# BOILER ROOM COMPONENTS

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.

Energy Managemen



Radiant System



Water Managemer



Gas Distribution



Renewable Sources

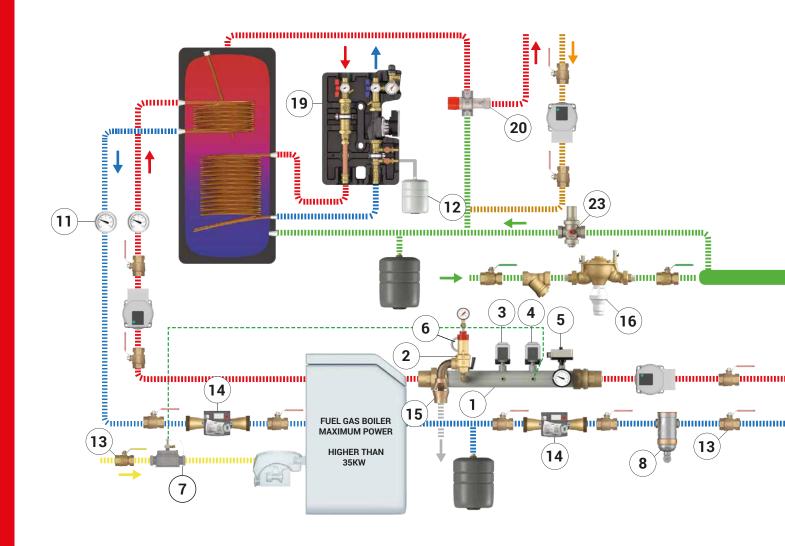


Hydrogen System



Fire Protection

- 168 Balancing valves
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R555

manifold

threaded or flanged

R140D

INAIL safety valve

3 K374 pressure switches

4 K374 pressure switches



N143

fuel shut-off valve



8 R146D/R146M/R146C

dirt separator



9 R146I deaerator group



10 R150M automatic filling unit



13 R950/R910

ball valve



14 GE552-1

meters for thermal heating



15 R141

relief funnel



16 R626 backflow preventer



19 R586S

circulation unit for solar thermal systems



20 R156/R156-2 thermostatic mixer



21 R74A/R74M Y-filter

INAIL



disk check valve

22 R60



25 R206C

differential pressure control valve



26 R276/R267B/R277 motorised zone valve



27 R586SEP multifunction boiler room manifold

# **21** 11 10 25 18 9 17

K373I

thermostat

11 R540I

thermometer

17 K275/K275-1

for mixing valve

pressure reducing

23 R153C/R153P/R153M

actuators

INAIL

INAIL

# **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 are required. 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.



**12 VES** 



R225I/R228A/R228I

manometer, damper, 3-way manometer holder cock

expansion vessel



# Balancing valves

# **R206B**

PRODUCT CODE	SIZE	ð	Ш
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" <b>*</b>	1	-
R206BY016	1 1/4" *	1	-
R206BY017	1 1/2" *	1	-
R206BY018	2" *	1	-

R206B

10 x Dn

2 x Dn

2 x Dn

R206B



#### **BENEFITS**

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

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.

\* Without probe holders.

#### ① INFO

#### Accessories

- P206Y001: probe holder.
- R225EY001: differential manometer.



## 

Scan the QR-Code with a smartphone or tablet to view the video-tutorial









(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



5 x Dn

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

# © BENEFITS

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



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

# A piece of life.





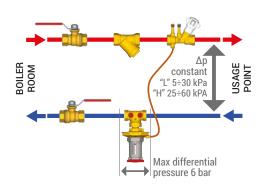
# NEW GIACOMINI R206C. PERFECT BALANCE.

Giacomini's research department developed R206C, the revolutionary differential pressure controller that can cover a wide range of applications while balancing any system and guaranteeing high levels of performance in terms of comfort and energy saving. In addition, thanks to the double regulation field, it makes planners, distributors and installers' work much easier. Together with other flow regulation devices, R206C adds up to the solutions by Giacomini dedicated to circuit balancing. Cutting-edge products now part of your life. *Giacomini, a piece of life*.



# **R206C**

PRODUCT CODE	SIZE	ð	$\blacksquare$
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	5
R206CY106	DN32 - 1 1/4" - Kv 6,95	1	5
R206CY107	DN40 - 1 1/2" - Kv 11,72	1	6
R206CY108	DN50 - 2" - Kv 12,97	1	6





#### **BENEFITS**

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

Differential pressure controller, equipped with a copper capillary pipe 1 m length. Differential pressure setting: 5÷30 kPa in "Low" modality; 25÷60 kPa in "High" modality.





