Chapter 7 Modern buildings have to guarantee operating continuity, easy maintenance, and low management costs; that's why even heating systems have to offer optimum safety and reliability, and fully meet the legislative and prescriptive regulations.

To satisfy these needs beginning right in the heart of the system, the boiler room, we have a complete range of components for ensuring excellent control and energy efficiency.















Boiler room components

Products

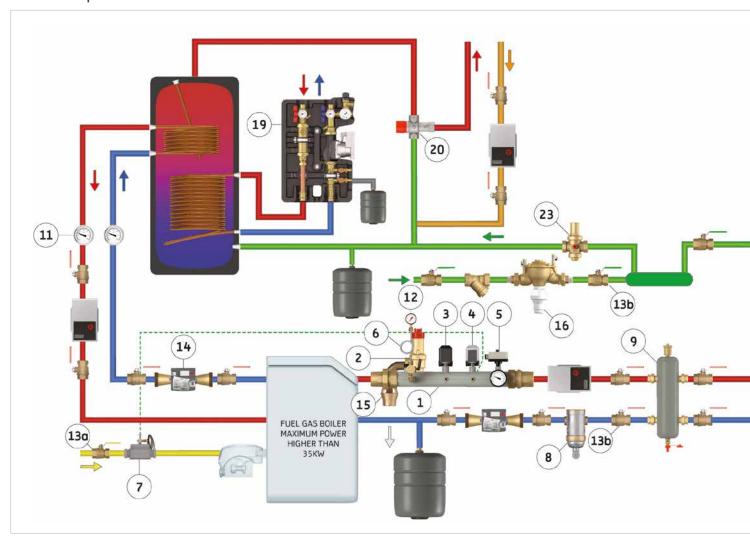
158	Balancing valves
162	Distribution units
164	Zone valves and mixing valves
170	Components for boiler room
177	Water controls
178	Components for biomass systems
179	Backflows, filters, check valves
180	Gate valves
181	Automatic air vent valves
182	Accessories for circulators
183	Oil filters
185	Components for solar thermal systems
186	Units for domestic hot water
186	Other components for solar thermal systems

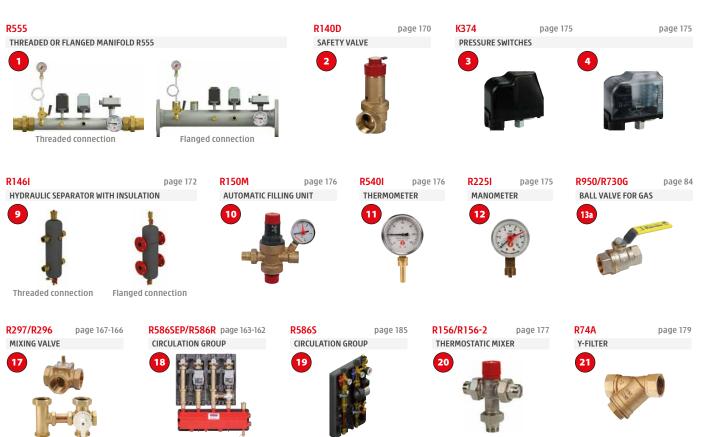
Technical and dimensional data

188

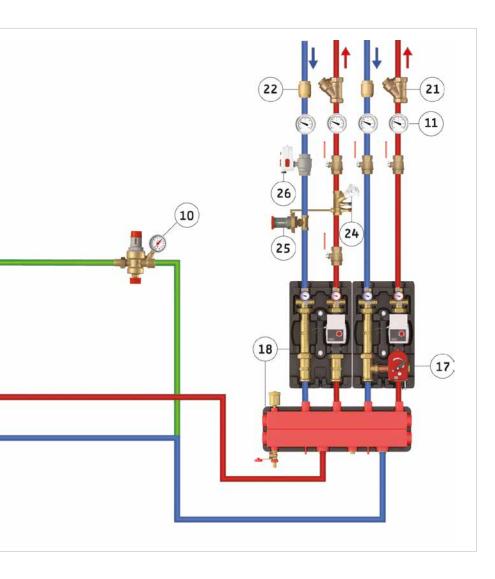
(f) GIACOMINI

Components for boiler room









Modern buildings should offer work continuity, easy maintenance and low running costs; for this reason, boiler rooms characterized by high safety, reliable protection and total compliance with laws

In order to satisfy these requests, Giacomini offers a complete range of boiler room components; with it, a single supplier can provide all you need for thermo-vector fluid and sanitary water distribution from central room to room terminals.

The application of the boiler room components shown in the figure is merely an example. The sizing of the components, and their positioning in the layout diagram, depends on the system $configuration\ chosen\ during\ the\ design\ phase.$









page 171



page 171



GE552-1 METERS FOR THERMAL HEATING

Threaded connection



Flanged connection



RELIEF FUNNEL

R141

page 179 BACKFLOW PREVENTER

R60 page 179 DISK CHECK VALVE







R276B page 168 MOTORISED ZONE VALVE

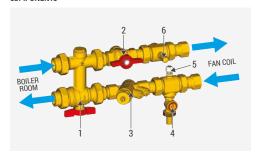


Balancing valves

R280K

PRODUCT CODE	SIZE		\oplus
R280KY003	1/2"F	1	-
R280KY004	3/4"F	1	-

COMPONENTS



(1) Diverting ball valve to by-pass unit, (2) Ball valve with integrated filter, (3) Pressure-independent control valve (PICV), (4) Drain cock, (5) Manual air vent valve, (6) Probe holder.



BENEFITS

- ✓ Reduction of manpower, installation time and costs on site
- ✓ Quick connection (only 4 connections required)
- ✓ Reduced need of a preassembly area
- ✓ One single kit for both heating and cooling
- \checkmark Limitation of installation errors
- ✓ Prompt sizing (only two product codes)
- ✓ Limitation of planning errors

Compact preassembled kit for terminal units (fan coils, chilled beams or ceiling air conditioning systems).

The kit includes a diverting ball valve to by-pass the terminal unit, a full port ball valve with integrated filter, a pressure-independent control valve (PICV), a manual air vent valve and a drain cock.

The kit enables to set and maintain constant the flow rate when the differential pressure of the main circuit changes.

(i) INFO

Working flow rate

R280KY003: 37 - 575 l/h - R280KY004: 64 - 1110 l/h

PICV working pressure

R280KY003: 16 - 200 kPa - R280KY004: 30 - 400 kPa

Accessories and spare parts

K281EX001: thermo-electric actuator NC, ON/OFF. Power 230 Vac K281EX002: thermo-electric actuator NC, ON/OFF. Power 24 Vac

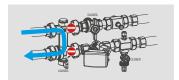
K281X012: actuator 0÷10 V. Power 24 V
K281X022: actuator 0N/OFF. Power 24 V
P206Y001: probe holder kit (n°2) for temperature

and pressure measuring

R225EY001: differential pressure gauge

P206AMY001: spare cartridge for the PICV valve of R280KY003 kit P206AMY002: spare cartridge for the PICV valve of R280KY004 kit

KIT R280K ENABLES THE FOLLOWING OPERATIONS:



SYSTEM FLUSHING / MAINTENANCE The user can fully isolate the fan coil by closing the two ball valves, flush the system and carry out a chemical treatment if desired, preventing debris from entering the fan coil and the pressure-independent control valve (PICV). This setting also enables to clean the filter integrated in the delivery ball valve.



FAN COIL FLUSHING WITH DELIVERY CIRCUIT FLOW Ball valves and drain cock open. This setting enables to flush the kit components and prevents debris from entering the pressureindependent control valve (PICV).



FAN COIL FLUSHING WITH RETURN CIRCUIT FLOW Ball valve on return circuit closed, ball valve on delivery circuit and drain cock both

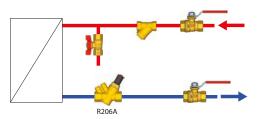


NORMAL OPERATION Ball valves open and drain cock closed

R206A

PRODUCT CODE	SIZE	ā	\oplus
R206AY013	1/2"	1	-
R206AY014	3/4"	1	-
R206AY015	1"	1	-
R206AY016	11/4"	1	-
R206AY017	11/2"	1	-
R206AY018	2"	1	-
REDUCED FLOW RATE			
PRODUCT CODE	SIZE	ā	
R206AY033	1/2"	1	-
R206AY034	3/4"	1	-

INSTALLATION







BENEFITS

- ✓ The perfect solution for constant flow-rate plants
- ✓ Wide range of flow-rates

Dynamic balancing valve, with integrated cartridge for stabilizing the flow rate.

Brass body with female-female connections and predisposition for the connection of probe holder.

Polymer cartridge, possibly replaceable, equipped with double indicator for the precise adjustment of the flow rate.

Maximum working temperature: 120 °C. Maximum working pressure: 25 bar.

i) INFO

Accessories

- P206A: spare part cartridges.
- P206Y001: probe holder.
- R225EY001: differential manometer.



R206AM

PRODUCT CODE	SIZE	ā	\oplus
R206AY053	1/2"	1	-
R206AY054	3/4"	1	-
R206AY055	1" - low flow	1	-
R206AY065	1"	1	-
R206AY056	1 1/4"	1	-
R206AY057	1 1/2"	1	-
R206AY058	2"	1	-



⊕ BENEFITS

- ✓ Combines multiple functions in one single product
- ✓ Automatic flow-rate control with proportional actuator
- ✓ Replaceable polymer cartridge with dual indicator

Pressure independent control valve (PICV) that combines an automatic flow rate regulator and a control valve with actuator. Brass body with female-female connections and predisposition for the connection of probe holder.

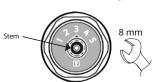
Polymer cartridge, possibly replaceable.

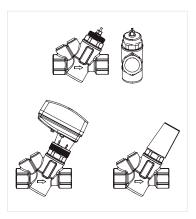
Flow rate is adjusted in two different ways:

- manually on the automatic flow rate regulator, to restrict the maximum value;
- automatically by the control valve in combination with a proportional 0÷10 V or ON/OFF actuator, in accordance with the thermal load requirements of the section of the circuit to be controlled.

SETTING ADJUSTMENT

To set the valve according to the desired flow rate, using a 8 mm wrench, rotate the stem valve clockwise to decrease the setting; counterclockwise to increase the setting.





(i) INFO

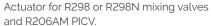
Accessories

- K281EX001: thermo-electric actuator normally closed, ON/OFF, power supply 230 Vac, 50/60 Hz, for valves R206AY053, R206AY054, R206AY055. valve connection M30 x 1.5 mm.
- K281EX002: thermo-electric actuator normally closed, ON/OFF, power supply 24 Vac, 50/60 Hz, for valves R206AY053, R206AY054, R206AY055, valve connection M30 x 1,5 mm.
- K281X022: actuator 24 V, ON/OFF, for valves R206AY053, R206AY054, R206AY055, valve connection M30 x 1,5 mm.
- K281X012: actuator 24 V, 0÷10 V, for valves R206AY053, R206AY054, R206AY055, valve connection M30 x 1.5 mm.
- K281X032: actuator 24 V, 0÷10 V, for valves R206AY065, R206AY056, valve connection M30 x 1,5 mm.
- K281X042: actuator 24 V, 0÷10 V, for valves R206AY057, R206AY058,
- valve connection M30 x 1,5 mm. P206AM: spare part cartridges.
- P206Y001: probe holder.
- R225EY001: differential pressure gauge.

	K281EX001 ON/OFF 230 V	K281EX002 ON/OFF 24 V	K281X012 0-10 24 V	K281X022 ON/OFF 24 V	K281X032 0-10 24 V	K281X042 0-10 24 V	P206Y001	R225EY001	P206AMY001	P206AMY002	P206AMY003
R206AY053	✓	✓	✓	✓			✓	✓	✓		
R206AY054	✓	✓	✓	✓			✓	✓		✓	
R206AY055	\checkmark	\checkmark	\checkmark	\checkmark			✓	\checkmark		\checkmark	
R206AY065					\checkmark		\checkmark	\checkmark			\checkmark
R206AY056					\checkmark		\checkmark	\checkmark			\checkmark
R206AY057						\checkmark	✓	\checkmark			
R206AY058						\checkmark	✓	\checkmark			

K281

PRODUCT CODE	POWER SUPPLY		\oplus
K281X012	24 V - 0-10 V	1	-
K281X022	24 V - 3 point floating	1	-
K281X032	24 V - 0-10 V	1	-
K281X042	24 V - 0-10 V	1	-



Operation in combination with Giacomini thermoregulation.

M30 x 1,5 mm connection.

