AD05 710	10	50			
707+710	3/8"	82707AC06 710	10	50			
707+710	1/2"	82707AD06 710	10	50			

Automatic floating air vent with check valve. Packed together. Regular size.



ART. 700 + ART. 710

ART.	SIZE	CODE					
700+710	3/8"	82700AC05 710	10	50			
700+710	1/2"	82700AD05 710	10	50			
700+710	3/8"	82700AC06 710	10	50			
700+710	1/2"	82700AD06 710	10	50			

Automatic floating air vent with check valve. Packed together. Compact model.



ART. 708

ART.	SIZE	CODE					
708	3/8"	82708AC05	10	100			
708	1/2"	82708AD05	10	100			
708	3/8"	82708AC06	10	100			
708	1/2"	82708AD06	10	100			

Automatic floating air vent. Big size. **Manual use also available.**



ART. 707

ART.	SIZE	CODE					
707	3/8"	82707AC05	10	100			
707	1/2"	82707AD05	10	100			
707	3/4"	82707AE05	10	100			
707	3/8"	82707AC06	10	100			
707	1/2"	82707AD06	10	100			
707	3/4"	82707AE06	10	100			

Automatic floating air vent. Regular size.



ART. 709

ART.	SIZE	CODE					
709	3/8"	82709AC05	10	100			
709	1/2"	82709AD05	10	100			
709	3/8"	82709AC06	10	100			
709	1/2"	82709AD06	10	100			

Automatic floating air vent. Very small outside diameter particularly suitable for coplanar manifolds. Manual use also available.



ART. 715

ART.	SIZE	CODE			
715	3/8"	82715AC06	10	100	
715	1/2"	82715AD06	10	100	
715	3/4"	82715AE06	10	100	

Angle automatic floating air vent. Nickel plated. Manual use also available.



ART. 719

ART.	SIZE	CODE			
719	3/8"	82719AC05	10	100	
719	1/2"	82719AD05	10	100	
719	3/8"	82719AC06	10	100	
719	1/2"	82719AD06	10	100	

Automatic floating air vent. Lateral discharge.



ART. 710

ART.	SIZE	CODE		
710	3/8"	82710AC05	100	
710	1/2"	82710AD05	100	
710	3/8"	82710AC06	100	
710	1/2"	82710AD06	100	

Check valve for art. 700 - 707 - 708 - 709.



ART. 711

ART.	SIZE	CODE		
711	1/2"	82711AD06	50	

Drain cock. Body made of nickel plated brass, revolving knob made of nylon. EPDM O-ring. 1/2" thread.



ART. 135

ART.	SIZE	CODE		
135	1/2" M x Ø 15	90135AD05	100	

Drain cock for boilers, ball valve with lever, hose and cap.



ART. 146

ART.	SIZE	CODE		
146	1/2"	90146AD05	100	

Ball valve drain cock for boiler. PN 10.



ART. 150

ART.	SIZE	CODE		
150	3/8"	90150AC05	100	
150	1/2"	90150AD05	100	
150	3/4"	90150AE05	50	

Drain cock for boiler. PN 10.



ART. 152

ART.	SIZE	CODE		
152	3/8"	90152AC05	100	
152	1/2"	90152AD05	150	
152	3/4"	90152AE05	100	

Drain cock for boilers. Swivel and hose connection (without plug and chain) PN 10.



ART. 602

Liquid and gaseous fuel interception valve. Manual resetting. Liquid expansion thermostatic element. Capillary length: 5 m. Temperature setting: 97°C ± 3°C. PN 6. Sensor side max. temperature 120°C. Valve side max. temperature 50°C. INAIL approved and set - The product complies the PED 2014/68/UE norm.

ART.	SIZE	CODE	
602	1/2"	90602AD05	1
602	3/4"	90602AE05	1
602	1"	90602AF05	1
602	1" 1/4	90602AG05	1
602	1" 1/2	90602AH05	1
602	2"	90602AJ05	1
602	DN65	90602AK05	1
602	DN80	90602AL05	1
602	DN100	90602AN05	1

## G4

## AUTOMATIC FILLINGS GROUPS

G

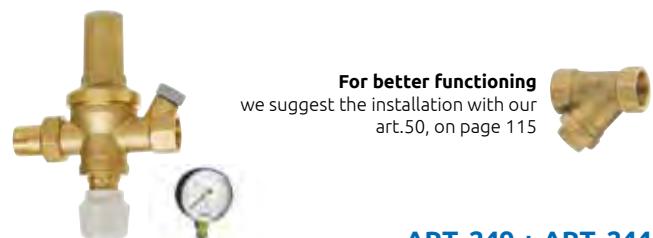


**For better functioning**  
we suggest the installation with our art.50, on page 115

ART. 249

ART.	SIZE	CODE		
249	1/2"	91249AD05	1	20

Heavy model filling group with stop cock and filter. 1/4" connection for gauge. Check valve. Max. inlet pressure 20 bar, adjustable outlet pressure from 1 to 6 bar (factory setting 1,5 bar), max. working temperature 90°C.



**For better functioning**  
we suggest the installation with our art.50, on page 115

ART. 249 + ART. 244

ART.	SIZE	CODE		
249+244	1/2"	91249AD05 244	1	20

Heavy model filling group with stop cock and filter. 1/4" connection for gauge. Check valve. Max. inlet pressure 20 bar, adjustable outlet pressure from 1 to 6 bar (factory setting 1,5 bar), max. working temperature 90°C. With gauge.



ART. 605

ART.	SIZE	CODE		
605	3/4"	90605AE05	1	10

The double safety thermal drain valve prevents heat generators, such as biomass-fired boilers, from overheating. When the temperature reaches 95°C the valve opens to release excess hot water. Opening temperature 95°C, Max. capacity: 93 KW - 80000 Kcal/h, max. water flow 2000 kg/h, 1/2" cockpit connection, 152 mm cockpit length.

PLEASE NOTE: the double safety consists of 2 thermostatic elements with 2 capillaries. In case of malfunction or accidental break of an element, the other one ensures the opening.



ART. 606

ART.	SIZE	CODE	
606	1"1/4	90606AG05	1
606	1"1/2	90606AH05	1

Thermic drain valve. **INAIL approved**. Manual resetting and optical signal. Temperature setting 95°C, IP40.

#### TECHNICAL FEATURES

Drainage potentiality:

- 1"1/4 176.750 Kcal/h equal to 7.070 l/h
- 1"1/2 318.200 Kcal/h equal to 12.728 l/h



ART. 608

ART.	SIZE	CODE		
608	3/4"	90608AE05	1	10

Thermal drain valve. It prevents heat generators, such as biomass-fired boilers, from overheating. When the temperature reaches 95°C the valve opens to release excess hot water. Opening temperature 95°C, Max. capacity: 93 KW - 80000 Kcal/h, max. water flow 2000 kg/h, 1/2" cockpit connection.



ART. 266

ART.	SIZE	BAR	CODE		
266	1/2"MX1/2" F	3	91266ADAF	1	20
266	1/2"MX1/2" F	6	91266ADAN	1	20
266	1/2"MX1/2" F	8	91266ADAQ	1	20
266	3/4"MX3/4" F	3	91266AEAF	1	20
266	3/4"MX3/4" F	6	91266AEAN	1	20
266	3/4"MX3/4" F	8	91266AEAQ	1	20

The temperature and pressure relief valve discharges the hot water contained in a storage tank when the temperature is over 100°C or when the pressure is exceeding valve set value. The valve closes when the pressure and/or the temperature decreases within the set tolerances. The valve starts opening at a temperature between 98°C and 100°C.



ART. 267

ART.	SIZE	CODE		
267	3/4"	90267AE05	1	10

Thermal release valve. It prevents overheating in thermal generators, such as biomass-fired boilers. When the temperature of 95°C is reached, the valve opens, enabling hot water in excess to be discharged, and letting cold water flow into the boiler. Opening temperature 95°C, max. capacity: 93 KW - 80000 kcal/h, max. water flow 2000kg/h, cockpit connection 1/2.



ART. 131

ART.	CONNECTIONS	CALIBRATION	CODE			
131	1"1/4	45°	90131AF0545	1	10	
131	1"1/4	55°	90131AF0555	1	10	
131	1"1/4	60°	90131AF0560	1	10	
131	1"1/4	70°	90131AF0570	1	10	
131	1"1/2	45°	90131AG0545	1	10	
131	1"1/2	55°	90131AG0555	1	10	
131	1"1/2	60°	90131AG0560	1	10	
131	1"1/2	70°	90131AG0570	1	10	

Male anti-condensation valve on the 3 ways. Working temperature range 45°/55°/60°/70°. It automatically regulates at the set value the temperature of the water returning to the generator.