(i) INFO

- K281X012: actuator for valves R298, R298N, R206AY053,
- R206AY054, R206AY055. Power supply 24 V. Version 0÷10 V. K281X022: actuator for valves R298, R298N, R206AY053,
- R206AY054, R206AY055. Power supply 24 V. Version ON/OFF.
- K281X032: actuator for valves R206AY056. Power supply 24 V; 50/60 Hz. Version 0÷10 V. 5 VA. UL approved.
- K281X042: actuator for valves R206AY057, R206AY058. Power supply 24 V; 50/60 Hz. Version 0÷10 V. 7 VA. UL approved.

K281E



PRODUCT CODE	POWER SUPPLY	0	\blacksquare
K281EX001	230 V	1	-
K281EX002	24 V	1	-

Thermo-electric actuator, normally closed, ON/OFF type.

Suitable to command the R206AM pressure independent control valve (PICV).

Cable length 1 m. M30 x 1,5 mm connection.



P206AM

PRODUCT CODE	SIZE		\oplus
P206AMY001	for R206AMY053	1	-
P206AMY002	for R206AMY054, R206AMY055	1	-
P206AMY003	for R206AMY065, R206AMY056	1	-

Spare part cartridge for R206AM and R280K.





R206B

PRODUCT CODE	SIZE		\oplus
R206BY003	1/2"	1	-
R206BY004	3/4"	1	-
R206BY005	1"	1	-
R206BY006	1 1/4"	1	-
R206BY007	1 1/2"	1	-
R206BY008	2"	1	-
R206BY013	1/2" *	1	-
R206BY014	3/4" *	1	-
R206BY015]" *	1	-
R206BY016	1 1/4" *	1	-
R206BY017	1 1/2" *	1	-
R206BY018	2" *	1	-







VIDEO TUTORIAL

⊕ BENEFITS

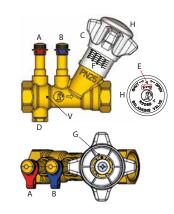
- √ Fix orifice
- ✓ DZR brass body
- ✓ Opening control through mechanical-memory mechanism

(A) High pressure probe, (B) Low pressure probe (C) Handwheel, (D) Drain 1/4"F, (E) Kv of the Venturi flow meter, (F) Scale for 0÷100 % setting (20 positions), (G) Presetting screw (limiting the stroke) (H) Removable head (for presetting) with imprinted the Venturi Kv, (V) Venturi flow meter.

Static balancing valve with fixed orifice (Venturi principle). Brass body with female-female connections and 1/4"F connection for differential pressure controller capillary pipe. Available in version with or without probe holders to connect the differential pressure gauge for differential pressure measurement.

(i) INFO

- * Without probe holders.
- Accessories
- P206Y001: probe holder.
- R225EY001: differential manometer.



R206B-1

PRODUCT CODE	SIZE	ā	\oplus
R206BY113	1/2"	1	25
R206BY114	3/4"	1	25
R206BY115	1"	1	25

Compact static balancing valve. Brass body with female-female connections and 1/4"F connection for differential pressure controller capillary pipe.

Maximum working temperature: 110 °C Maximum working pressure: 25 bar



⊕ BENEFITS

- ✓ Extremely compact
- ✓ Opening control through mechanical-memory mechanism



P225E

length 30÷40 mm.

P206

PRODUCT CODE

P206Y001



SIZE

1/4" Probe holder for pressure outlets, to measure the flow rate in the balancing valves. Suitable for pressure outlets with needle Ø3 mm and

Couple of valves for R225E pressure gauge, equipped with Ø 3 mm needle for measuring the pressure/flow rate through the pressure outlets of R206B static balancing valves.



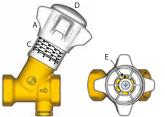
R225E

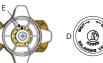
PRODUCT CODE	SIZE		
R225EY001	-10÷20 bar	1	-

Differential pressure gauge to measure the differential pressure and flow rate calculation for balancing plumbing systems. Battery powered (2 x AA).

Equipped with two needle probes M10x1 mm. Measuring range of differential pressure: -10÷20 bar.

Fluid temperature: -5÷90 °C.





(A) Handwheel, (B) 1/4" F connection for differential pressure controller capillary, (C) Presetting scale 0÷100 % (25 position), (D) Removable cap (to carry out the limitation of the opening stroke), (E) Locking screw (limits the opening stroke to the desired value).



R206C

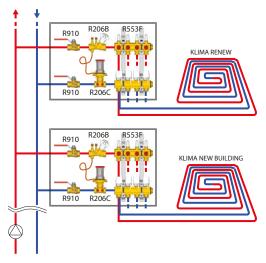
PRODUCT CODE	SIZE	ð	\oplus
R206CY103	DN15 - 1/2" - Kv 2,24	1	8
R206CY104	DN20 - 3/4" - Kv 3,49	1	8
R206CY105	DN25 - 1" - Kv 5,92	1	8
R206CY106	DN32 - 11/4" - Kv 6,95	1	6
R206CY107	DN40 - 1 1/2" - Kv 11,72	1	6
R206CY108	DN50 - 2" - Kv 12,97	1	6



Differential pressure controller, equipped with a copper capillary pipe 1 m lenght.

Nominal differential pressure adjusted from 5÷30 KPa in "Low" modality or from 25÷60 KPa in "High" modality.

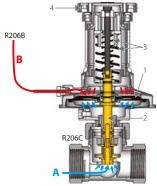
EXAMPLE OF APPLICATION WITH RADIANT FLOOR SYSTEMS



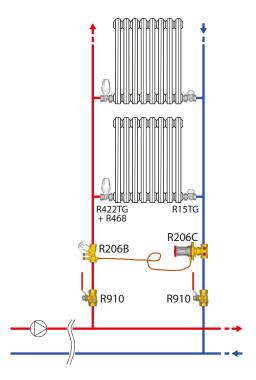
VIDEO TUTORIAL

○ BENEFITS

- ✓ Exclusive dual control range selection: (5-30 kPa) and 25-60 kPa
- ✓ Control of high flow-rates
- ✓ CR brass body

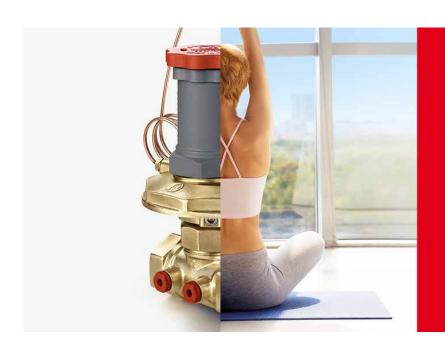


EXAMPLE OF APPLICATION WITH RISING PIPE RADIATOR SYSTEMS



(A) Return piping water pressure, (B) Delivery piping water pressure, through capillary pipe.

(1) Elastic membrane, (2) Stopper, (3) Double spring, (4) Adjustment knob.



A piece of life.

NEW GIACOMINI R206C. PERFECT BALANCE.





Distribution units

R586R

WITH CIRCULATOR



R586RY101

PRODUCT CODE

R586RY101

R586RY102

R586RY103



SI7F

11/2"M x 1"F - NO mixing valve

11/2"M x 1"F - Mix. valve(R296)

11/2"M x 1"F - Mix. valve(R297)



APPLICATION

Heating/Cooling

Heating/Cooling

Heating/Cooling

Heating



Yes

Yes

Nο

Yes

R586RY103 R586RY104

Distribution units to control heating and cooling for one zone of the system (R586RY104-114 for heating only).

System side connection 1"F ISO228. Boiler side connection 11/2"M ISO228. Delivery and return outputs centre distance 125 mm.

Reversible delivery and return outputs (except R586RY103-113).

Complete with interception ball valves with thermometers (0÷120 °C scale), check valve on return output, insulation and wall-mount plate.

R586RY104 11/2"M x 1"F - Thermostatic mix





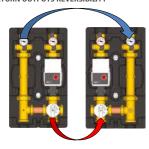




R586RY113

PRODUCT CODE	SIZE	APPLICATION	OUTPUTS REVERSIBILITY	ā	
R586RY111	1 1/2"M x 1"F - NO mixing valve	Heating/Cooling	Yes	1	-
R586RY112	11/2"M x 1"F - Mix. valve(R296)	Heating/Cooling	Yes	1	-
R586RY113	1 1/2"M x 1"F - Mix. valve(R297)	Heating/Cooling	No	1	-
R586RV114	1 1/2"M v 1"F - Thermostatic miv	Heating	Vac	1	

DELIVERY/RETURN OUTPUTS REVERSIBILITY



(i) INFO

OPTIONAL COMPONENTS

- K275Y002: actuator with integrated constant temperature regulator
- (for R586RY102-112-103-113).
- K275Y013: actuator with 0-10 V regulation controllable with KLIMAbus thermoregulation (for R586RY102-112-103-113).
- R284Y021: differential by-pass kit.
- R252Y001: shut-off ball valve 1"F x nut 1 1/2"F, for installation upstream the distribution unit.
- . KLIMAbus thermoregulation: KLIMAbus thermoregulation components (regulation unit, thermostats, ambient probes, etc.)

COMPATIBLE CIRCULATORS (for circulator-free units)

- Wilo Yonos Para. 180 mm centre distance
- Grundfos Alpha series, 180 mm centre distance

R554E

PRODUCT CODE	SIZE	ā	\oplus
R554EY001	1"	1	10

Safety unit for closed heating system. It consists of: 551E brass bar, R88I automatic air vent with shut off valve, R140R relief valve, R225 pressure gauge 0÷4 bar, R608D filling valve



R554P

PRODUCT CODE	SIZE	ā	\blacksquare
R554PY005	1"	1	10

Safety valve unit with provision for pressure switch, for sealed heating system, furnace power up to 35 KW.

It consists of: R551E brass body, R88I automatic air vent with shut off valve, R140R pressure relief valve 3 bar, R225 pressure gauge 0+4 bar, 1/4" connection for switch.



R554F

PRODUCT CODE	SIZE	ō	\oplus
R554FY001	1"	1	10

Safety unit for closed heating system. It consists of: R551E brass bar, R88I automatic air vent with shut off valve, R140R relief valve, R225 pressure gauge 0÷4 bar.





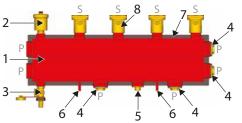
R586SEP

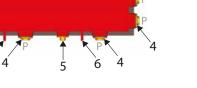
PRODUCT CODE	SIZE	Ō	\oplus
R586SEY02	1 1/4"F x 1"M (2 outputs)	1	-
R586SEY03	1 1/4"F x 1"M (3 outputs)	1	-



Multifunction boiler room manifold, steel made, with hydraulic separator function and connections for primary and secondary circuits. Equipped with automatic air vent valve, drain cock and insulation shell.

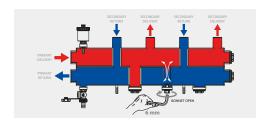
Possibility to install N.2 R586R for every R586SEP (max. 2 R586SEP in series installation).

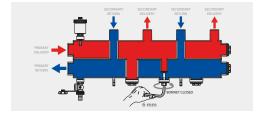




- (P) Primary side outputs, (S) Secondary side outputs.
- (1) Manifold body, (2) Automatic air vent valve, (3) Drain tap,
- (4) Brass caps, 1 1/4"F; (5) Bonnet for hydraulic separator function,
- (6) Threaded pins for bracket installation, (7) Insulation,
- (8) R252 interception valves or R37K tail pieces.







R19DL

PRODUCT CODE	SIZE	ð	
R19DY016	11/4"	2	20





R284-1

PRODUCT CODE	SIZE	đ	
R284Y021	26/19	1	30

Differential by-pass kit to protect the circulator of R586R units.

The kit includes a brass spacer with integrated check valve calibrated at a fix value of 5 mH2O, two nuts to be screwed on the interception valves and two PTFE gaskets.



R₂ODL

PRODUCT CODE	SIZE	ā	\oplus
R20DY016	1 1/4"	2	20

Three pieces adaptor with self-sealing.



R147N

PRODUCT CODE	SIZE		
R147NY004	3/4" x 3/4"	1	25

Differential pressure valve to be installed on heating system with thermostatic valves.



R588SEP

PRODUCT CODE	SIZE	ā	
R588SEY01	-	1	-

Pair of brackets for wall installation of R586SEP boiler room manifold. Equipped with washers and M8 nuts.





Zone valves and mixing valves

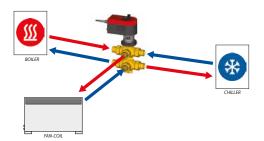
MIXING VALVE - ACTUATOR COMPATIBILITY TABLE

	K275	K275-1	K274	K281	K282	K274J	K274-2	K272	K270	R473	R473M
R297	✓	√									
R298				✓	√						
R298N				✓	√						
R296	✓	√	✓								
K297						✓					
R274N							✓				
R276								✓	√		
R277								✓	√		
R278								✓	√		
R279								✓	✓		
R291										✓	√
R292										√	✓

R274N

PRODUCT CODE	SIZE	ð	\oplus
R274Y033	1/2" ISO228	1	20
R274Y133	1/2" ISO228 (DZR brass)	1	20
R274Y045	1" ISO228	1	10
R274Y145	1" ISO228 (DZR brass)	1	10

OPERATING DIAGRAM WITH FAN-COIL UNIT





VIDEO TUTORIAL

Six-way zone valve with male threaded connections.

For use in applications on four pipes systems, where heating and cooling must be available simultaneously.

The typical installation is on ceiling, underfloor and fan-coil systems, but are not excluded other applications.

Temperature range: 5÷90 °C.

Nominal pressure: 10 bar.

Valve closed with stem in 45° position.

(i) INFO

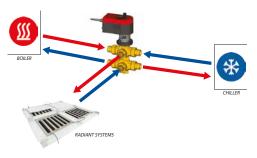
Optional for R274Y033, R274Y133 (1/2"):

- K274-2: actuator 24 Vac/dc (0-10 V).
- P21SY001-P21SY006: calibrated washers to control the loss of pressure.
- RM179Y053, RM179Y056, P15FY013, P15Y018: fittings to connect the system pipes.
- R274WY002: insulation.

Optional for R274Y045, R274Y145 (1"):

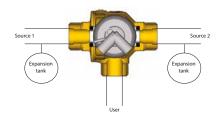
- K274-2: actuator 24 Vac/dc (0-10 V).
- P21SY011-P21SY018: calibrated washers to control the loss of pressure.
- RM179Y073, RM179Y074, R252Y003, RM252Y004, R252Y023, R252Y025, P15Y015, P15Y016, P15Y017: fittings to connect the system pipes.
- R274WY001: insulation.

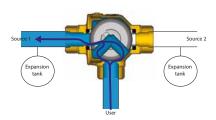
OPERATING DIAGRAM WITH RADIANT SYSTEMS





OVERPRESSURE PROTECTION SYSTEM





OVERPRESSURE PROTECTION SYSTEM

When using the six-way valve for combined heating/cooling applications (radiant ceilings, fan-coil), the fluid inside the user circuit may become completely isolated when the valve is in the closed position (no heating or cooling).

The pressure of the trapped fluid inside the user circuit may then increase or decrease due to changes in temperature of the fluid caused by the ambient temperature.

The six-way valve is equipped with integrated protection against overpressure, and is designed to compensate for such pressure variations.

The upper ball of the valve has a small hole in its interior which maintains the connection of the "user" with the "source 1", even when the valve is closed (stem position 45°).

The combined action of the two balls (upper and lower) prevents the circulation of fluid when the valve is in the closed position.

The overpressure protection system does not compromise hydraulic separation between the two circuits (source 1 and source 2): the two hydraulic circuits remain separate.

TAILPIECE R274Y033 - R274Y133

P15FY013	P15Y018	RM179Y053	RM179Y056
1/2"F x 1/2"F (couple)	1/2"F x 1/2"M (couple)	1/2"F x 16 x 2	1/2"F x 20 x 2
0000	The same		

TAILPIECE R274Y045 - R274Y145

P15Y015	P15Y016	P15Y017	RM179Y073	RM179Y074	R252Y023	R252Y025	RM252Y003	RM252Y004
1"F x 1/2"M (couple)	1"F x 3/4"M (couple)	1"F x 1"M (couple)	1" x 26 x 3	1" x 32 x 3	1/2"M x 1"F	1"F x 1/2"F x 18	1"F x 16 x 2	1"F x 20 x 2
	The State of the S				Ç N			100



P21S

FOR R274N SIZE 1/2"

PRODUCT CODE	SIZE	ō	
P21SY001	Ø2,7 mm - Kv 0,25	1	5
P21SY002	Ø3,5 mm - Kv 0,40	1	5
P21SY003	Ø4,5 mm - Kv 0,65	1	5
P21SY004	Ø6,0 mm - Kv 1,00	1	5
P21SY005	Ø7,0 mm - Kv 1,30	1	5
P21SY006	Ø8,0 mm - Kv 1,60	1	5

FOR R274N SIZE 1"

PRODUCT CODE	SIZE	ð	
P21SY011	Ø3,0 mm - Kv 0,25	1	5
P21SY012	Ø4,0 mm - Kv 0,40	1	5
P21SY013	Ø4,5 mm - Kv 0,65	1	5
P21SY014	Ø5,8 mm - Kv 1,00	1	5
P21SY015	Ø6,7 mm - Kv 1,30	1	5
P21SY016	Ø7,5 mm - Kv 1,60	1	5
P21SY017	Ø9,0 mm - Kv 2,50	1	5
P21SY018	Ø12,7 mm - Kv 3,45	1	5

Calibrated washers with seeger ring, for balancing the Kv of R274N six-way zone valves.

(i) INFO

Order N°2 calibrated washers for every six-way valve.

K274-2

PRODUCT CODE	POWER SUPPLY	ō	\oplus
K274Y052	24 V - 0-10 V (CE, UL)	1	-

Actuator for R274N six-way zone valve. Automatic or manual operation by handwheel. Power supply 24 V - 0-10 V.

CE and UL certifications.

R274W

R274WY002	1 /0//		
R274WY001	1"	1	-
PRODUCT CODE	SIZE	O	

Insulation made of cross-linked polyethylene foam, for R274N six-way zone valves.

P15F

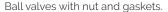
P15FY013 1/2"F>	1/2"F 5	50
P15FY013 1/2"F>	: 1/2"F 5	50



Couple of brass tail pieces, female threaded, with nut and gasket, for the connection of R274N six-way zone valves.

R252-1

PRODUCT CODE	SIZE		\blacksquare
R252Y023	1/2"M x 1"F	4	40
R252Y025	18 x 1"F	4	40
RM252Y003	(RM16 x 2) x 1"F	4	40
RM252Y004	(RM20 x 2) x 1"F	4	40





R295

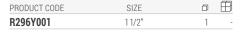
PRODUCT CODE	SIZE		\oplus
R295Y001	1 1/2"	1	10

Four-way mixing valve male-female connections. Centre distance: 120 mm.



To be completed with K274 or K275 actuator.

R296



Three-way mixing valve male-female connections

Centre distance: 120 mm.

To be completed with K274, K275 or K275-1 actuator.



R197P

PRODUCT CODE	SIZE	a	
R197PY001	11/4" x 11/2"	10	100

Fitting for horizontal installation of R295, R296 mixing valves.



P15M

PRODUCT CODE	SIZE	ð	
P15Y018	1/2"F x 1/2"M	5	50
P15Y015	1"F x 1/2"M	10	50
P15Y016	1"F x 3/4"M	10	50
P15Y017	1"F x 1"M	5	50

Couple of brass tail pieces, male threaded, with nut and gasket, for the connection of R274N six-way zone valves.



K274

PRODUCT CODE	POWER SUPPLY		
K274Y101	230 V - 3-point floating	1	-
K274Y102	24 V - 3-point floating	1	-

Actuator for R295, R296 mixing valves. Possibility of automatic command in combination with Giacomini thermoregulation.





K275

PRODUCT CODE	POWER SUPPLY		\oplus
K275Y002	24 V / 230 V	1	-
ACCESSORIES FO	R R297 FLANGED VALVES		
PRODUCT CODE	SIZE		\oplus
P275Y001	Kit for R297 flanged valves	1	-

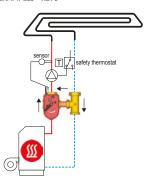


Actuator with integrated regulator for R295, R296 or R297 mixing valves.

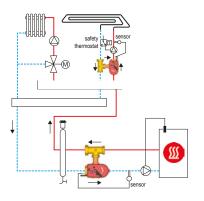
(i) INFO

P275Y001: installation kit for R297 flanged valves.

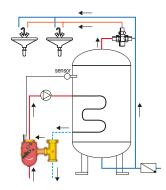
OPERATION EXAMPLES - K275



Underfloor heating Maintain a constant temperature of heating water. The installation of a safety thermostat is recommended.



Radiator and underfloor radiant systems
Maintain a constant return flow water temperature (protection against condesation in solid fuel boiler) and constant temperature in the heating system.



Tank to heat the drinking water Maintain a constant water temperature inside the hot water tank.

K275-1

PRODUCT CODE	POWER SUPPLY		\blacksquare
K275Y011	230 V - 3-point floating	1	-
K275Y013	24 V - 0-10 V	1	-
ACCESSORIES FO	R R297 FLANGED VALVES		
PRODUCT CODE	SIZE		\blacksquare
P275Y001	Kit for R297 flanged valves	1	-

Actuator for R296 or R297 mixing valves.

(i) INFO

P275Y001: installation kit for R297 flanged valves.

R297

THREADED CONNECTIONS

SIZE	ā	\Box
3/4"	1	-
1"	1	-
1 1/4"	1	-
1 1/2"	1	-
2"	1	-
	3/4" 1" 1 1/4" 1 1/2"	3/4" 1 1" 1 11/4" 1 11/2" 1

Concorna

FLANGED CONNECTIONS

PRODUCT CODE	SIZE		
R297Y105	DN50	1	-
R297Y106	DN65	1	-
R297Y108	DN80	1	-
R297Y110	DN100	1	-
R297Y112	DN125	1	-

Sector mixing valve female-female threaded or flanged connections.

Threaded versions made of brass; flanged versions made of cast iron.

(i) INFO

To be completed with K275 or K275-1 actuator.
To install the K275 or K275-1 actuators on flanged version valves, it is necessary to order the installation kit P275Y001.

R298

PRODUCT CODE	SIZE	ā	
R298Y027	1 1/2"	1	



(i) INFO

To be completed with K281 or K282 actuator.

R298N

PRODUCT CODE	SIZE	ā	
R298Y024	3/4"	1	-

Three-way mixing valve female-female connections.

M30 x 1,5 mm actuator connection.

(i) INFO

To be completed with K281 or K282 actuator.

K281

PRODUCT CODE	POWER SUPPLY		
K281X012	24 V - 0-10 V	1	-
K281X022	24 V - 3 point floating	1	-
K281X032	24 V - 0-10 V	1	-
K281X042	24 V - 0-10 V	1	-

Actuator for R298 or R298N mixing valves and R206AM PICV. Operation in combination with Giacomini thermoregulation.

(i) INFO

 K281X012: actuator for valves R298, R298N, R206AY053, R206AY054, R206AY055. Power supply 24 V. Version 0÷10 V.
 K281X022: actuator for valves R298, R298N, R206AY053,

M30 x 1,5 mm connection.

- K281X022: actuator for valves R298, R298N, R206AY053, R206AY054, R206AY055. Power supply 24 V. Version ON/OFF.
- K281X032: actuator for valves R206AY056. Power supply 24 V;
 50/60 Hz. Version 0÷10 V. 5 VA. UL approved.
- K281X042: actuator for valves R206AY057, R206AY058. Power supply 24 V; 50/60 Hz. Version 0÷10 V. 7 VA. UL approved.





K282

K282X022	24 V - 3 point floating	1	
PRODUCT CODE	POWER SUPPLY		

Actuator for R298 or R298N mixing valves. With integrated delivery temperature probe and electronic regulator. M30 \times 1,5 mm connection.



K297

PRODUCT CODE	SIZE	П	
FRODUCT CODE	SIZE	ш	ш
K297Y004	DN20 - Kv 6,3	1	-
K297Y005	DN25 - Kv 10	1	-
K297Y006	DN32 - Kv 16	1	-
K297Y007	DN40 - Kv 25	1	-
K297Y008	DN50 - Kv 40	1	-

Three-way mixing valve with female-female connections, made of bronze.

(i) INFO

To be completed with K274J actuator.



K297R

PRODUCT CODE	SIZE	ð	
K297RY016	1 1/4" - Kv 16	1	-

Mixing unit with K297 three-way mixing valve, with insulation. To use in combination with R586R, R586I units.

(i) INFO

To be completed with K274J actuator.



K274J

PRODUCT CODE	POWER SUPPLY		\oplus
K274Y022	24 V - 3 point floating	1	-
K274Y042	24 V - 0-10 V	1	-

Actuator for K297 mixing valve.

Possibility of automatic command in combination with Giacomini thermoregulation.



R276

PRODUCT CODE	SIZE	ð	\oplus
R276Y004	3/4"	1	25
R276Y005	1"	1	25

Two-way zone valve with female-female connections.