ART. 132

ART.	CONNECTIONS	CALIBRATION	CODE			
132	1"	45°	90132AF0545	1	10	
132	1"	55°	90132AF0555	1	10	
132	1"	60°	90132AF0560	1	10	
132	1"	70°	90132AF0570	1	10	
132	1"1/4	45°	90132AG0545	1	10	
132	1"1/4	55°	90132AG0555	1	10	
132	1"1/4	60°	90132AG0560	1	10	
132	1"1/4	70°	90132AG0570	1	10	

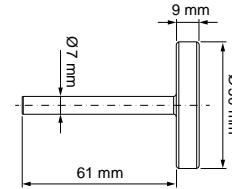
Anti-condensation valve with male unions on the 3 ways. Working temperature range 45°/55°/60°/70°. It automatically regulates at the set value the temperature of the water returning to the generator.



ART. 133

ART.	CONNECTIONS	CALIBRATION	CODE			
133	1"	45°	90133AF0545	1	10	
133	1"	55°	90133AF0555	1	10	
133	1"	60°	90133AF0560	1	10	
133	1"	70°	90133AF0570	1	10	
133	1"1/4	45°	90133AG0545	1	10	
133	1"1/4	55°	90133AG0555	1	10	
133	1"1/4	60°	90133AG0560	1	10	
133	1"1/4	70°	90133AG0570	1	10	

Female anti-condensation valve. Working temperature range 45°/55°/60°/70°. It automatically regulates at the set value the temperature of the water returning to the generator.



ART. 134

ART.	°C	CODE			
134	0-120	871340120	1		

Anti-condensation valve thermometer, 7 mm holder diameter, 0-120°C.



ART. 147

ART.	SIZE	CONNECTION THREAD	CODE		
147	3/4"	3/4"	90147AE06	1	20

Draught regulator for wood, carbon and multi-fuel boilers. Temperature regulation range 30-100°C. The draught regulator controls the flow of the air and modulates the fire intensity according to the request of the system.

**TECHNICAL FEATURES:**

- Wax thermostatic element: high precision and power.
- Metallic body.
- High temperature proof handwheel.
- Regulating scale 30° ÷ 100°C.
- Chain lenght: 1200 mm.
- 120° bended standard lever; from 120 mm to 145 mm; chain stroke 6 mm./10°C; force 0,850 Kg.
- 3/4" conical connection to the boiler; vertical or horizontal positioning.

**FLOW AND PRESSURE SWITCHES, THERMOSTATS,  
INAIL INSTRUMENTS UNIT**


ART. 603

ART.	SIZE	CODE	
603 MAX	1/4"	90603AB53	1
603 MIN	1/4"	90603AB05MIN	1

Manual resetting pressure switch with graduated scale for heating systems. Available in two versions:

- 1) Maximum (or safety) pressure switch: Pressure range: 1 - 5 bars, factory setting 3 bars. Contacts: 16A (10)A - 250V. IP44 protection degree. Max. fluid temperature 110°C.
  - 2) Minimum pressure switch: Pressure range: 0,5 - 1,7 bars, factory setting 0,9 bars. Contacts: 16A (10)A - 250V. IP44 protection degree. Max. fluid temperature 110°C.
- The product complies with the PED 2014/68/UE norm.



ART. 610

ART.	CODE	
610	9061009053	1

Contact control thermostat, with two-metal sensor, setting range 0 ÷ 90°C, IP40, contacts capacity 16 (4) A 250 V~, 6 (1)A 400 V~, differential 6 ± 2°C. CE approved.



ART. 604

ART.	SIZE	CODE	
604	1"	90604AF05	1

Flow switch for liquids. Suitable for pipes from DN 1" to DN 8". Aluminium body. Brass connection. Microswitch: 16(5)A. Max.working pressure: 10 bar. Max.working temperature: 120°C. Room temperature: 60°C. Protection degree IP64. The product complies with the 2006/95/CE norm.



ART. 611

ART.	CODE	
611	9061109053	1

Immersion thermostat, with switching contact. Bulb with cockpit, connection thread 1/2", 100 mm long included, setting range 0 ÷ 90°C, IP40, contact capacity 16 (4) A 250 V~, 6 (1)A 400V~, differential 6 ± 2°C. CE and INAIL approved.



**ART. 612**

ART.	CODE	
612	9061209053	1

Immersion safety thermostat, fixed calibration, manual reset and positive safety device. Calibration valve 100°C. Bulb with cockpit, connection 1/2", 100 mm long included, contacts capacity 16 (4) A 250 V~, 6 (1)A 400 V~, CE approved.



**ART. 613**

ART.	CODE	
613	9061309053	1

Immersion control and safety thermostat (with manual reset). Setting range 0 ÷ 90°C (differential 6 ± 2°C), fixed calibration valve 100°C. Bulb with cockpit, connection thread 1/2" 100 mm long included, contacts capacity 16 (4) A 250 V~, 6 (1)A 400 V~, CE approved.



**ART. 614**

ART.	MAX.PRES. SWITCH	MIN.PRES. SWITCH	SIZE	CODE	
614	•		1" 1/2	90614AH09	1
614	•		DN 50	90614AJ09	1
614	•		DN 65	90614AK09	1
614	•		DN 80	90614AL09	1
614	•		DN 100	90614AN09	1
614	•	•	1" 1/2	90614AH09MIN	1
614	•	•	DN 50	90614AJ09MIN	1
614	•	•	DN 65	90614AK09MIN	1
614	•	•	DN 80	90614AL09MIN	1
614	•	•	DN 100	90614AN09MIN	1

INAIL instrument holding stub for central heating systems. Instruments holding stub in galvanized steel, provided with safety thermostat, safety pressure switch, pressure gauge with cock and curl, thermometer, tap thread 1/2" for fuel on/off valve, cockpit thread 1/2" for INAIL inspection and connection thread 1/2" for INAIL safety valve (not supplied). Available with double - minimum and maximum - pressure switch.

## G8

### GAUGES, THERMOMETERS, THERMOMANOMETERS, VALVES FOR GAUGE, CURLS



**ART. 151**

ART.	SIZE	CODE	
151	1/4"	90151AB05	100
151	3/8"	90151AC05	100
151	1/2"	90151AD05	50

Female gauge tap. PN 16. Max.working temperature 110°C.



**ART. 158**

ART.	SIZE	CODE	
158	1/4"	90158AB05	100
158	3/8"	90158AC05	100
158	1/2"	90158AD05	50

Male gauge tap. PN 16. Suitable for steam up to 140°C. Metallic gasket for high temperature.



ART. 159

ART.	SIZE	CODE	
159	1/4"	90159AB05	50
159	3/8"	90159AC05	50
159	1/2"	90159AD05	50

Three-way gauge tap M-F. INAIL approved. PN16. Max.working temperature 110°C.



ART. 160

ART.	SIZE	CODE	
160	1/4"	90160AB05	100
160	3/8"	90160AC05	100
160	1/2"	90160AD05	100

Gauge tap. male-female connections. PN 16. Max.working temperature 110°C.



ART. 183

ART.	SIZE	CODE	
183	1/2" 1/2"	90183AD05	50
183	1/2" M20x1,5	90183ADAO05	50

Three-way **Female-Female** gauge tap, INAIL approved. PN 16. Max. operating temperature 110°C.



ART. 153

ART.	SIZE	CODE	
153	1/4"	90153AB06	1
153	3/8"	90153AC06	1
153	1/2"	90153AD06	1

Male/Female revolving curl for pressure gauge. Nickel plated. PN 25. Max. working temperature 120°C.



ART. 243

ART.	SIZE	BAR	CODE		
243	1/4"	0 - 4	91243AB04	1	100
243	1/4"	0 - 6	91243AB06	1	100
243	1/4"	0 - 10	91243AB10	1	100

1/4" gauge. Back connection. Ø 63. When ordering please specify the operating pressure.



ART. 244

ART.	SIZE	BAR	CODE		
244	1/4"	0 - 4	91244AB04	1	100
244	1/4"	0 - 6	91244AB06	1	100
244	1/4"	0 - 10	91244AB10	1	100

1/4" gauge. Radial connection. Ø 63. When ordering please specify the operating pressure.