(i) INFO

To be completed with K270 or K272 actuator.



R277

PRODUCT CODE	SIZE	ō	\oplus
R277Y004	3/4"	1	25
R277Y025	1"	1	10

Two-way zone valve with male-male connections with tail pieces.

(i) INFO

To be completed with K270 or K272 actuator.



PRODUCT CODE	SIZE	ā	
R278Y004	3/4"	1	10
R278Y005	1"	1	10

1 10 1 10 male

Three-way zone valve with male-male connections with tail pieces, by-pass and lockshield for adjustment.

(i) INFO

To be completed with K270 or K272 actuator.

R279

Three-way zone valve with female-female connections, with lockshield for adjustment.

(i) INFO

To be completed with K270 or K272 actuator.

R279D

PRODUCT CODE	SIZE		
R279DY024	3/4"	1	-
R279DY025	1"	1	-

Three-way diverting valve with female-female connections.

(i) INFO

To be completed with K270 or K272 actuator.

R276B

PRODUCT CODE	SIZE	ā	
R276BX006	11/4" - 230 V	1	-
R276BX007	11/2" - 230 V	1	-
R276BX008	2" - 230 V	1	-
R276BX026	11/4" - 24 V	1	-
R276BX027	11/2" - 24 V	1	-
R276BX028	2" - 24 V	1	-

Two-way zone valve with female-female connections, with K272 actuator and insulation included.

K270

PRODUCT CODE	POWER SUPPLY		\oplus
K270Y101	230 V	1	-
K270Y102	24 V	1	-

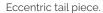
Actuator for R276, R277, R278, R279 zone valves and R279D diverting valve. With stroke-end microswitch. 90° rotation in around 40 seconds.





P15E

PRODUCT CODE	SIZE	ā	\oplus
P15EY004	1" x 3/4"	1	15
P15EY005	1" x 1"	1	15





R193K

R1	193Y021	Ø18 - for R500-2 cabinets	1	50
R1	193Y011	Ø18 - for R500 cabinets	1	50
PR	ODUCT CODE	SIZE		\oplus

Connection kit for R278, R292, R292E zone valves.



K272

PRODUCT CODE	POWER SUPPLY	ð	
K272Y101	230 V	1	-
K272Y102	24 V	1	-

Actuator for R276, R277, R278, R279 zone valves and R279D diverting valve. With stroke-end microswitch and handwheel for manual operation. 90° rotation in around 60 seconds.



Actuator used also in R276B valves.

P19

PRODUCT CODE	SIZE		\blacksquare
P19Y001	From M28 to M30	1	50
P19Y002	From M30 to M28	1	50

Ring nut to change the connection of the mixing valves.



R291

PRODUCT CODE	SIZE	ā	
R291Y004	3/4"	1	10
R291Y005	1"	1	10

Two-way piston zone valve, male-male connections with tail pieces.

(i) INFO

To be completed with R473, R473M actuator.

PRODUCT CODE	POWER SUPPLY	ā	
R473X221	230 V	1	25
R473X222	24 V	1	25

Thermo-electric actuator, normally closed. Cable lenght 1 m. With new high efficiency thermo-electric sensor. Can be used to replace the manual handwheels on manifolds.



R292

PRODUCT CODE	SIZE	ð	\oplus
R292Y004	3/4"	1	10
R292Y005	1"	1	10

Three-way piston zone valve, male-male connections with tail pieces.

(i) INFO

To be completed with R473, R473M actuator.



R473M

R473

PRODUCT CODE	POWER SUPPLY		\oplus
R473MX221	230 V	1	25
R473MX222	24 V	1	25

Thermo-electric actuator, normally closed, with microswitch. Cable lenght 1 m. With new high efficiency thermo-electric sensor. Can be used to replace the manual handwheels on manifolds.



R292E

R292EY005	1"	1	10
R292EY004	3/4"	1	10
PRODUCT CODE	SIZE	ā	\blacksquare

Three-way piston zone valve, male-male connections with eccentric tail pieces.

(i) INFO

To be completed with R473, R473M actuator.





Components for boiler room

R140

PRODUCT CODE	SIZE	ō	\oplus
R140Y001	1/2" - 1,5 bar	1	50
R140Y002	1/2" - 2,5 bar	1	50
R140Y003	1/2" - 3 bar	1	50
R140Y005	1/2" - 3,5 bar	1	50
R140Y006	1/2" - 4 bar	1	50
R140Y007	1/2" - 4,5 bar	1	50
R140Y008	1/2" - 5 bar	1	50
R140Y009	1/2" - 6 bar	1	50
R140Y010	1/2" - 7 bar	1	50
R140Y011	1/2" - 8 bar	1	50
R140Y013	1/2" - 10 bar	1	50
R140Y021	3/4" - 1,5 bar	1	25
R140Y020	3/4" - 2 bar	1	25
R140Y022	3/4" - 2,5 bar	1	25
R140Y023	3/4" - 3 bar	1	25
R140Y025	3/4" - 3,5 bar	1	25
R140Y026	3/4" - 4 bar	1	25
R140Y028	3/4" - 5 bar	1	25
R140Y029	3/4" - 6 bar	1	25
R140Y031	3/4" - 8 bar	1	25
R140Y032	3/4" - 10 bar	1	25
R140Y040	1" - 2 bar	1	20
R140Y042	1" - 2,5 bar	1	20
R140Y043	1" - 3 bar	1	20
R140Y045	1" - 3,5 bar	1	20
R140Y046	1" - 4 bar	1	20
R140Y048	1" - 5 bar	1	20
R140Y049	1" - 6 bar	1	20
R140Y051	1" - 8 bar	1	20
R140Y052	1" - 10 bar	1	20
R140Y062	11/4" - 2,5 bar	1	10
R140Y063	11/4" - 3 bar	1	10
R140Y065	1 1/4" - 3,5 bar	1	10
R140Y066	11/4" - 4 bar	1	10
R140Y067	1 1/4" - 4,5 bar	1	10
R140Y068	1 1/4" - 5 bar	1	10
R140Y069	11/4" - 6 bar	1	10

Membrane safety valve, female-female connections. Use with hot/cold water, air. Temperature range: 5÷110 °C. Nominal pressure: 10 bar.

R140-R140M

R140R-R140R1-R140RM

-



CERTIFICATIONS AND SYMBOLS

C€ 1115

R140M

PRODUCT CODE	SIZE		\oplus
R140MY003	1/2" - 3 bar	1	25

Membrane safety valve, male-female connections. Use with hot/cold water, air. Temperature range: 5÷110 °C. Nominal pressure: 10 bar.



CERTIFICATIONS AND SYMBOLS

CE 1115

R140R

PRODUCT CODE	SIZE		
R140RY101	1/2" - 1,5 bar	1	50
R140RY102	1/2" - 2,5 bar	1	50
R140RY103	1/2" - 3 bar	1	50

Membrane safety valve, female-female connections. Use with hot/cold water, air. Temperature range: 5+110 °C. Nominal pressure: 10 bar.



CERTIFICATIONS AND SYMBOLS

C€ 1115

R140R1

PRODUCT CODE	SIZE	ā	
R140TY102	1/2" - 2,5 bar	1	50
R140TY103	1/2" - 3 bar	1	50

Membrane safety valve, female-female connections, with 1/4" connection for pressure gauge. Use with hot/cold water, air. Temperature range: 5+110 °C.
Nominal pressure: 10 bar.



CERTIFICATIONS AND SYMBOLS

C€ 1115

R140RM

PRODUCT CODE	SIZE	ā	\oplus
R140SY102	1/2" - 2,5 bar	1	50
R140SY103	1/2" - 3 bar	1	50

Membrane safety valve, male-female connections. Use with hot/cold water, air. Temperature range: 5÷110 °C. Nominal pressure: 10 bar.



CERTIFICATIONS AND SYMBOLS

C€₁₁₁₅

R140PT

1/2"

3/4"

1"

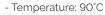
1 1/4"

3/4"

1"

PRODUCT CODE	SIZE	ō	\oplus
R140PY021	1/2" x Ø15 mm (4 bar)	1	-
R140PY026	1/2" x Ø15 mm (7 bar)	1	-
R140PY031	3/4" x Ø22 mm (4 bar)	1	-
R140PY036	3/4" x Ø22 mm (7 bar)	1	-

Combined temperature and pressure safety valve, male connections. Use with hot/cold water. Calibration settings:



- Pressure: 4 and 7 bar (depending on versions) Nominal pressure: 10 bar.



CERTIFICATIONS AND SYMBOLS





R141C R141CY005

ACCESSORIES

R141

R141Y003 R141Y014

R141Y015

R141Y016

R141CY004

R141CY006

R140C

PRODUCT CODE	SIZE		
R140CY006	1/2" x 3/4" - 4 bar	1	30
R140CY009	1/2" x 3/4" - 6 bar	1	30

Membrane safety valve for solar thermal systems, female-female connections. Use with hot water or glycol solutions (max. 50 %). Temperature range: 5÷160 °C. Nominal pressure: 10 bar.



CERTIFICATIONS AND SYMBOLS

C€ 1115

R141

PRODUCT CODE	SIZE		\oplus
R141Y003	1/2" x 1/2"	4	40
R141Y014	3/4" x 3/4"	5	50
R141Y015	1" x 1"	5	50
R141Y016	1 1/4" x 1 1/4"	2	20
R141Y017	1 1/2" x 1 1/2"	2	20





R140C-1

PRODUCT CODE	SIZE	ð	\oplus
R140CY010	1/2" x 3/4" - 7 bar	1	30
R140CY011	1/2" x 3/4" - 8 bar	1	30

Membrane safety valve for domestic water systems, female-female connections. Use with hot/cold water, air. Temperature range: 5÷110 °C. Nominal pressure: 10 bar.



CERTIFICATIONS AND SYMBOLS



R141C

PRODUCT CODE	SIZE	O	
R141CY004	3/4" x 3/4"	1	20
R141CY005	1" x 1"	1	20
R141CY006	11/4" x 11/4"	1	10

90° elbow brass relief funnel.



R146D

THREADED CONNECTIONS

PRODUCT CODE	SIZE	ā	\blacksquare
R146DY004	3/4"	1	-
R146DY005	1"	1	-
R146DY014	3/4"	1	-
R146DY015	1"	1	-
R146DY016	1 1/4"	1	-
R146DY017	1 1/2"	1	-
R146DY018	2"	1	-

FLANGED CONNECTIONS

PRODUCT CODE	SIZE	o 🖽
R146DY105	DN50	1 -
R146DY106	DN65	1 -
R146DY108	DN80	1 -
R146DY110	DN100	1 -
R146DY112	DN125	1 -
R146DY115	DN150	1 -





Dirt separator with female threaded connections (insulation optional) or flanged connections (with insulation). It can be use also as a deaerator unit by installing the R99S air vent valve instead of the upper plug. Equipped with drain cock, filter and gaskets.

(i) INFO

THREADED VERSION

- Upper connection: 1/2"F
- Female threaded connections UNI ISO228

FLANGED VERSION

- Upper connection: 1/2"F
- Flange UNI EN 1092-1 PN16
- Insulation: thickness 20 mm, density 30 kg/m³,
 thermal conductibility 0,038 W/m K, fire reaction class B2)

R146M

PRODUCT CODE

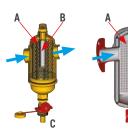
THREADED CONNECTIONS

3/4"	1 -
1"	1 -
1 1/4"	1 -
1 1/2"	1 -
2"	1 -
S	
SIZE	o 🖽
DN50	1 -
DN65	1 -
DN80	1 -
DN100	1 -
DN125	1 -
DN150	1 -
	1" 11/4" 11/2" 2" S SIZE DN50 DN65 DN80 DN100 DN125

SIZE







Magnetic dirt separator with female threaded connections (insulation optional) or flanged connections (with insulation). Equipped with magnet holder housing, P146M magnetic kit, drain cock, filter and gaskets.

i) INFO

THREADED VERSION

- Housing for magnetic kit, size 1/2"M
- Female threaded connections UNI ISO228

FLANGED VERSION

- Housing for magnetic kit, size 1/2"M
- Flange UNI EN 1092-1 PN16
- Insulation: thickness 20 mm, density 30 kg/m³, thermal conductibility 0,038 W/m K, fire reaction class B2)

OPERATION

The flow enters the dirt separator and is slowed down, allowing for the separation of the solid impurities present in the fluid. The solid impurities are separated when they collide with the metal mesh (A) and ferrous particles are retained by the attraction force generated by the magnet (B). The filter can be cleaned without having to remove it and/or switch off the system, by opening the shut-off cock (C) and removing the magnet (B) from the container housing, by pulling it upwards.



R146I

THREADED CONNECTIONS

PRODUCT CODE	SIZE	ā	
R146IY005	1"	1	-
R146IY006	1 1/4"	1	-
R146IY007	1 1/2"	1	-
R146IY008	2"	1	-
FLANGED CONNECTIONS			
PRODUCT CODE	SIZE	ā	\oplus
R146IY105	DN50	1	-
R146IY106	DN65	1	-
R146IY108	DN80	1	-
R146IY110	DN100	1	-
R146IY112	DN125	1	-
R146IY115	DN150	1	-



Hydraulic separator with female threaded or flanged connections, with insulation. Equipped with automatic air vent valve and drain cock with hose connection.

(i) INFO

THREADED VERSION

- Connections: UNI ISO228 for 1", 1 1/4".
- Connections: ISO7/1 for 1 1/2", 2".
- Insulation: density 40 kg/m³, thermal conductibility 0,023 W/mK, fire reaction class 1.

FLANGED VERSION

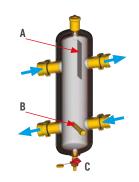
- Flange: UNI EN 1092-1 PN16
- Insulation: density 30 kg/m³, thermal conductibility 0,039 W/mK, fire reaction class B2.

R146IM

THREADED CONNECTIONS

THILLADED COMMECTIONS	,		
PRODUCT CODE	SIZE	ā	\oplus
R146IM005	1"	1	-
R146IM006	1 1/4"	1	-
R146IM007	1 1/2"	1	-
R146IM008	2"	1	-
FLANGED CONNECTIONS			
PRODUCT CODE	SIZE	ð	\oplus
R146IM105	DN50	1	-
R146IM108	DN80	1	-
R146IM110	DN100	1	-
R146IM112	DN125	1	-
R146IM115	DN150	1	-





Hydraulic separator equipped with magnet to remove solid debris, with female threaded or flanged connections, with insulation. Equipped with automatic air vent valve and drain cock with hose connection.

(i) INFO

THREADED VERSION

- Connections: UNI ISO228 for 1", 1 1/4".
- Connections: ISO7/1 for 1 1/2". 2".
- Insulation: density 40 kg/m³, thermal conductibility 0,023 W/mK, fire reaction class 1.

FLANGED VERSION

- Flange: UNI EN 1092-1 PN16
- Insulation: density 30 kg/m³, thermal conductibility 0,039 W/mK,

The R146IM hydraulic separator enables to decouple the primary circulator flow from the secondary. When the flow running through a primary or secondary circuit exceeds the one circulating in the other. the separator bypasses part of the flow. This results in a production circuit featuring a constant flow and a distribution circuit with a variable flow. The flow enters the separator and slows down to separate the solid debris from the fluid. The solid impurities are separated when they collide with the metal mesh (A) and ferrous particles are retained by the attraction force generated by the magnet (B). We recommend to periodically open the drain tap (C) on the lower end of the separator to discharge possible debris collected on the bottom of the separator.

P146M

PRODUCT CODE	SIZE		
P146MY002	1/2" - Lenght 90 mm	1	-
P146MY003	1/2" - Lenght 110 mm	1	-
P146MY103	1/2" - Lenght 245 mm	1	-
P146MY104	1/2" - Lenght 375 mm	1	-
P146MY105	1/2" - Lenght 395 mm	1	-

Kit composed of magnet holder housing with gaskets for installation on dirt separator and/ or hydraulic separators.

(i) INFO

FOR DIRT SEPARATORS

R146MY003: for all threaded dirt separators.

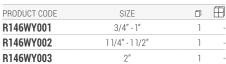
R146MY103: for flanged dirt separators DN50, DN65, DN80. R146MY104: for flanged dirt separators DN100, DN125.

R146MY105: for flanged dirt separators DN150.

FOR HYDRAULIC SEPARATORS

R146MY002: for threaded hydraulic separators 1", 1 1/4". R146MY003: for threaded hydraulic separators 1 1/2", 2".

R146W



density 30 kg/m³, thermal conductibility

0,038 W/m K, fire reaction class B2.







R146C

PRODUCT CODE	SIZE	ð	\oplus	
R146CX004	3/4"M	1	10	
R146CX005	1"M	1	10	
KIT: DIRT SEPARATO	KIT: DIRT SEPARATOR + BALL VALVE + ADJUSTABLE TAIL PIECE			
PRODUCT CODE	SIZE	ā	\oplus	
R146CKX004	3/4"	1	10	
ACCESSORIES FOR	3/4" M COMPACT VERSION			
PRODUCT CODE	SIZE	ā	\blacksquare	
R254PY034	3/4"M x 3/4"F	5	50	
R176PY018	3/4"F x 3/4"F adjustable	5	30	
R176PY008	3/4"F x 3/4"F	5	30	





VIDEO TUTORIAL

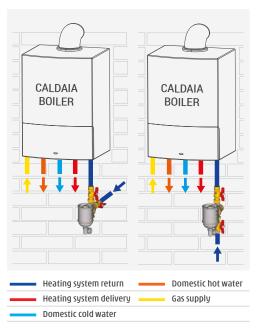
Adjustable magnetic dirt separator. Equipped with adjustable inlet/outlet fitting with 3/4"M or 1"M ISO 228 connections, cap, adjustable drain cock, filter, magnet housing and magnet.

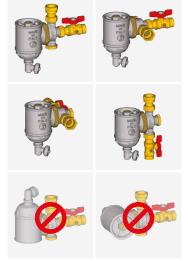
(i) INFO

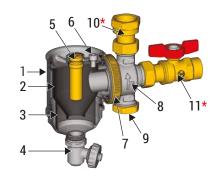
Optional accessories for R146CX004

- R254PY034: shut-off ball valve, 3/4"F flat seat nut (ISO228) x 3/4"M (ISO228)
- R176PY008: tail piece, 3/4"F flat seat nut (ISO228) x 3/4"F (ISO228) Optional accessories for R146CX005
- P15FY005: pair of two tail pieces, 1"F flat seat nut (ISO228) x 1"F (Rp - EN10226)

INSTALLATION

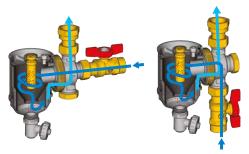






(1) Dirt separator body, (2) Cyclonic chamber, (3) Filter, (4) Adjustable drain cock, (5) Magnet housing and magnet, (6) Air vent screw, (7) $\,$ Fitting lock nut, (8) Adjustable inlet/outlet fitting, (9) Cap (3/4"F or 1"F depending on the codes), (10) 3/4"F x 3/4"F flat seat tail piece *(Optional), (11) 3/4"M x 3/4"F interception ball valve *(Optional).

OPERATION



Impure water flowing into the dirt separator

> Impurity-free water flowing out from the dirt separator

The water flows into the dirt separator and is then channeled into the cyclonic chamber where a vortical motion enhances particle separation; this area also features a magnet that retains metal impurities.

A metal filter below the cyclonic chamber holds the impurities decanting from the chamber itself on the bottom of the separator.

The dirt separator features a screw on top which releases air upon initial operation (see "Installation" paragraph).

The separator can be cleaned without being disassembled and/or switching off the system by opening the dran cock on the bottom of the separator - after pulling out the magnet from its housing from the top (see "Maintenance" paragraph).

P146C

PRODUCT CODE	SI7F	П	
PRODUCT CODE	SIZE	U	
P146CY001	3/8" - Lenght 51 mm	1	-
P146CY011	3/8" - Lenght 81 mm	1	-

Magnetic kit for R146C dirt separator.

(i) INFO

P146CY001: for 3/4" R146C dirt separator P146CY011: for 1" R146C dirt separator







For a more thorough cleansing, proceed as follows:

- 1) Turn off the system and intercept the fluid with ball valves, upstream and downstream of the separator to prevent water from flowing inside the dirt separator.
- 2) Unscrew the dirt separator base in counter-clockwise direction.
- 3) Remove the filter from the dirt separator to clean it.
- 4) Fit the filter back in and screw the separator back on its base.



Protect the quality of your system and your work







Managemer



For existing systems

• **REMOVE-RAPID**: dirt-separating solution for rapid and intensive removal of scales, muds and oxides. Once removed, you need to protect the system with universal filming.

PRODUCT CODE	SIZE	Ō	
K381Y001	11	1	9

• 2-IN-1: a special product to clean (anti-mudding, dispersing and sanitizing properties) and protect (anti-corrosive and anti-limestone action). Once poured into the system, let the product react without flushing. Use with a dirt separator.

PRODUCT CODE	SIZE	ð	
K382Y001	11	1	9

For new systems

• **CLEAN**: neutral, rapid and effective cleaner for the protection of new systems. It removes machining debris, oil, grease, corrosive waste and other impurities before system startup.

K380Y001	11	1	9
PRODUCT CODE	SIZE	ð	\oplus

• **PROTECT-UNIVERSAL**: a protective product for every type of system (high and low temperature, radiant panels, hot/cold mixed circuits) with special filming, anti-corrosive and anti-scaling action.

K375Y021	11	1	g
PRODUCT CODE	SIZE	Ō	



K3731

PRODUCT CODE	SIZE	ā	\oplus
K373Y013	-	1	-
K373Y021	1/2"	1	-
K373Y022	1/2"	1	-
K373Y023	1/2"	1	-
K373Y033	1/2"	1	-



K373Y022





K373Y023



K373Y033



K373Y013

Safety thermostat INAIL approved. Max. working pressure: 10 bar.

(i) INFO

K373Y013: contact thermostat for temperature regulation. Temperature regulation: 0÷90 $^{\circ}\text{C.}$ Safety limitation: factory set 100 $^{\circ}\text{C.}$

K373Y021: temperature regulation. Temperature regulation: 0÷90 °C. Safety limitation: factory set 100 °C. K373Y022: temperature regulation with manual reset safety limitation. Temperature regulation: 0÷90 °C. Safety limitation: factory set 100 °C.

K373Y023: safety limitation with manual reset.

Safety limitation: factory set 100 $\,^{\circ}\text{C}.$

K373Y033: safety limitation with manual reset. Safety limitation: factory set 110 °C.

CERTIFICATIONS AND SYMBOLS



K374

PRODUCT CODE	SIZE		\blacksquare
K374Y001	1/4" - Pmax 5 bar - Tmax 110 °C	1	-
K374Y002	1/4" - Pmax 5 bar - Tmax 110 °C	1	-
K374Y003	1/4" - Pmax 5 bar - Tmax 55 °C	1	-
K374Y004	1/4" - Pmax 5 bar - Tmax 55 °C	1	-

K374Y004



K374Y003







K374Y001

Pressure switch.

K374Y001: safety pressure switch with manual reset. Regulation range: 2-4,5 bar. Pressure of intervention: 3 bar (factory set). K374Y002: minimal pressure switch with manual reset. Regulation range: 0,5-1,7 bar. Pressure of intervention: 0,9 bar (factory set). K374Y003: regulation pressure switch for autoclaves.

Regulation range: 1-5 bar. Pressure of intervention: 1,4-2,8 bar (factory set). K374Y004: regulation pressure switch for autoclaves.

Regulation range: 3-12 bar. Pressure of intervention: 5-7 bar (factory set).

CERTIFICATIONS AND SYMBOLS



K500

K500Y002 1"		
PRODUCT CODE SIZE	ō	Ħ

Flow switch for pipes from DN25 to DN200. Protection degree: IP65 Max. working pressure: 10 bar

Max. working temperature: 110 °C.



CERTIFICATIONS AND SYMBOLS



R228A

PRODUCT CODE	SIZE	ā	
R228AY001	1/4"	1	-
R228AY002	3/8"	1	-
R228AY003	1/2"	1	-

Damper for the protection of pressure gauge. To be use in combination with R225I and R228I.



R227

PRODUCT CODE	SIZE	O	
R227Y001	1/2" - Lenght 45 mm	1	250
R227Y010	1/2" - Lenght 100 mm	1	15

Thermometer brass housing.



R228I

PRODUCT CODE	SIZE	o	\oplus
R228IY001	1/4"	1	5
R228IY002	3/8"	1	5
R228IY003	1/2"	1	5

3-way pressure gauge holder cock. Compliance with INAIL.



R225I

PRODUCT CODE SIZE		П
THOUGH GODE SIZE		الللا
R225IY004 1/4" 0÷6 bar	1	-
R225IY005 1/4" 0÷6 bar	1	-
R225IY006 1/4" 0÷10 bar	1	-
R225IY007 1/4" 0÷10 bar	1	-
R225IY009 3/8" 0÷4 bar	1	-
R225IY010 3/8" 0÷6 bar	1	-
R225IY011 3/8" 0÷10 bar	1	-

Pressure gauge in compliance with INAIL.