**ART. 257**

ART.	SIZE	BAR	CODE		
257	1/4"	0 - 4	91257AB04	1	100
257	1/4"	0 - 6	91257AB06	1	100
257	1/4"	0 - 10	91257AB10	1	100
257	1/4"	0 - 16	91257AB16	1	100

Pressure gauge. Radial connection. **Max. pressure indication. Ø 63. INAIL approved.**



**ART. 263**

ART.	SIZE	BAR	CODE		
263	1/4"	0 - 4	91263AB04	1	100
263	1/4"	0 - 6	91263AB06	1	100
263	1/4"	0 - 10	91263AB10	1	100

Pressure gauge. Back connection **with red pointer for maximum pressure indication. Ø 63. INAIL approved.**



**ART. 255**

ART.	SIZE	BAR	CODE		
255	3/8"	0 - 4	91255AC04	1	100
255	3/8"	0 - 6	91255AC06	1	100
255	3/8"	0 - 10	91255AC10	1	100
255	3/8"	0 - 16	91255AC16	1	100
255	1/2"	0 - 4	91255AD04	1	100
255	1/2"	0 - 6	91255AD06	1	100
255	1/2"	0 - 10	91255AD10	1	100
255	1/2"	0 - 16	91255AD16	1	100

Radial connection gauge. Ø 80. When ordering please specify the operating pressure. **INAIL approved.**



**ART. 282**

ART.	SIZE	mBAR	CODE	
282	1/4"	0 - 60	91282AB060	1
282	1/4"	0 - 100	91282AB100	1
282	1/4"	0 - 150	91282AB150	1
282	1/4"	0 - 250	91282AB250	1
282	1/4"	0 - 400	91282AB400	1
282	1/4"	0 - 600	91282AB600	1

Membrane gauge for gas with 1/4 radial connection. Ø 63.



**ART. 283**

ART.	SIZE	mBAR	CODE	
283	1/4"	0 - 6	91283AB06	1
283	1/4"	0 - 10	91283AB10	1
283	1/4"	0 - 16	91283AB16	1

Glycerine gauge with 1/4 radial connection. Max. operating temperature 160°C. Ø 63.



**ART. 258**

ART.	SIZE	BAR	°C	CODE		
258	1/2"	0 - 4	0 - 120	91258AD04120	1	50
258	1/2"	0 - 6	0 - 120	91258AD06120	1	50
258	1/2"	0 - 10	0 - 120	91258AD10120	1	50

Thermomanometer with check valve. Radial connection, temperature range 0 + 120°C, pressure scale 0 ÷ 4 bar or 0 ÷ 6 bar or 0 ÷ 10 bar. Pressure precision: CL 1,6. Temperature precision: CL 2.IP 34 protection degree. Ø 80.



ART. 259

ART.	SIZE	BAR	°C	CODE		
259	1/2"	0 - 4	0 - 120	91259AD04120	1	100
259	1/2"	0 - 6	0 - 120	91259AD06120	1	100
259	1/2"	0 - 10	0 - 120	91259AD10120	1	100

Thermomanometer with check valve. Back connection, temperature range 0 ÷ 120°C, pressure scale 0 ÷ 4 bar or 0 ÷ 6 bar or 0 ÷ 10 bar. Pressure precision: CL 1,6. Temperature precision: CL 2. IP 34 protection degree. Ø 80



ART. 207

ART.	SIZE	FINISH	CODE		
207	3/8"	BRASS	87207AC05	10	400
207	3/8"	NICHEL PLATED	87207AC06	10	400

Cockpit for thermometer art. 206 and 287.



ART. 287

ART.	SIZE	CODE		
287	0-120	872870120	1	100

Thermometer with spring clip, 60 mm diameter.



**G**



# H

## SOLAR SYSTEMS PRODUCTS AND COMPONENTS

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**H1** PRE-ASSEMBLED GROUPS  
FOR SOLAR SYSTEMS

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**H3** TEMPERATURE HYDRONIC  
REGULATION FOR  
SOLAR SYSTEMS

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**H2** ELECTRONIC REGULATORS  
FOR SOLAR SYSTEMS

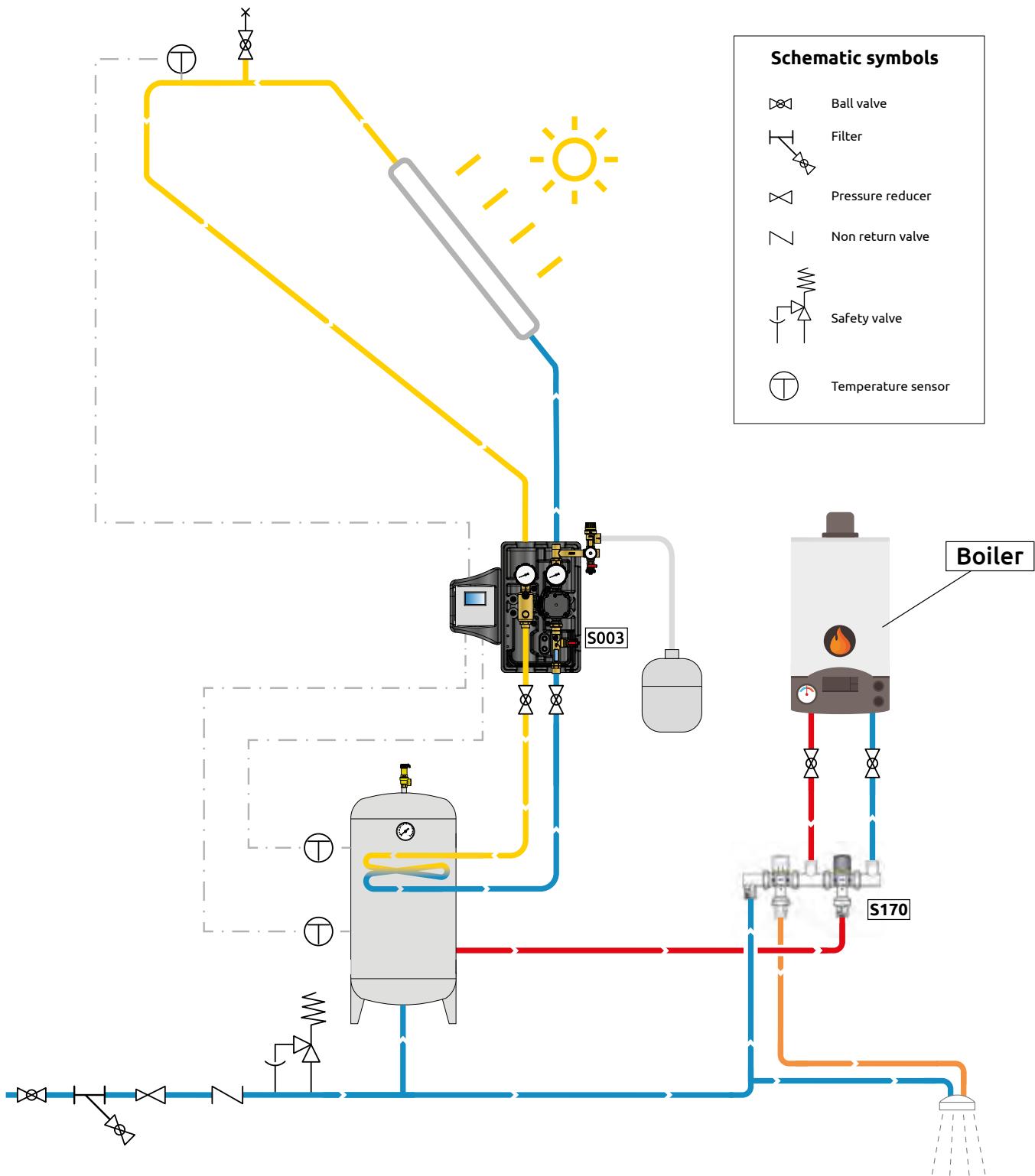
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**H4** SAFETY EQUIPMENT FOR  
SOLAR SYSTEMS

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## SOLAR SYSTEM SCHEME





ART. S001

ART.	SIZE	PUMP	CIRCULATOR CONTROL SIGNAL		PWM SIGNAL CABLE	CODE	
			ON/OFF	PWM			
S001	3/4"	NO PUMP	✗	✗	✗	93S001AE05SC	1
S001 •	3/4"	Wilo ST 20/6	✓	✗	✗	93S001AE05	1
S001 •	3/4"	Grundfos 15/6	✓	✗	✗	93S001AE05G	1
S001	3/4"	Taco ES2 15-70/130	✓	✗	✗	93S001S166	1
S001	3/4"	Grundfos UPM3 15-75 ELECTRONIC CIRCULATOR	✓	✓	NOT INCLUDED*	93S001S163	1
S001	3/4"	Wilo RSTG 15/7.5 ELECTRONIC CIRCULATOR	✓	✓	INCLUDED	93S001S164	1
S001	3/4"	Wilo Para ST 15/6 ELECTRONIC CIRCULATOR	✓	✗	✗	93S001S165	1

**Delivery and return** circulation group for primary circuits of solar systems. The flow goes from the solar panel to the boiler. It includes: interception ball valves with thermometers, pump for solar plants, air vent group, 6 bar safety valve, filling and drain taps to wash the system before filling, 0-12 lt/min flowmeter to regulate the flow, anti-gravity check valve, gauge, thermalproof shell. Suitable for fluids with up to 50% of glycol. Max working temperature 140°C.

- Products equipped with circulators "Wilo ST 20/6" and "Grundfos 15/6" are intended for sale in non-EU countries.

\*To be purchased separately (see page 197), in case of connection with electronic controller with PWM signal.



ART. S002

ART.	SIZE	PUMP	CIRCULATOR CONTROL SIGNAL		PWM SIGNAL CABLE	CODE	
			ON/OFF	PWM			
S002	3/4"	NO PUMP	✗	✗	✗	93S002AE05SC	1
S002 •	3/4"	Wilo ST 20/6	✓	✗	✗	93S002AE05	1
S002 •	3/4"	Grundfos 15/6	✓	✗	✗	93S002AE05G	1
S002	3/4"	Taco ES2 15-70/130	✓	✗	✗	93S002S166	1
S002	3/4"	Grundfos UPM3 15-75 ELECTRONIC CIRCULATOR	✓	✓	NOT INCLUDED*	93S002S163	1
S002	3/4"	Wilo RSTG 15/7.5 ELECTRONIC CIRCULATOR	✓	✓	INCLUDED	93S002S164	1
S002	3/4"	Wilo Para ST 15/6 ELECTRONIC CIRCULATOR	✓	✗	✗	93S002S165	1

Return circulation group for primary circuits of solar systems. The flow goes from the solar panel to the boiler. It includes: interception ball valves with thermometers, pump for solar plants, 6 bar safety valve, filling and drain taps to wash the system before filling, 0-12 lt/min flowmeter to regulate the flow, anti-gravity check valve, gauge, thermal-proof shell. Suitable for fluids with up to 50% of glycol. Max working temperature 140°C.

- Products equipped with circulators "Wilo ST 20/6" and "Grundfos 15/6" are intended for sale in non-EU countries.

\*To be purchased separately (see page 197), in case of connection with electronic controller with PWM signal.



ART. TAS003

ART.	SIZE	PUMP	CIRCULATOR CONTROL SIGNAL		PWM SIGNAL CABLE	CODE	
			ON/OFF	PWM			
TAS003+S303 •	3/4"	Grundfos 15/65	✓	✗	✗	TAS003AE05GS303	1
TAS003+S303 •	3/4"	Wilo ST 20/6	✓	✗	✗	TAS003AE05S303	1
TAS003+S303	3/4"	Taco ES2 15-70/130	✓	✗	✗	TAS003S166S303	1
TAS003+S303	3/4"	UPM3 15-75 CIRCOL.ELETTRONICO	✓	✓	NOT INCLUDED*	TAS003S163S303	1
TAS003+S303	3/4"	Wilo RSTG 15/7.5 CIRCOL.ELETTRONICO	✓	✓	INCLUDED	TAS003S164S303	1
TAS003+S303	3/4"	Wilo Para ST 15/6 CIRCOL.ELETTRONICO	✓	✓	✗	TAS003S165S303	1
TAS003+S305 •	3/4"	Grundfos 15/65	✓	✗	✗	TAS003AE05GS305	1
TAS003+S305 •	3/4"	Wilo ST 20/6	✓	✗	✗	TAS003AE05S305	1
TAS003+S305	3/4"	Taco ES2 15-70/130	✓	✗	✗	TAS003S166S305	1
TAS003+S305	3/4"	UPM3 15-75 CIRCOL.ELETTRONICO	✓	✓	NOT INCLUDED*	TAS003S163S305	1
TAS003+S305	3/4"	Wilo RSTG 15/7.5 CIRCOL.ELETTRONICO	✓	✓	INCLUDED	TAS003S164S305	1
TAS003+S305	3/4"	Wilo Para ST 15/6 CIRCOL.ELETTRONICO	✓	✓	✗	TAS003S165S305	1

**Delivery and return** solar station for primary circuits of solar systems **with integrated controller**. The flow goes from the solar panel to the boiler. It includes: interception ball valves with thermometers, pump for solar plants, air vent group, 6 bar safety valve, filling and drain taps to wash the system before filling, 0-12 lt/min flowmeter to regulate the flow, antigravity check valve, gauge, thermal-proof shell. Suitable for fluids with up to 50% of glycol. Max working temperature 140°C. **It can be integrated with the microprocessor units art. S303 or art. S305.**

- Products equipped with circulators "Wilo ST 20/6" and "Grundfos 15/6" are intended for sale in non-EU countries.

\*To be purchased separately (see page 197), in case of connection with electronic controller with PWM signal.



ART. S004

ART.	SIZE	PUMP	CIRCULATOR CONTROL SIGNAL		PWM SIGNAL CABLE	CODE	
			ON/OFF	PWM			
S004+S303	3/4"	NO PUMP	✗	✗	✗	93S004SCS303	1
S004+S303 •	3/4"	Wilo ST 20/6	✓	✗	✗	93S004AE05S303	1
S004+S303 •	3/4"	Grundfos 15/65	✓	✗	✗	93S004AE05GS303	1
S004+S303	3/4"	Grundfos UPM3 15-75 CIRCOL.ELETTRONICO	✓	✓	NOT INCLUDED*	93S004S163S303	1
S004+S303	3/4"	Wilo RSTG 15/7,5 CIRCOL.ELETTRONICO	✓	✓	INCLUDED	93S004S164S303	1
S004+S303	3/4"	Wilo Para ST 15/6 CIRCOL.ELETTRONICO	✓	✗	✗	93S004S165S303	1
S004+S303	3/4"	Taco ES2 15-70/130	✓	✗	✗	93S004S166S303	1
S004+S305	3/4"	NO PUMP	✗	✗	✗	93S004SCS305	1
S004+S305 •	3/4"	Wilo ST 20/6	✓	✗	✗	93S004AE05S305	1
S004+S305 •	3/4"	Grundfos 15/6	✓	✗	✗	93S004AE05GS305	1
S004+S305	3/4"	Grundfos UPM3 15-75 CIRCOL.ELETTRONICO	✓	✓	NOT INCLUDED*	93S004S163S305	1
S004+S305	3/4"	Wilo RSTG 15/7,5 CIRCOL.ELETTRONICO	✓	✓	INCLUDED	93S004S164S305	1
S004+S305	3/4"	Wilo Para ST 15/6 CIRCOL.ELETTRONICO	✓	✗	✗	93S004S165S305	1
S004+S305	3/4"	Taco ES2 15-70/130	✓	✗	✗	93S004S166S305	1

**Return** circulation group for primary circuits of solar systems with integrated controller. The flow goes from the solar panel to the boiler. It includes: interception ball valves, pump for solar plants, air vent group, 6 bar safety valve, filling and drain taps to wash the system before filling, 0-12 lt/min flowmeter to regulate the flow, anti-gravity check valve, gauge, thermal-proof shell. Suitable for fluids with up to 50% of glycol. Max working temperature 140°C. **It can be integrated with the microprocessor units art. S303 or art. S305.**

- Products equipped with circulators "Wilo ST 20/6" and "Grundfos 15/6" are intended for sale in non-EU countries.

\*To be purchased separately (see page 197), in case of connection with electronic controller with PWM signal.



ART. TAS001

ART.	SIZE	PUMP	CIRCULATOR CONTROL SIGNAL		PWM SIGNAL CABLE	CODE	
			ON/OFF	PWM			
TAS001 •	3/4"	Wilo ST 20/6	✓	✗	✗	TAS001AE05	1
TAS001•	3/4"	Grundfos 15/6	✓	✗	✗	TAS001AE05G	1
TAS001	3/4"	Taco ES2 15-70/130	✓	✗	✗	TAS001AE05S166	1
TAS001	3/4"	UPM3 15-75 ELECTRONIC CIRCULATOR	✓	✓	NOT INCLUDED*	TAS001AE05S163	1
TAS001	3/4"	Wilo RSTG 15/7.5 ELECTRONIC CIRCULATOR	✓	✓	INCLUDED	TAS001AE05S164	1
TAS001	3/4"	Wilo Para ST 15/6 ELECTRONIC CIRCULATOR	✓	✗	✗	TAS001AE05S165	1

**Delivery and return** circulation group for primary circuits of solar systems. The flow goes from the solar panel to the boiler. It includes: interception ball valves with thermometers, pump for solar plants, Wilo Para 15/1-7 or Grundfos 15/6, air vent group, 6 bar safety valve, filling and drain taps to wash the system before filling, 0-12 lt/min flowmeter to regulate the flow, antigravity check valve, gauge, thermal-proof shell. Suitable for fluids with up to 50% of glycol. Max working temperature 140°C.