(i) INFO

R225IY004: back connection. R225IY005: radial connection. R225IY006: radial connection. R225IY007: back connection. R225IY009: radial connection. R225IY010: radial connection. R225IY011: radial connection.



R5401

PRODUCT CODE	SIZE	O	
R540IY001	1/2"	1	-
R540IY002	1/2"	1	-
R540IY003	1/2"	1	-

Thermometer, scale 0÷120 °C, in compliance with INAIL.



2" - 0÷120 °C - Ø61,5 mm
8" - 0÷120 °C - Ø40 mm

R540

PRODUCT CODE

R540Y002

Thermometer, back connection.



(i) INFO

R540IY001: 50 mm thermometer housing, back connection. R540IY002: 100 mm thermometer housing, back connection. R540IY003: 50 mm thermometer housing, radial connection.

R150B

R150BY103	1/2"	1	25
PRODUCT CODE	SIZE		

Female x male filling valve, plastic coated tail piece.



R150

PRODUCT CODE	SIZE	ā	\blacksquare
R150Y103	1/2"	1	25

SIZE

3/8" - 0÷80 °C - Ø40 mm

Female x female filling valve.



R150M

PRODUCT CODE	SIZE		
R150MY003	1/2" - with manometer	1	10
R150MY013	1/2" - without manometer	1	10



Automatic filling unit for installation on water adduction pipes of closed-circuit heating/ cooling systems.

Possibility to preset the system fluid pressure. Removable cartridge and filter for easy cleaning and maintenance.

Anti-limestone function and compensated housing pressure adjustment.

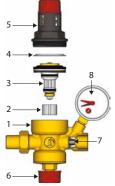
Connections: inlet 1/2"M with tail piece; outlet 1/2"F; pressure gauge: 1/4"F.





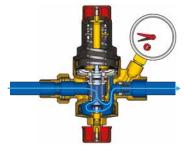




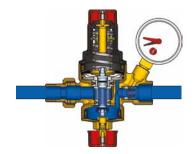


1) Filling group body, (2) Filter, (3) Cartridge, (4) Anti-loosening ring, (5) Upper bonnet with presetting scale, (6) Shut-off valve, (7) Check valve, (8) Pressure gauge (only for R150MY003-plug for R150MY013).

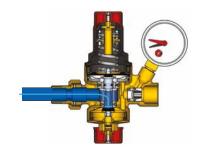
OPERATION



The water duct fluid enters the R150M filling unit and loads it up to the required pressure (calibration pressure).



When the system reaches the desired pressure, the stopper (A) closes without letting in any fluid. The check valve (B) prevents the system water from flowing back to the main water ducts



The R150M filling unit automatically reintegrates the installation water when the pressure drops below the calibration value, up to restoring the desired pressure. The automatic filling function can be deactivated by closing the shut-off valve (C) completely.



Water controls

R153M

A	П	SI7F	PRODUCT CODE
-	1	1/2"	R153MY003
-	1	3/4"	R153MY004
-	1	1"	R153MY005
-	1	1 1/4"	R153MY006
-	1	1 1/2"	R153MY007
-	1	2"	R153MY008
	1	2"	R153MY008

Diaphragm pressure reducer, PN25, female-female connections.

With Rp 1/4"F connection for pressure gauge.



R226

PRODUCT CODE	SIZE	o	\Box
R226Y001	1/2" 0÷4 bar	1	50
R226Y002	1/2" 0÷6 bar	1	50

Thermometer/pressure gauge. Temperature scale: 20+120 °C. Preussre scale: 0+4 bar or 0+6 bar.



R153MK

PRODUCT CODE	SIZE	ā	\oplus
R153MY103	1/2"	1	10
R153MY104	3/4"	1	10
R153MY105	1"	1	6

Diaphragm pressure reducer, PN25, tail pieces male connections.

With pressure gauge, scale 0÷10 bar.



R156

PRODUCT CODE	SIZE	o	
R156X004	3/4" - Kv 2,0	1	25
R156X005	1" - Kv 2,2	1	25

Thermostatic mixer for use in domestic water systems, chrome plated brass, female-female connections. Temperature range: 38÷60 °C.



R153C

PRODUCT CODE	SIZE		
R153CX003	1/2"	1	-
R153CX004	3/4"	1	-

Piston pressure reducer, PN16, female-female connections.

With Rp 1/4"F connection for pressure gauge.



R156-1

PRODUCT CODE	SIZE		\oplus
R156X024	3/4" - Kv 1,8	1	10
R156X025	1" - Kv 2,0	1	10

Thermostatic mixer for use in domestic water systems, chrome plated brass, tail pieces male connections. Temperature range: 38÷60 °C.



R153P

SIZE		
1/2"	1	-
3/4"	1	-
1"	1	-
1 1/4"	1	-
1 1/2"	1	-
2"	1	
	1/2" 3/4" 1" 11/4"	1/2" 1 3/4" 1 1" 1 11/4" 1

Piston pressure reducer, PN25, female-female connections.

With Rp 1/4"F connection for pressure gauge.



R156-2

PRODUCT CODE	SIZE		\blacksquare
R156Y223	1/2" - Kv 1,3	1	10
R156Y224	3/4" - Kv 1,4	1	10
R156Y225	1" - Kv 5,0	1	10
R156Y226	11/4" - Kv 5,8	1	8
R156Y227	1 1/2" - kv 11,0	1	5
R156Y228	2" - Kv 12,0	1	5

Thermostatic mixer for use in domestic water systems, brass finish, tail pieces male connections. With anti-scalding function. Temperature range: 30÷65 °C.



R225

			-
PRODUCT CODE	SIZE		Ш
R225Y001	1/4" 0÷6 bar	1	100
R225Y002	1/4" 0÷10 bar	1	100
R225Y003	1/4" 0÷10 bar	1	100

Pressure gauge, 1/4" connection. Accuracy class according with EN 837-1: 1,6.

(i) INFO

R225Y001, R225Y002: back connection R225Y003: radial connection





Components for biomass systems

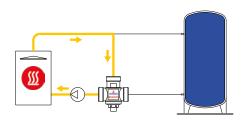
R157A

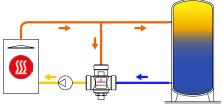
1" CONNECTIONS PRODUCT CODE SIZE R157AY051 1" (45 °C) R157AY052 1" (55 °C) R157AY053 1" (60 °C) R157AY054 1" (70 °C) 1 1/4" CONNECTIONS PRODUCT CODE A SIZE R157AY061 11/4" (45 °C) R157AY062 11/4" (55 °C) R157AY063 11/4" (60 °C) R157AY064 11/4" (70°C)

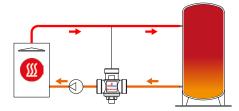


Anti-condensation valve for solid fuel boilers. Temperature range: 5+100 °C.
Max. working pressure: 10 bar.
Valves with 1" connections: Kv 3,2 - DN25
Valves with 11/4" connections: Kv 9 - DN32

OPERATING PRINCIPLE OF THE ANTI-CONDENSATION VALVE







R144ST

R144SY001	3/4"	1	-
PRODUCT CODE	SIZE	ō	

Thermal safety discharge valve, with dual safety sensor. Complete with remote probe with housing and 1/2"M connection. Capillary pipe 1300 mm lenght. Temperature range: 92÷112 °C. Calibration temperature: 95 °C Max. working pressure: 10 bar.



R140PT

PRODUCT CODE	SIZE		\oplus
R140PY021	1/2" x Ø15 mm (4 bar)	1	-
R140PY026	1/2" x Ø15 mm (7 bar)	1	-
R140PY031	3/4" x Ø22 mm (4 bar)	1	-
R140PY036	3/4" x Ø22 mm (7 bar)	1	-



Combined temperature and pressure safety valve, male connections. Use with hot/cold water. Calibration settings:

- Temperature: 90°C

- Pressure: 4 and 7 bar (depending on versions) Nominal pressure: 10 bar.

CERTIFICATIONS AND SYMBOLS



R140PT-1

PRODUCT CODE	SIZE	ð	
R140PX028	1/2" x Ø 15 mm (10 bar)	1	-
R140PX038	3/4" x Ø 22 mm (10 bar)	1	-

Combined temperature and pressure safety valve, male connections. Use with hot/cold water for solar thermal systems. Calibration temperature: 100°C. Calibration pressure: 10 bar. Nominal pressure: 10 bar.



CERTIFICATIONS AND SYMBOLS

 ϵ

R158

PRODUCT CODE SIZE	Ħ

Draught regulator for delivery water temperature control in solid fuel boilers.





Dackflows, filters, check valves

R626

THREADED CONNECTION \oplus PRODUCT CODE SIZE R626Y003 1/2" R626Y004 3/4" R626Y005 1" R626Y006 11/4" R626Y007 11/2" R626Y008 2" **FLANGED CONNECTION** o A PRODUCT CODE SIZE R626Y106 DN65 R626Y108 DN80 R626Y110 DN100 R626Y115 DN150

Dual-check backflow preventer with controlled reduced pressure zone. BA type. Protection against fluids of categories 1, 2, 3, 4 (in accordance with UNI EN 1717).

R701F

PRODUCT CODE SIZE 🗇 🛨	1FY004	3/4"	_	-
	DUCT CODE	SIZE		

Ball valve with built-in filter, female-female threaded connections and full port. Brass finishing. Red T-handle (water use).



R74A

MAGNETIZABLE VERSION

PRODUCT CODE	SIZE		
R74AY103	1/2"	1	10
R74AY104	3/4"	1	5
R74AY105	1"	1	5
R74AY106	1 1/4"	1	4
R74AY107	11/2"	1	4
R74AY108	2"	1	2

Y-filter, brass finishing. Max. working temperature: 110 °C. Max. working pressure for not magnetizable versions: 16 bar. Max. working pressure for magnetizable versions: 30 bar.

R74M

PRODUCT CODE	SIZE	ā	
R74MY003	1/2"	1	10
R74MY004	3/4"	1	5
R74MY005	1"	1	5
R74MY006	1 1/4"	1	4
R74MY007	11/2"	1	4
R74MY008	2"	1	2

Magnetic Y-filter, brass finishing. Max. working temperature: 110 °C. Max. working pressure: 30 bar.



R623

PRODUCT CODE	SIZE	0	
R623Y004	3/4"	1	25
R623Y005	1"	1	25

Dual-check backflow preventer. ED type (in accordance with UNI EN 1717).



R624

PRODUCT CODE	SIZE	o	Ħ
R624Y003	1/2" - drain 1/2"F	1	20
R624Y004	3/4" - drain 1/2"F	1	25

Dual-check backflow preventer with non-controlled reduced pressure zone. CA type. Protection against fluids of categories 1, 2, 3 (in accordance with UNI EN 1717).



R60

PLATE IN POLYMERIC MATERIAL

PRODUCT CODE	SIZE	o E
R60Y002	3/8"	1
R60Y003	1/2"	1
R60Y004	3/4"	1
R60Y005	1"	1
R60Y006	1 1/4"	1
R60Y007	1 1/2"	1
R60Y008	2"	1
R60Y009	2 1/2"	1
R60Y010	3"	1
R60Y011	4"	1

PLATE IN METALLIC MATERIAL

PRODUCT CODE	SIZE		
R60Y032	3/8"	1	-
R60Y033	1/2"	1	-
R60Y034	3/4"	1	-
R60Y035	1"	1	-
R60Y036	1 1/4"	1	-
R60Y037	1 1/2"	1	-
R60Y038	2"	1	-
R60Y039	2 1/2"	1	-
R60Y040	3"	1	-
R60Y041	4"	1	

Disc check valve, brass finish. Temperature range: 5÷95 °C (110 °C for peaks).12 bar (from 2 1/2" to 4")

(i) INITO

Plate in polymeric material: 16 bar (from 3/8" to 1") 10 bar (from 1 1/4" to 2") - 8 bar (from 2 1/2" to 4") Plate in metallic material: 35 bar (from 3/8" to 1") 25 bar (from 1 1/4" to 2") - 12 bar (from 2 1/2" to 4")



P74MY001	1/2", 3/4" - Lenght 29 mm	1	
PRODUCT CODE	SIZE		

Magnetic kit for R74A and R74M filters.

(i) INFO

P74MY001: for R74A and R74M filters of 1/2" and 3/4".





N5

PRODUCT CODE	SIZE	ā	
N5Y003	1/2"	1	-
N5Y004	3/4"	1	-
N5Y005	1"	1	-
N5Y006	1 1/4"	1	-
N5Y007	1 1/2"	1	-
N5Y008	2"	1	-
N5Y009	2 1/2"	1	-
N5Y010	3"	1	-
N5Y011	4"	1	-



Clapper check valve, neoprene seat, brass finish.

N6

SIZE		\oplus
1/2"	1	-
3/4"	1	-
1"	1	-
1 1/4"	1	-
1 1/2"	1	-
2"	1	-
2 1/2"	1	-
3"	1	-
	1/2" 3/4" 1" 11/4" 11/2" 2" 21/2"	1/2" 1 3/4" 1 1" 1 11/4" 1 11/2" 1 2" 1 21/2" 1



P36S

FOR	R74A	MAGN	NETI:	ZABI	LE	AND	R7

PRODUCT CODE	SIZE		
P36SY103	1/2"	1	-
P36SY104	3/4"	1	-
P36SY105	1"	1	-
P36SY106	1 1/4"	1	-
P36SY107	1 1/2"	1	-
P36SY108	2"	1	-

Filter cartridge for R74A and R74M filters.



Gate valves

R55

PRODUCT CODE	SIZE	ā	
R55Y002	3/8"	10	50
R55Y003	1/2"	10	50
R55Y004	3/4"	5	50
R55Y005	1"	4	20
R55Y006	1 1/4"	5	30
R55Y007	1 1/2"	3	18
R55Y008	2"	2	12
R55Y009	2 1/2"	1	6
R55Y010	3"	1	3
R55Y012	4"	1	2

Brass gate valve, female-female connections.



R54

PRODUCT CODE	SIZE	a	
R54Y004	3/4"	5	50
R54Y005	1"	4	20
R54Y006	1 1/4"	5	30

Brass gate valve, heavy model, female-male connections.



R56

PRODUCT CODE	SIZE	ā	
R56Y002	3/8"	10	50
R56Y003	1/2"	10	50
R56Y004	3/4"	5	50
R56Y005	1"	4	20
R56Y006	1 1/4"	5	30
R56Y007	1 1/2"	3	18
R56Y008	2"	2	12

Brass gate valve, female-female connections, with drain cock.





R220

R220Y005	Ø22	5	50
PRODUCT CODE	SIZE	ā	

Brass gate valve, with compression coppercopper connections.

R230

PRODUCT CODE	SIZE	ā	\oplus
R230Y002	Ø15	10	100
R230Y004	Ø18	5	50
R230Y005	Ø22	5	50
R230Y006	Ø28	4	20
R230Y007	Ø35	5	30

Brass gate valve, welding connections.

P22C

PRODUCT CODE	SIZE	ā	\oplus
P22CY001	3/8" - 1/2"	1	
P22CY002	3/4" - 1"	1	
P22CY003	11/4"	1	
P22CY004	11/2"	1	
P22CY005	2"	1	
P22CY008	2 1/2" - 3"	1	



Red handwheel for R54, R55, R56, R220, R230 gate valves.

(i) INFO

Please indicate in your order the model and the relative size of the valve.

Automatic air vent valves

R88

PRODUCT CODE	SIZE	ā	
R88Y001	1/4"	1	100
R88Y002	3/8"	1	100

Automatic air vent valve, brass finish.



R99

PRODUCT CODE	SIZE	ā	
R99Y001	1/4"	1	50
R99Y002	3/8"	1	50
R99Y003	1/2"	1	50

Automatic air vent valve, brass finish.



R88I

PRODUCT CODE	SIZE	ā	
R88IY002	3/8"	1	100
R88IY003	1/2"	1	100

Automatic air vent valve, with shut-off valve, brass finish.



R991

PRODUCT CODE	SIZE		
R99IY002	3/8"	1	50
R99IY003	1/2"	1	50

Automatic air vent valve, with shut-off valve, brass finish.



R160

PRODUCT CODE	SIZE		
R160Y001	1/4" x 3/8"	1	1.000
R160Y002	1/4" x 1/2"	1	500

Shut-off valve for automatic air vent valves.



R99S

PRODUCT CODE	SIZE	ō	\oplus
R99SY003	1/2" - with shut-off valve	1	10
R99SY013	1/2" - without shut-off valve	1	-

Automatic air vent valve for solar thermal systems with shut-off valve included.





Accessories for circulators

R252

PRODUCT CODE	SIZE		\blacksquare
R252Y001	1"F x 1 1/2"F nut	2	50
R252Y002	11/4"F x 2"F nut	2	20
R252Y003	Ø22 x 1 1/2"F nut	2	50
R252Y004	Ø28 x 1 1/2"F nut	2	50

Ball valve, with female-female threaded connections with nut and gasket or with compression-female threaded connections with nut and gasket, for the connection of circulator or mixing valve. Brass finishing. Standard port. Screwdriver bonnet handle (water use). For opening and closing operations use a screwdriver or a 5 mm Allen wrench.

R37K

PRODUCT CODE	SIZE	ā	
R37KY003	1" x 1/2"	30	-
R37KY004	1 1/4" x 3/4"	25	-
R37KY005	1 1/2" x 1"	25	-
R37KY006	2" x 1 1/4"	10	-

Pair of flat-seat tail pieces with nuts and gaskets.

R39

PRODUCT CODE	SIZE	ā	
R39Y001	1 1/2" x 1"	2	50

Check valve.



R182AM

PRODUCT CODE	SIZE		\oplus
R182MY002	11/4"	1	10

Unit consisting of: angle fitting R19D 1 1/4", Tee fitting R182A 1 1/4" x 1" x 35.



R285L

SIZE		
1"F x 1 1/2" nut connection	4	40
11/4"F x 2" nut connection	4	20
	1"F x 1 1/2" nut connection	1"F x 1 1/2" nut connection 4

Ball valve, with female threaded connectionconnection for nut, specific for circulator connection. Brass finishing. Standard port. Red lever handle (water use).

(i) INFO

To be completed with P18LY007 (1 1/2") or P18LY009 (2") nut. Possibility to install the R288 check valve inside the valve.



R285

PRODUCT CODE	SIZE		
R285Y001	1"F x 1 1/2" nut connection	4	40
R285Y002	1 1/4"F x 1 1/2" nut connection	4	20
R285Y003	11/4"F x 2" nut connection	4	20

Ball valve, with female threaded connectionconnection for nut, specific for circulator connection. Brass finishing. Standard port. Red T-handle (water use).

(i) INFO

To be completed with P18LY007 (1 1/2") or P18LY009 (2") nut. Possibility to install the R288 check valve inside the valve.



R197

PRODUCT CODE	SIZE		\oplus
R197Y001	130 mm	1	50
R197Y002	180 mm	1	36

Threaded male fitting spacer for circulator.



P18L

PRODUCT CODE	SIZE		
P18LY007	11/2" for R252, R285, R285L	1	20
P18LY009	2" - for R252, R285, R285L	1	20

Brass nut, female thread.



R197M

PRODUCT CODE	SIZE	0	
R197MY001	130 mm	1	10
R197MY002	180 mm	1	10

Unit consisting of: threaded male fitting R197 size 1 1/2", shut-off circulator valve R252 1 1/2" \times 1".



R284

R284Y001	2///"	1	20
PRODUCT CODE	QI7E		

Differential valve with 3/4" female connections, complete with 18 mm copper pipe and compression fitting for connection to R287 valve.





R284M

PRODUCT CODE	SIZE		
R284MY001	1" x 1 1/2"	1	10

Valve set for by-pass with differential valve and N.2 special ball valves and thermometers.



R287M

PRODUCT CODE	SIZE		\blacksquare
R287MY005	1"F x 1 1/2"F nut	1	10



Couple of ball valves, with female-female nut connections, specific for circulator connection, with thermometers (R540 series), check valves (R288), plugs (R92). Brass finishing. Standard port. Red and blue T-handles (water use).

R287

PRODUCT CODE	SIZE		\oplus
R287Y005	1"F x 1 1/2"F nut	4	20

Ball valve, with female-female nut threaded connections, specific for circulator connection, with additional connections for thermometers or other optional components. Brass finishing. Standard port. Red T-handle (water use).



Oil filters

N1

NYLON GLASS AND INOX FILTER

PRODUCT CODE	SIZE		\oplus
N1UY001	3/8"MM	1	20
N1Y001	3/8"FF	1	20
N1UY012	3/8"MF	1	20

Oil filter with shut-off cock, check valve and bracket.

Equipped with nylon ferrules of 8 mm, 10 mm, 12 mm and brass nuts.



N2

PRODUCT CODE	SIZE		\oplus
N2Y001	3/8"FF	1	20

Oil filter with shut-off cock. Nylon glass and inox filter.



N3

N3Y001	3/8"FF	1	25
PRODUCT CODE	SIZE		

Oil filter.

Nylon glass and inox filter.



N1UB

PRODUCT CODE	SIZE		Ш
N1UBY001	3/8"MM	1	20

Oil filter with shut-off cock, recirculation, check valve and bracket. Nylon glass and inox filter.

Equipped with nylon ferrules of 8 mm, 10 mm, 12 mm and brass nuts.

(i) INFO

N1UBY002: brass ferrule.



N10

PRODUCT CODE	SIZE	Ō	
N10Y002	3/8"	1	200
N10Y003	1/2"	1	100

Check valve for tank.





N12

PRODUCT CODE	SIZE		\oplus
N12Y005	1" x (8-10-12)	1	100

Double connection for oil tank. 45° connections. With stuffing box for copper pipe.



N20

PRODUCT CODE	SIZE	ā	
N20Y003	1/2"	10	200

Check valve for oil systems. Female connections.



N14

PRODUCT CODE	SIZE	ā	
N14Y001	2" x 2"	1	50
N14Y002	2" x 2 1/2"	1	50
N14Y003	2" x 2 3/4"	1	30

Tank plug with female connection.



N42

42Y007	1 1/2"M x (8-10-12)	10	100
RODUCT CODE	SIZE		

Double fitting for oil tank.



N15

PRODUCT CODE	SIZE	ā	
N15Y005	1"	1	150
N15Y006	11/4"	1	100
N15Y007	11/2"	1	50
N15Y008	2"	1	50

Air vent valve for tank.

P36



Filter insert stainless for N1, N2, N3.



N16-1

PRODUCT CODE	SIZE		\oplus
N16KY001	2" x (8-10-12) x 1700 mm	1	10
N16KY002	2" x (8-10-12) x 2200 mm	1	10
N16KY003	2" x (8-10-12) x 3200 mm	1	10

Emergency valve complete with flexible suction pipe and level gauge connection. Equipped with nylon ferrules of 8 mm, 10 mm, 12 mm and brass nuts.



P36F

PRODUCT CODE	SIZE		
P36Y002	-	1	-

Filter insert felt for N1, N2, N3.



N16-2

PRODUCT CODE	SIZE		\blacksquare
N16GY001	1" x (8-10-12) x 1700 mm	1	10
N16GY002	1" x (8-10-12) x 2200 mm	1	10
N16GY003	1" x (8-10-12) x 3200 mm	1	10

Emergency valve complete with flexible suction pipe.

Equipped with nylon ferrules of 8 mm, 10 mm, 12 mm and brass nuts.



P78T

PRODUCT CODE	SIZE	ā	
P78TY001	N1	1	-
P78TV002	N2-N3	1	

Transparent filter cup.



N17

PRODUCT CODE	SIZE	ā	\oplus
N17Y002	3/8"	10	100
N17Y003	1/2"	10	100

Shut-off emergency valve.





Components for solar thermal systems

R586S-0

R586SY002	3/4"	 ш
PRODUCT CODE	SIZE	Ш

Single-way circulation unit for solar thermal systems, with safety group and mechanical flow meter. Circulator ErP compliance. To be coupled with KTD electronic unit.



P586S

PRODUCT CODE	SIZE	ā	\blacksquare
P586SY001	-	1	50
P586SY002	-	1	10
P586SY003	-	1	20
P586SY004	-	1	10
P586SY005	-	1	20
P586SY007	-	1	20
P586SY008	-	1	-



Spare parts for R586S-1 circulation units.

(i) INFO

P586SY001: flow meter for R586S with 2÷12 l/min P586SY002: flow meter unit plus probe for R586S. P586SY003: valve body R586S 1/2" (3/4"F) for system filling. P586SY004: return valve for R586S 3/4". P586SY005: delivery valve for R586S 3/4". P586SY006: safety fitting R586S 1/2"MX3/4"M. P586SY006: safety fitting R586S 1/2"MX3/4"M.

P5865Y006: Sarety fitting R5865 1/2"MX3/4"M. P586SY007: air separator for R586S 1 1/2"X1/2". P586SY008: R252 1 1/2"XØ22 (for solar system).