- Products equipped with circulators "Wilo ST 20/6" and "Grundfos 15/6" are intended for sale in non-EU countries.

\*To be purchased separately (see page 197), in case of connection with electronic controller with PWM signal.



**NEW**

**ART. S303**

ART.	CODE	
S303	93S3030302PWM	1

Centralized control unit for thermal solar panels. Equipped with 3 relay outputs (2 for loads + 1 for alarm), PWM output, 0..10V output and 3 inputs (Ntc sensors/probes), can adjust and manage up to 6 different types of solar systems. **Control unit supplied with 2 NTC probes.**



**ART. S307**

ART.	CODE	
S307	93S3070302	1

Micropressor control unit for solar systems with 3 inputs for temperature sensors and 2 outputs, 1 for pump control and 1 potential-free contact for a supplementary function. The price includes **2 NTC sensors.**



**NEW**

**ART. S305**

ART.	CODE	
S305	93S3050404PWM	1

Centralized control unit for thermal solar panels. Equipped with 5 outputs (Load Relays + Alarm Relays), 2 PWM outputs, and 4 Inputs (Pt1000 sensors/probes) it is able to manage a system configuration that can be selected among 20 common types of layouts. **Control unit supplied with 3 PT1000 probes.**



**ART. S310**

ART.	CODE	
S310	93S3100106	1

PT1000 temperature sensor with 1,5 mt. silicon cable. Working temperature range -50°C + 200°C.



**ART. S306**

ART.	CODE	
S306	93S3060301	1

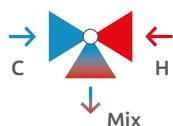
Microprocessor control unit for solar systems with backlit display, 3 inputs for temperature sensors, 1 modulating TRIAC output for pump control. The price includes 1 solar panel sensor and 1 boiler sensor with 2 mt. silicon cable.



**ART. S311**

ART.	MAX. TEMPERATURE	CODE	
S311	110°	93S3110106	1
S311	200°	93S3110206	1

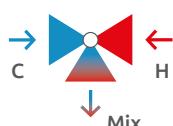
NTC temperature sensor.



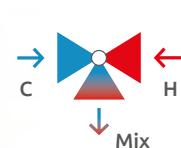
ART. S100

ART.	SIZE	Kv m³/h	CODE		
S100	1/2"	1,5	93S100AD05	1	10
S100	3/4"	2	93S100AE05	1	10
S100	1"	3	93S100AF05	1	10

Thermostatic mixer for solar systems. Male threaded tails, max. working pressure 10 bars, max. working temperature 100°C. Temperature setting on mixed way 30-60°C. Side hot/cold water inlets, **lower mixed way**.



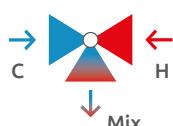
ART. S103



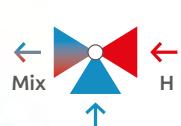
ART. S103

ART.	SIZE	Kv m³/h	CODE		
S103	3/4"	1,5	93S103AD05	1	10
S103	1"	2	93S103AE05	1	10
S103	1 1/4"	3	93S103AF05	1	10

Thermostatic mixer with male thread. Max. working pressure 10 bars, max. working temperature 100°C. Temperature setting on mixed way 30-60°C. Side hot/cold inlets, **lower mixed way**.



ART. S101



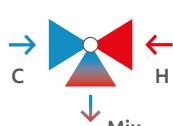
ART. S107

ART.	SIZE	Kv m³/h	CODE		
S107	1/2"	1,5	93S107AD05	1	10
S107	3/4"	2	93S107AE05	1	10

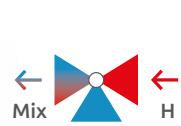
Thermostatic mixer for solar systems. Female thread, max. working pressure 10 bars, max. working temperature 100°C. Temperature setting on mixed way 30-60°C. Side hot/cold water inlets, **lower mixed way**.

ART.	SIZE	Kv m³/h	CODE		
S101	1/2"	1,5	93S101AD05	1	10
S101	3/4"	2	93S101AE05	1	10
S101	1"	3	93S101AF05	1	10

Thermostatic mixer for solar systems. Female thread, max. working pressure 10 bars, max. working temperature 100°C. Temperature setting on mixed way 30-60°C. Side hot/cold water inlets, **lower mixed way**.



ART. S102



ART. S108

ART.	SIZE	Kv m³/h	CODE		
S102	3/4"	2	93S102AE05	1	10
S102	1"	3	93S102AF05	1	10

Thermostatic mixer for solar systems. Male threaded tails, **with check valve for high temperatures**, max. working pressure 10 bars, max. working temperature 100°C. Temperature setting on mixed way 30-60°C. Side hot/cold water inlets, **lower mixed way**.

ART.	SIZE	Kv m³/h	CODE		
S108	1/2"	1,5	93S108AD05	1	10
S108	3/4"	2	93S108AE05	1	10

Thermostatic mixer for solar systems. Female thread, max. working pressure 10 bars, max. working temperature 100°C. Temperature setting on mixed way 30-60°C. **Side mixed way**, hot water side inlet, cold water lower inlet.



**IMPORTANT!** Items highlighted with “●” will be replaced with new models. Subscribe to ICMA Newsletter on our website [www.icmaspa.it](http://www.icmaspa.it) to stay updated about all latest news.

## TEMPERATURE HYDRONIC REGULATION FOR SOLAR SYSTEMS



ART. S109

ART.	SIZE	Kv m³/h	CODE			
S109	3/4"	2	93S109AE05	1	10	

Thermostatic mixer for solar systems. Male threaded tails, **with check valve for high temperatures**, max. working pressure 10 bars, max. working temperature 100°C. Temperature setting on mixed way 30-60°C. **Side mixed way**, hot water side inlet, cold water lower inlet.



ART. S105

ART.	SIZE	Kvs		CODE		
		T out>45°	T out<45°			
S105	1/2"	1,3	1,2	93S105AD05045	1	10
S105	3/4"	1,6	1,4	93S105AE05045	1	10

Diverting thermostatic valve. Male threaded tails, max. working pressure 10 bars, max. working temperature 100°C. 45°C temperature deviation. Inlet from lower way, deviation on side way.



ART. S106

ART.	SIZE	Kvs		CODE		
		T out>45°	T out<45°			
S106	1/2"	1,3	1,2	93S106AD0545	1	10
S106	3/4"	1,6	1,4	93S106AE0545	1	10

Diverting thermostatic valve. Female threaded connections, max. working pressure 10 bars, max. working temperature 100°C. 45°C temperature deviation. Inlet from lower way, deviation on side way.



ART. S112

ART.	SIZE	Kv m³/h	CODE			
S112	3/4"	1,5	93S112AD05	1	10	
S112	1"	2	93S112AE05	1	10	

Thermostatic mixer with male connections. Max. working pressure 10 bars, Max. working temperature 100°C. Temperature setting on mixed way 30-60°C. **Side mixed way**, hot water side inlet, cold water lower inlet.



ART. S170

ART.	SIZE	Kvs	CODE			
S170	3/4"	1,2	93S170AE0645	1	10	

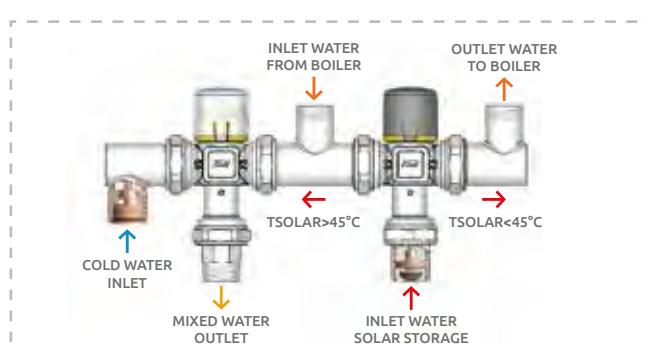
Integration kit between the solar panel and the boiler for the production of hot sanitary water. The kit includes one 45°C diverting valve and one mixing valve; temperature setting 30-60°C. Check valve are included in the fittings. On demand, the protection shell art. S172 is available.



ART. S172

ART.	CODE		
S172	93S172AE66	1	

Protection shell for art. S170.





ART. S120

ART.	SIZE	CODE		
S120	1/2"	93S120ADAN	1	50
S120	3/4"	93S120AEAN	1	50

Fixed setting (6 bars) safety valve for solar systems, female connections, max. working temperature 160°. The product complies the Ped. 2014/68/UE norm - categoria IV D.M.1.12.75, D.Lgs.25.02.2000. CE n. 0425 approval.



ART. 740

ART.	SIZE	CODE		
740	3/4"	82740AE05	1	10
740	1"	82740AF05	1	10
740	1"1/4	82740AG05	1	10
740	1"1/2	82740AH05	1	5

High capacity deaerator, for solar systems. Max. working pressure 10 bars. Max. temperature 160°C.



ART. S111

ART.	SIZE	CODE		
S111	1/2"	93S111AD05	1	10
S111	3/4"	93S111AE05	1	10

High efficiency automatic air vent valve for solar systems, with oil-free mechanism. The oil-free operation prevents the impurities of the fluid from depositing on the venting device. Max. working pressure 10 bars, max. temperature 160°C.



ART. S121

ART.	SIZE	CODE		
S121	1/2"-3/4"	93S121AEAN	1	50

Fixed setting (6 bars) safety valve for solar systems, with increased discharge, female connections, max. working temperature 160°. The product complies the Ped. 2014/68/UE norm - categoria IV D.M.1.12.75, D.Lgs.25.02.2000. CE n. 0425 approval.



ART. S110

ART.	SIZE	CODE		
S110	1/2"	93S110AD05	10	100

Air vent valve for solar systems. Max. working pressure 10 bars, max. temperature 130°C.



ART. S128

ART.	SIZE	CODE		
S128	3/8"	93S128AC05	10	100
S128	1/2"	93S128AD05	10	100

Air vent valve for solar systems. Maximum operating pressure 10 bar, maximum temperature 180°C.



ART. S129

ART.	SIZE	BAR	CODE		
S129	1/2M X 1/2F	3	93S129ADAF	1	20
S129	1/2M X 1/2F	6	93S129ADAN	1	20
S129	1/2M X 1/2F	8	93S129ADAQ	1	20
S129	3/4M X 3/4F	3	93S129AEAF	1	20
S129	3/4M X 3/4F	6	93S129AEAN	1	20
S129	3/4M X 3/4F	8	93S129AEAQ	1	20

The TP safety valve controls and limits the temperature and pressure of hot water contained in a solar sanitary storage tank. It prevents the case of temperatures above 100°C. When the pre-set values are reached, the valve opens and discharges a quantity of water so as to reduce the pressure and temperature of the storage tank. The discharged water is immediately refilled with water from the hydraulic network.



ART. S141

ART.	SIZE	PIPE LENGTH MM	CODE	
S141	3/4"	500	93S141AE05	1
S141	3/4"	1000	93S141AE10	1

Fixing kit for expansion vessel consisting of a bracket, a connection pipe to the solar station, double check valve. It enables replacing the expansion vessel without emptying the system. Available with 1000 mm connection pipe, for shock-proof curl-siphon installation.



ART. S131

ART.	SIZE	PIPE LENGTH MM	CODE	
S131	12 lt	500	93S131AE12500	1
S131	18 lt	500	93S131AE18500	1
S131	24 lt	500	93S131AE24500	1
S131	35 lt	500	93S131AE35500	1
S131	50 lt	500	93S131AE50500	1
S131	12 lt	1000	93S131AE121000	1
S131	18 lt	1000	93S131AE181000	1
S131	24 lt	1000	93S131AE241000	1
S131	35 lt	1000	93S131AE351000	1
S131	50 lt	1000	93S131AE501000	1

Expansion kit for solar systems, consisting of an expansion vessel art. S130 and the fixing kit art. S141. The 1000 mm pipe enables installation with shock-proof siphon.



ART. S142

ART.	SIZE	CODE		
S142	3/4"	93S142AE05	1	50

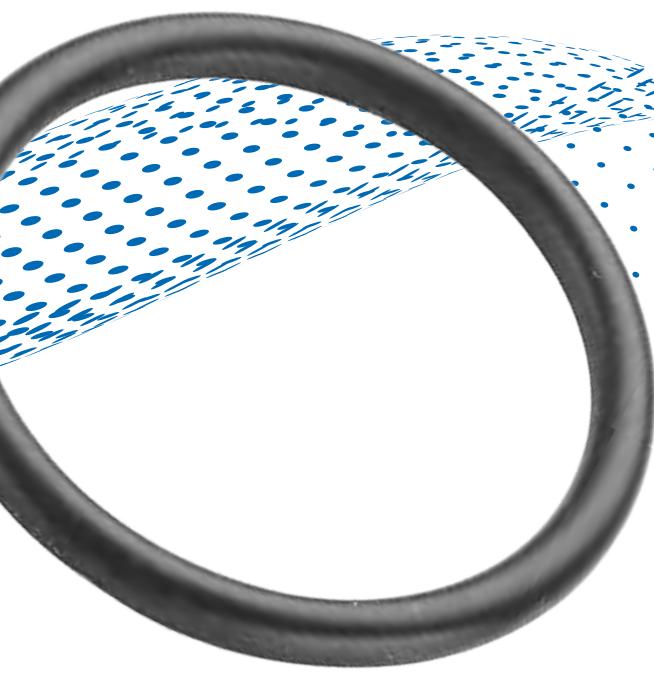
Double check valve. It enables replacing the expansion vessel without emptying the system.



ART. S130

ART.	SIZE	CODE	
S130	12 lt	93S130AE12	1
S130	18 lt	93S130AE18	1
S130	24 lt	93S130AE24	1
S130	35 lt	93S130AE35	1
S130	50 lt	93S130AE50	1

Expansion vessel for solar systems. Max. temperature 140°C.



## SPARE PARTS



- I1** HANDWHEELS/CAPS/  
LEVERS/BUTTERFLY  
HANDLES  
page 186



- I5** COMPONENTS FOR PRESS  
FITTINGS  
page 194



- I2** COMPONENTS FOR  
CONNECTIONS/UNIONS/  
NUTS/O-RINGS  
page 189



- I6** COMPONENTS FOR  
BIOMASS SYSTEMS/SOLAR  
THERMAL COMPONENTS  
page 195



- I3** PROBES/PROBE HOLDERS  
FOR SINGLE PIPE VALVES  
page 191



- I7** CIRCULATORS  
page 196



- I4** COMPONENTS FOR  
COLLECTORS  
page 191



CODE	COLOUR	
CST01950AC22	WHITE	
CST01950AC07	CHROMED	

Handwheel for thermostatic valves  
**White for articles:** 1142-840-842-852-841-843-844-845-1122-1123-1124-1125-1146-930-931  
**Chromed for articles:** 1110-1111-1112-1113-1140-908-909



CODE	COLOUR	
82984AC20	WHITE	

Handwheel for thermostatic valves **for articles:** 970-972-966-971-973-967-868-869-974-975-870-866-891-892.



CODE	SIZE	COLOUR	
05774AC34	M28	WHITE	
05778AD34	M30	WHITE	

Protection cap for thermostatic valve.  
**M28 for articles:** 770-772-771-773-774-775-906-907  
**M30 for articles:** 764-765-776-777-778-779-795-766-767-878-370-371-376-377-378-379-300-301-302



CODE	SIZE	COLOUR	
01170AE38	1"	WHITE	
01181AE38	1"1/4	GRAY	

Protection cap for manifolds with thermostatic option valves.



CODE	COLOUR	
C01941AC22	WHITE	

Handwheel for manual TULIP-shaped valves (3 components) **for articles:** 846-847-848-849-850-851



CODE	COLOUR	
C01921AC22	WHITE	

Handwheel **for articles:** 921, 941, 924, 944, 951 e 954. With white handwheel cover.



CODE	COLOUR	
C01803AC38	WHITE	

Handwheel **for articles:** 803-813-804-814-832-834



CODE	COLOUR	
C01826AD38	WHITE	

Handwheel **for articles:** 802-812-826-828-836-838-161

## HANDWHEELS/CAPS/LEVERS/BUTTERFLY HANDLES



CODE	OUTLET	LANGUAGE	
CSA2272IT	2	ITALIAN	
CSA2272UN	2	HUNGARIAN	
CSA2272RU	2	RUSSIAN	
CSA2272GR	2	GREEK	
CSA2272SP	2	SPANISH	
CSA2273IT	3	ITALIAN	
CSA2273UN	3	HUNGARIAN	
CSA2273RU	3	RUSSIAN	
CSA2273GR	3	GREEK	
CSA2273SP	3	SPANISH	

Kit including:

Handwheel for articles:

**227 228 229**

Composed of:

- Hot/cold plate. One side red, the other side blu
- Double face plate with description for sanitary and heating system
- Screws



SIZE	CODE	COLOUR	
3/8"	01347AC11	RED	
	01347AC12	BLUE	
1/2" 3/4"	01347AD11	RED	
	01347AD12	BLUE	
	01347AD13	WHITE	
1"	01347AF11	RED	
	01347AF12	BLUE	
1"1/4	01347AG11	RED	
	01347AG12	BLUE	

Ball valves butterfly handle **for articles:** 347-348-349-351-215-216-225-226-361-362.