R586S

PRODUCT CODE	SIZE		
R586SY001	3/4"	1	

Two-way circulation unit for solar thermal systems, with safety group and mechanical flow meter. Circulator ErP compliance. To be coupled with KTD electronic unit.



P50

PRODUCT CODE	SIZE		
P50Y003	3/4"M x 1/2"F	1	100

Threaded reducer fitting for R586S unit.



R586S-1

R586SY011	3/4"	1	
PRODUCT CODE	SIZE	ā	\oplus

Two-way circulation unit for solar thermal systems, with safety group and mechanical flow meter. Circulator ErP compliance. KTD electronic unit included.

DRAIN

EXPANSION TANK



KTI

PRODUCT CODE	SIZE		
KTD3Y003	3 probes	1	-
KTD5Y006	6 probes	1	-

Electronic unit for the control of the differential temperatures in solar thermal systems.

PT1000 temperature probes included.



KTDP

KTDPY001	-	1	_
PRODUCT CODE	SIZE	ō	

Protection device against overvoltage, for KTD electronic unit.



1) Flow meter (mechanical for R5865 - electronic for R5865-1), (2) Drain tap, (3) Filling tap, (4) Ball Valve, (5) Circulator, (6) Pressure gauge, (7) Safety valve, 6 bar, (8) Ball valve with integrated thermometer and check valve, (9) Air discharge manual valve, (10) Ball valve, (11) Insulation cover.

KTDS

PRODUCT CODE	SIZE		\oplus
KTDSY001	-	1	-

PT1000 (180 $^{\circ}\text{C})$ probe, for KTD electronic unit.





Units for domestic hot water

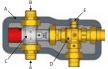
GS550

PRODUCT CODE	SIZE	ð	\oplus
GS550Y001	-	1	-
GS550Y002	-	1	-

Units to control the domestic hot water production in solar thermal systems.



(A) Insulation in crosslinked expanded PE, (B) Tail pieces with check valves and filter, (C) Thermostatic mixer, (D) Deflector valve, (E) Connection for K272 motor.



GS556

GS556Y001	-	1	-
PRODUCT CODE	SIZE	ā	\blacksquare

Domestic hot water unit for solar thermal systems. 67 kW @ 70 °C.



Other components for solar thermal systems

R140C

PRODUCT CODE	SIZE	ð	
R140CY006	1/2" x 3/4" - 4 bar	1	30
R140CY009	1/2" x 3/4" - 6 bar	1	30

Membrane safety valve for solar thermal systems, female-female connections. Use with hot water or glycol solutions (max. 50 %).

Temperature range: 5÷160 °C. Nominal pressure: 10 bar.



CERTIFICATIONS AND SYMBOLS

C€ 1115

R182

	50
PRODUCT CODE SIZE	

Tee fitting, to install the R99S automatic air vent valve on solar panels.



CERTIFICATIONS AND SYMBOLS



R99S

PRODUCT CODE R99SY003	1/2" - with shut-off valve	1	10
DRODUCT CODE	SIZE		

Automatic air vent valve for solar thermal systems with shut-off valve included.



R227-1

PRODUCT CODE	SIZE	ā	\oplus
R227Y003	1/2" x 6 mm	25	250

Probe housing.



R₂OSC

PRODUCT CODE	SIZE		\Box
R20SCY004	3/4"	10	100

Straight fitting in three pieces, male-male threaded for connection to the manifolds.



310

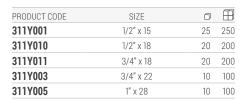
PRODUCT CODE	SIZE	ā	\oplus
310Y004	15 x 15	20	200
310Y010	18 x 18	10	100
310Y006	22 x 22	10	100
310Y007	28 x 28	10	100

Straight fitting for copper pipe.

With metallic seal. Suitable for solar thermal systems.

In compliance with EN1254-2 standard.





Straight fitting male thread, for copper pipe. With metallic seal. Suitable for solar thermal systems.

In compliance with EN1254-2 standard.





312

PRODUCT CODE	SIZE		\oplus
312Y001	1/2" x 15	25	250
312Y010	1/2" x 18	20	200
312Y011	3/4" x 18	10	100
312Y003	3/4" x 22	10	100
312Y005	1" x 28	10	100



R564P

PRODUCT CODE	SIZE	ā	\blacksquare
R564PY004	3/4"	1	25
R564PY005	1"	1	10



Tee fitting, flat seat male thread connections.

Straight fitting female thread, for copper pipe. With metallic seal. Suitable for solar thermal systems.

In compliance with EN1254-2 standard.

315

PRODUCT CODE	SIZE		
315Y001	15 x 15	25	250
315Y010	18 x 18	10	100
315Y003	22 x 22	10	100
315Y004	28 x 28	5	50

With metallic seal. Suitable for solar thermal



R93

BRASS FINISH

Dilitioo i iitioii			
PRODUCT CODE	SIZE		\oplus
R93Y011	1"M x 3/4"F	25	250

Reducer fitting male-female threaded.



systems.
In compliance with EN1254-2 standard.

Elbow fitting, for copper pipe.

317

PRODUCT CODE	SIZE	ā	\oplus
317X001	1/2" x 15	25	250
317X002	3/4" x 22	10	100

Elbow fitting, female thread, for copper pipe. With metallic seal. Suitable for solar thermal systems.

In compliance with EN1254-2 standard.



K377

PRODUCT CODE	SIZE	ā	\oplus
K377Y001	5 I	1	-
K377Y002	10	1	_

Propylenic antifreeze glycol for anticorrosive and biodegradable uses, suitable for solar thermal system. Concentrated solution to be watered down.



318

PRODUCT CODE	SIZE		
318Y001	15 x 15 x 15	10	100
318Y010	18 x 18 x 18	10	100
318Y006	22 x 22 x 22	5	50
318Y014	28 x 28 x 28	5	50



With metallic seal. Suitable for solar thermal systems.

In compliance with EN1254-2 standard.



VES

PRODUCT CODE	SIZE	o 8
VESY001	8	1 -
VESY002	18 I	1 -
VESY003	24	1 -
VESY004	351	1 -
VESY005	50 l	1 -
VESY006	801	1 -
VESY007	100 l	1 -
VESY008	150 l	1 -
VESY009	200 l	1 -
VESY010	300 l	1 -



Expansion vessel for solar thermal systems.

R189

PRODUCT CODE	SIZE	ō	\oplus
R189Y004	3/4"	25	250
R189Y005	1"	20	200

Nipple.



VES-2

PRODUCT CODE	SIZE		
VESY020	-	1	-

Bracket for expansion vessel. For VESY001÷VESY004 versions only.

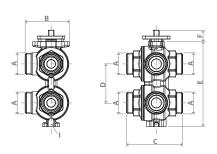


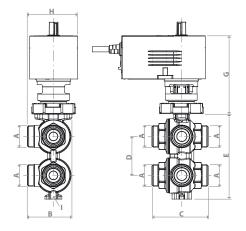


> Technical and dimensional data

R274N + K274-2

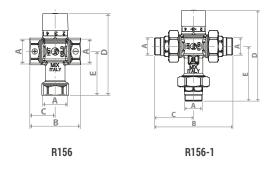
PRODUCT CODE	A [ISO 228]	В	С	D	Е	F	G	Н	I	L	М	Ν
R274Y033	1/2"M	51	68	45	100	18	114	70	2 holes M4	114	122	70
R274Y045	1"M	67	87	60	131	18	114	75	1 hole M6	114	122	70





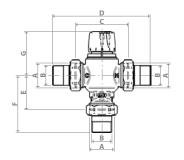
R156 e R156-1

PRODUCT CODE	А	В	С	D	Е	KV
R156X004	3/4"F	73	36,5	118	63	2
R156X005	1"F	73	36,5	118	63	2,2
R156X024	3/4"M	120	60	138	83	1,8
R156X025	1"M	128	64	143	88	2



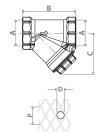
R156-2

PRODUCT CODE	А	В	С	D	Е	F	G
R156Y223	G 3/4"	G 1/2"	58	104	42	65	52
R156Y224	G 1"	G 3/4"	59	119	42,5	72,5	52
R156Y225	G 11/4"	G 1"	89	165	58	96	73
R156Y226	G 1 1/2"	G 1 1/4"	90	183	58,5	105	73
R156Y227	G 2"	G 1 1/2"	123	217	80,5	125,5	93
R156Y228	G 2 1/2"	G 2"	123	234	81	136,5	93



R74M - R74A magnetizable

PRODUCT CODE	A [ISO 228]	В	С	Р	D	М
R74AY103 R74MY003	1/2"	48	34			
R74AY104 R74MY004	3/4"	57	42			
R74AY105 R74MY005	1"	68	53	,	500	70
R74AY106 R74MY006	1 1/4"	82	65	1	500	70
R74AY107 R74MY007	1 1/2"	90	74			
R74AY108 R74MY008	2"	108	89			

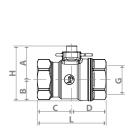


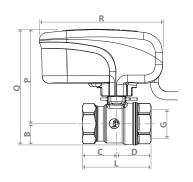


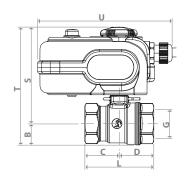
[:] holes pitch D: inscribed hole diameter N: number of holes per cm²

R276

PRODUCT CODE	G	С	D	L	В	Α	Н	Р	Q	R	S	Τ	U
R276Y004	3/4"	31	32	63	18	33	51	92	110	118	108	126	157
R276Y005	1"	38	38	76	23	37	60	96	119	118	112	135	157

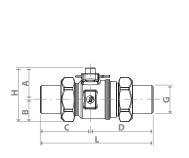


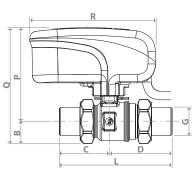


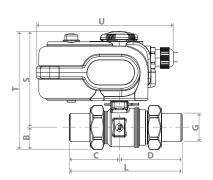


R277

PRODUCT CODE	G	С	D	L	В	Α	Н	Р	Q	R	S	Т	U
R277Y004	3/4"	56	71	127	21	33	54	92	113	118	108	129	157
R277Y025	1"	59	73	132	26	37	63	96	122	118	112	138	157

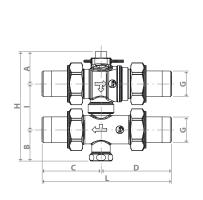


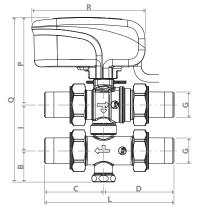


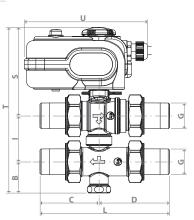


R278

PRODUCT CODE	G	С	D	L	В	Α	1	Н	Р	Q	R	S	Т	U
R278Y004	3/4"	56	71	127	32	33	46	111	92	166	118	108	186	157
R278Y005	1"	59	73	132	34	37	54	125	96	180	118	112	200	157

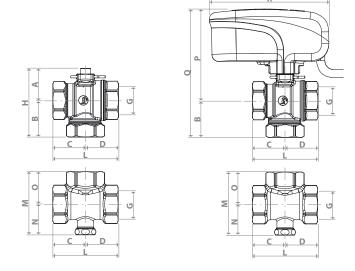


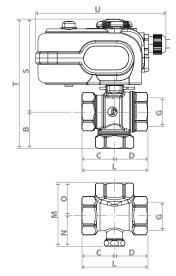






PRODUCT CODE	G	С	D	L	В	Α	Н	Ν	0	М	Р	Q	R	S	Т	U
R279Y004	3/4"	31	32	63	33	33	66	30	31	61	92	125	118	108	141	157
R279Y005	1"	38	38	76	42	37	79	35	38	73	96	138	118	112	154	157



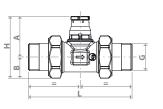


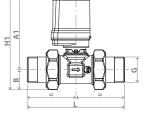
R291

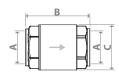
PRODUCT CODE	G	Н	L	А	В	H1	A1
R291Y004	3/4"	88	125	49	39	132	93
R291Y005	1"	88	125	49	39	132	93

R60

G	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
D	31	31	39	47	56	66	83	107	109	140
L	45	45	50	58	64	69	77	87	102	112







R292E

PRODUCT CODE	G	Н	L	Α	-	Е	В	H1	A1
R292EY004	3/4"	138	125	49	55	5	34	183	94
R292EY005	1"	138	125	49	55	5	34	183	94

DOODANDE	1"	100	10.5	40	гг	0.4	100	00
PRODUCT CODE	G	Н	L	Α	I	В	H1	A1