CODE	FOR ARTICLE	
C37413AE20	413 - 515	
C37409GH20	409	

Butterfly handle for built-in taps.



SIZE	CODE	COLOUR	
3/8"	37350AC11	RED	
	37350AC12	BLUE	
1/2" 3/4"	37350AD11	RED	
	37350AC12	BLUE	
1"	37350AG11	RED	
	37350AG12	BLUE	

Ball valves lever **for articles:** 350-352.



CODE	FOR ART.	
CG04013AE07	413 - 515	
CG0409GH07	409	

Cap and rosette for built-in cock.



CODE	COLOUR
05942AC38	WHITE

Plastic cap **for articles:** 922-942-925-945-952-955-1144-1145



CODE	COLOUR
C01894AD22	WHITE
C01894AD07	CHROMED

Handwheel for single-double pipe manual valves  
**White model for articles:** 894-895-923-943  
**Chromed model for articles:** 838-868



CODE	COLOUR
05805AC38	WHITE

Plastic cap **for articles:** 837-839-854-833-835-855-827-830-829-831-805-815-162



CODE	COLOUR
01886AC22	WHITE

Handwheel for single-double pipe manual valves **for articles:** 886-887-888



CODE	COLOUR
C05805AC06	NICKEL

Cap **for articles:** 875-877-896-883-902-903-904-905



CODE	COLOUR
01856AC22	WHITE

Handwheel for single-double pipe manual valves **for articles:** 856



CODE	COLOUR
C05922AC22	WHITE

Plastic cap for manifolds with manual lock-shields regulation **for articles:** 1005-1006-1011-1012

## COMPONENTS FOR CONNECTIONS/UNIONS/NUTS/O-RINGS



CODE	SIZE	
82940AC06	3/8"	
82940AD06	1/2"	
82940AE06	3/4"	

Art. 940: Anti-leakage connection with spherical seat.



CODE	SIZE	
C45808AC06	3/8"	
C45808AD06	1/2"	
C45808AE06	3/4"	
C45808AF06	1"	
C45808AG06	1"1/4	
C45808AH06	1"1/2	
C45808AJ06	2"	

Anti-leakage connection with spherical seat.



CODE	SIZE	REFERENCE	
CP10000143	3/8"	Ø12,42x2,62	
CP10000243	1/2"	Ø15,6x1,78	
CP10000343	3/4"	Ø21,95x1,78	
CP10000443	1"	Ø30x2	
CP10011343	1"1/4	Ø36,17x2,62	
CP10014643	1"1/2	Ø44,45x3,53	
CP10014543	2"	Ø58,74x3,53	

O-ring for connection with spherical seat.



CODE	SIZE	
C45891AD06	1/2"	
C45891AE06	3/4"	

Flat seat connection.



CODE	SIZE	
S5891AD41	1/2" 3/4"	

Gasket for flat seat connection, codes: C45891AD06-C45891AE06



CODE	SIZE	
45250AD01	1/2"	
45751AE01	3/4"	
45751AF01	1"	
45245AE01	1"1/4	

Flat seat connection **for articles:** 300-301-302-320-321-322-331-332-333-334-336-341-342-343-344-346.



CODE	SIZE	
CS0250AD43	1/2"	
CS5891AD41	3/4"	
CS5886AD41	1"	
CS5245AE43	1"1/4	

Gasket for flat seat connection, codes: 45250AD01-45751AE01-45751AF01-45245AE01.



CODE	SIZE	
45886AD06	1/2"	
45886AE06	3/4"	
45886AF06	1"	

Flat seat connection for single-pipe valves.



CODE	SIZE
C14886AD01	1/2"-3/4"-1"

Gasket for flat seat connection, codes: C45886AD06-C45886AE06-C45886AF06.



CODE	SIZE
C46940AD06	3/8" 1/2"
C46808AE06	3/4"

Nut for anti-leakage union for article 940.



CODE	SIZE
C46808AC06	3/8"
C46808AD06	1/2"
C46808AE06	3/4"
C46808AF06	1"
C46808AF06	1"1/4
C46808AH06	1"1/2
C46808AJ06	2"

Nut for union, spherical seat.



CODE	SIZE
C46896AE06	3/4"

Nut for H valves.



CODE	SIZE
C5320GE06	3/4"

Nut Ø15 for articles: 887-888.



CODE	SIZE
CS2880AD46	Ø15

Teflon ring.



CODE	SIZE
87265AF05	1"
87265AF06	1"

Connector with O-ring.



CODE	SIZE
A1S170AE06	3/4"

Connector with VNR.



CODE
81880AD06

Spare kit **for article:** 888



CODE
81881AD06

Spare kit **for article:** 887



CODE	SIZE	FOR ART.	
CA1886AD20	3/4"	886	
CA1894AD20	3/4	894	
CA1886AF20	1"	886	
CA1856AF20	1"	856	

Probe + probe holder.



CODE	
C40886AD31	

Shutter guide for art. 886.



CODE	
C21891AD32	

Connector for art. 891.



CODE	
C12970AC0101	

Stuffing box for valves/thermostatic manifolds.



CODE	
CA023AZ01	

Adaptor ring for CALEFFI® thermostatic valves.



CODE	
22023AY20	

Matching ring for M28 thermostatic heads.



CODE	
FA023AZ01	

Adaptor ring for FAR® thermostatic valves.



CODE	SIZE	FOR ART.	
22009AY06	M28	982 - 983	
22010AZ06	M30	979 - 980	

Blocking ring for electrothermic actuators.



CODE	SIZE	
CG21001PG01	1"	
CG2181PG01	1"1/4	

Thermostatic insert for floor heating manifolds.



CODE	CONNECTION	SIZE	
87175OO06	M24X1,5	1"	
87175AE06	3/4 Euroconus	1"	

Thermostatic insert with valve for manifolds (old type).



CODE	SIZE	
CG0121AE01	1"	
CG2182PG01	1"1/4	

Manual insert for lockshields regulation on manifolds.



CODE	CONNECTION	SIZE	
87176OO06	M24X1,5	1"	
87176AE06	3/4 Euroconus	1"	

Lockshield with micrometric adjustment (old type).



CODE	CONNECTION	SIZE	
CA3168OO06	M24X1,5	1"	
CA3168AE06	3/4 Euroconus	1"	
CA3180AE06	3/4 Euroconus	1"1/4	

Cup for manifold inserts.



CODE	SIZE	
CG1168AE06	0-4 L/MIN	
CG1180AE06	0-8 L/MIN	

Flow meter insert for floor-heating manifolds.



CODE	
87304OO06	

Flowmeter **for article:** K063.



CODE	
CG0227PA01	

Manual insert for simple manifolds.



CODE	
11196OE06	

Line for manifolds with box.



CODE	SIZE
06194OO20	30X25
06194OH20	40X25
06194OI20	48X25
06194OL20	60X30

Plastic cover for box article: 194



CODE	SIZE
06192OO09	330
06192OH09	430
06192OI209	530
06192OL09	630

Cover for box article: 192



CODE	
07192OO09	

Pair of screws for cabinet cover art. 192.



CODE	SIZE
87187OE09	500
87187OC09	600
87187OF09	700
87187OK09	850
87187OG09	1000
87187OH09	1200

White metal cover for box article: 196-197



CODE	
05192OO09	

Kit brackets + screws for cabinet art. 192 including:  
4 brackets + screws for manifolds sized ¾"  
4 brackets + screws for manifold sized 1"



CODE	SIZE	PRODUCT RANGE
C22400GH25O	16X2	SEMPITER
C22400GJ25O	18X2	SEMPITER
C22400BQ25O	20X2	SEMPITER
C22400GP25O	25X2,5 26X3	SEMPITER
C22400GQ25O	32X3	SEMPITER
C22400GS25O	40X3,5	SEMPITER
C22400GT25O	50X4	SEMPITER

Ring for Sempiter fittings.



CODE	SIZE
C10400GH01	16X2
C10400GJ01	18X2
C10400BQ01	20X2
C10400GO01	25X2,5
C10400GP01	26X3
C10400GQ01	32X3
C10400GS01	40X3,5
C10400GT01	50X4

Bushing for Sempiter and Sempigas fittings.



CODE	SIZE	PRODUCT RANGE
C22400GH25G	16X2	SEMPIGAS
C22400BQ25G	20X2	SEMPIGAS
C22400GP25G	25X2,5 26X3	SEMPIGAS
C22400GQ25G	32X3	SEMPIGAS

Ring for Sempigas fittings.



CODE	SIZE	PRODUCT RANGE
CP10010743	16x2 (8,5x1,5)	SEMPITER
CP10013743	18x2 (11x1,5)	SEMPITER
CP10010843	20x2 (13x1,5)	SEMPITER
CP10010943	25x2,5 26x3 (15x2)	SEMPITER
CP10011043	32x3 (21x2)	SEMPITER
CP10011243	40x3,5 (26,65x2,62)	SEMPITER
CP10011343	50x4 (36,14x2,62)	SEMPITER

O-ring for Sempiter fittings.



CODE	SIZE	PRODUCT RANGE
CP10010750	16x2 (8,5x1,5)	SEMPIGAS
CP10010850	20x2 (13x1,5)	SEMPIGAS
CP10010950	25x2,5 26x3 (15x2)	SEMPIGAS

O-ring for Sempigas fittings.



CODE	SIZE
C06132AF1045	45°
C06132AF1055	55°
C06132AF1060	60°
C06132AF1070	70°

Thermostatic element for anti-condensation valves.



CODE	SIZE
C07605AE05	1/2"

Cockpit for thermal drain valve art. 605.



CODE	SIZE
C07608AE05	1/2"

Cockpit for thermal drain valve art. 608.



CODE
C18147AE06

Chain for draught regulator.



CODE	FLOW RATE	SIZE
93741AE05	0-12 l/min	3/4"

Flowmeter for solar systems. Capacity 0-12 l/min, seal with cap and gasket, flat seat on one side and G3/4" F on the other side.



CODE	DESCRIPTION	SIZE
93743AE35	DELIVERY	3/4"
93733AE36	RETURN	3/4"

Ball valve for solar systems, for primary circuit of delivery/return piping with built-in thermometer and brass check valve. Seal with cap and gasket, flat seat at one side and G3/4" F on the other side.



CODE	SIZE
93725AE05	3/4"

Deaerator for solar stations. O-ring with revolving ring at one side, and G3/4" F on the other side.



CODE	SIZE
93742AE05	3/4"

Kit provided with pressure gauge 0-10 bars, loading/unloading cock, connection G1/2 for safety valve, connection G3/4" for expansion vessel. Seal with gasket, flat seat on one side and G3/4" F on the other side.



CODE	SIZE
CA5S100AD06	1/2"

Thermostatic mixing valve for solar kit art. S170.



CODE	SIZE
CA5S105AD06	1/2"

Diverting thermostatic valve for solar kit art. S170.



ART. P320 - ART. P321

CODE	SIZE	FEATURES	MODEL	
88P3200153	1"1/2	25/40	Grundfos	
88P3210153	1"1/2	25/65	Grundfos	

Asynchronous circulator for closed loop heating systems, interaxe distance 130 mm. NOT FOR SALE IN THE EU



ART. P327

CODE	SIZE	FEATURES	
88P3270153	1"1/2	25/8	

Electronic circulator WILO PARA RS 25/8, interaxe distance 130 mm. Variable pressure, constant pressure, constant curves. Power supply cable included.



ART. P326

CODE	SIZE	FEATURES	
88P3260153	1"1/2	25/70	

Electronic circulator Grundfos UMP4 PWM 25-70, interaxe distance 130 mm. With PWM signal. POWER SUPPLY CABLE INCLUDED. PWM signal cable **NOT INCLUDED**.



ART. P328

CODE	SIZE	FEATURES	
88P3280153	1"1/2	25/70	

Grundfos UPM3 HYBRID 25-70 electronic circulator, interaxe distance 130 mm. Variable pressure, constant pressure, constant curves, AUTO ADAPT, PWM signal. POWER SUPPLY CABLE INCLUDED. The pump can be controlled via PWM signal. PWM signal cable **NOT INCLUDED**.



ART. P330

CODE	SIZE	FEATURES	
88P3300153	1"1/2	25/7	

Electronic circulator WILO PARA RS 25/7, interaxis distance 130 mm. Variable pressure, constant pressure, constant curves. Power supply cable included.



ART. P329

CODE	SIZE	FEATURES	
88P3290153	1"1/2	25-70/130	

Electronic circulator Taco ES2 25-70/130. Adjustment of the desired operating curve by rotation of the selector:

- nr. 2 proportional-pressure curves (P1,P2)
- nr. 2 constant-pressure curves (CI, CII)
- min-max mode – Fixed speed

Interaxis distance 130 mm. Not equipped with PWM signal.



ART. S160G

CODE	SIZE	FEATURES	
88S1600199G	1"	15/60	

Asynchronous circulation pump for solar systems, interaxe distance 130 mm.  
NOT FOR SALE IN THE EU.



ART. S163

CODE	SIZE	FEATURES	
88S1630199	1"	15/75	

Grundfos UPM3 15-75 electronic pump for solar systems. Constant curves.  
POWER SUPPLY CABLE INCLUDED. PWM signal cable NOT INCLUDED.



ART. S160

CODE	SIZE	FEATURES	
88S1600199	1"	20/60	

Asynchronous circulation pump for solar systems, interaxe distance 130 mm.  
NOT FOR SALE IN THE EU.



ART. S166

CODE	SIZE	FEATURES	
88S1660153	1"	15-70/130	

Electronic circulator for solar systems, Taco ES2 solar 15-70/130. Adjustment of the desired operating curve by rotation of the selector:  

- Nr. 1 proportional pressure curve (P)
- Min-max mode - Fixed speed.

 Interaxis distance 130 mm. Not equipped with PWM signal.



ART. S164

CODE	SIZE	FEATURES	
88S1640199	1"	15/75	

Circulator for solar systems WILO Yonos Para RSTG15-75, interaxis distance 130 mm. It can be controlled via PWM signal. Power supply and signal included. Variable ΔP, constant speed.



CODE

CODE	
C65P3280153	

Linear connector for UPM3 pump power supply. 1 mt length. For pumps art. P328 and S163.



CODE

CODE	
C64P3280153	

PWM signal connector for UPM3 pump. 1 mt length. For pumps art. P328 and S163.



ART. S165

CODE	SIZE	FEATURES	
88S1650199	1"	15-6	

WILO Yonos Para ST 15/6 RKC electronic pump for solar systems. Power supply cable included. Variable ΔP, constant speed.

# GENERAL SALES CONDITIONS

## ORDERS

All orders are subject to our confirmation and do not bind ICMA to the delivery, even partial, of the ordered material. In case of payment difficulties, ICMA has the right to suspend the deliveries to the buyer.

## PRICES

Unless otherwise specified, valid prices are those in force at the time of the order. Prices are meant for goods delivered EX-WORKS Cuggiono.

## SHIPMENTS

Goods are carried at buyer's risk and danger. ICMA is not liable for any shortages occurred during the travel. In case of damages occurred during the transport, ICMA will accept the return of the damaged goods, only if the buyer has expressed reservations on the transport's paper and has informed ICMA within eight solar days.

## WARRANTY

All our products have a 12 month guarantee starting from the date of purchase at ICMA. This guarantee binds us only to replace the faulty pieces, which must be returned to our factory, and not to any damage or reimbursement of expenses. We are absolutely not responsible for faults owing to any tampering of the materials supplied by us during their utilisation or installation as well as the installation on ICMA products of pipe fittings not produced by ICMA.

## CLAIMS

Complaints concerning quantity or quality are accepted within eight days from receipt of goods.

## RETURNS

Returned goods are not accepted without our previous authorization. Goods have to be returned free destination to our factory in Cuggiono. The value of the returned goods is declassed depending on the time elapsed from the delivery date:

within 6 months: 15%

within 12 months: 20%

within 24 months: 50%

We do not accept returned goods of underfloor heating systems.

After 6 months from sale, no replacement for articles 260 and 602 is accepted.

## PAYMENT

The terms are those established in the commercial offer. In case of delay of payments Euribor interest rate plus additional 3% will be charged. Should the goods be delivered before payment of all owing amounts, these goods remain the property of ICMA until payment has been settled in full.

## CHANGES

ICMA retains the right to introduce any necessary technical modification without prior notice.

## CONTROVERSY

The competent court for any controversy is the Court of Milan, detached section of Rho.



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