**⊙** VIDEO

Scan the QR-Code with a smartphone or tablet to view the video-tutorial

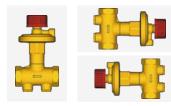
# R206C-1

DIFFFRENTIAL	PRESSURE S	SETTING: 5÷30 KPA	

SIZE		Ш
DN15 - 1/2" - Kv 1,55	1	15
DN20 - 3/4" - Kv 2,40	1	15
DN25 - 1" - Kv 4,15	1	10
SSURE SETTING: 25÷60 KPA		
SIZE	a	
DN15 - 1/2" - Kv 1,55	1	15
DN20 - 3/4" - Kv 2,40	1	15
DN25 - 1" - Kv 4.15	1	10
	DN20 - 3/4" - Kv 2,40  DN25 - 1" - Kv 4,15  SSURE SETTING: 25÷60 KPA  SIZE  DN15 - 1/2" - Kv 1,55  DN20 - 3/4" - Kv 2,40	DN15 - 1/2" - Kv 1,55 1  DN20 - 3/4" - Kv 2,40 1  DN25 - 1" - Kv 4,15 1  SSURE SETTING: 25÷60 KPA  SIZE □  DN15 - 1/2" - Kv 1,55 1  DN20 - 3/4" - Kv 2,40 1

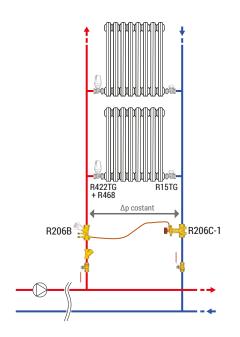


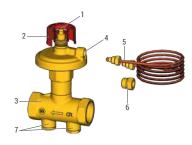
Compact differential pressure controller, equipped with a copper capillary pipe 1 m length. Differential pressure setting 5÷30 kPa or 25÷60 kPa.





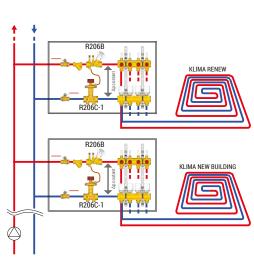
## EXAMPLE OF APPLICATION WITH RISER-BASED RADIATOR SYSTEMS





- (1) Setting socket-head screw,
- (2) Shut-off knob,
- (3) Valve body,
- (4) Connection to copper capillary tube,
- (5) Copper capillary tube with 1/8"M connection,(6) Adapter for copper capillary tube 1/8"F x 1/4"M, for connection to static balancing valve R206B
- (7) Pressure outlets (only for versions with pressure outlets)

# **EXAMPLE OF APPLICATION WITH RADIANT FLOOR SYSTEMS**





# **R206A**

PRODUCT CODE	SIZE	a	$\oplus$
R206AY113	G 1/2"M - red	1	15
R206AY103	G 1/2"M - blue	1	15
R206AY104	G 3/4"M - black	1	15
R206AY105	G 1"M - green	1	15
R206AY125	G 1"M - blue	1	10
R206AY106	G 1-1/4"M - blue	1	10

#### (i) INFO

Temperature range: 5÷120 °C Max. working pressure: 25 bar (2,5 MPa) Working differential pressure range:

25÷400 kPa (max. 4 bar) with R473 thermo-electric actuator 25÷800 kPa (max. 8 bar) with K281 actuator or without actuator

Working flow rate range:

R206AY113: 32÷520 l/h (single regulation scale) R206AY103: 150÷380 l/h (LF); 180÷630 l/h (HF) R206AY104: 320÷910 l/h (LF); 700÷1175 l/h (HF)

R206AY105: 290÷1000 l/h (LF); 860÷1500 l/h R206AY125: 400÷3800 l/h (single regulation scale) R206AY105: 400÷4700 l/h (single regulation scale)

Accessories

- K281X062: actuator 24 V for proportional linear flow rate control (0-10 V)
- R473X221: thermo-electric actuator 230 V, normally closed, ON/OFF type
- R473X222: thermo-electric actuator 24 V, normally closed, ON/OFF type
- R453FY002: adapter ring M30 x 1,5 mm for R473 thermo-electric actuator
- P206Y001: pair of pressure outlets
- R225EY001: differential pressure gauge with probe

Spare parts R73PY010: regulation key for the presetting of the flow rate



#### © BENEFITS

- √ Dual flow-regulation scale
- ✓ Reliable hermetic seal
- √ Pressure compensation for basic actuators
- ✓ Extremely compact

Pressure independent control valve (PICV). Combines an automatic control of the flow rate with an optional control of the valve throught an actuator. The valve is able to regulate the flow rate and keep it constant as the differential pressure conditions vary within the hydraulic circuit in which it is installed.

The valve can be used with two operating modes:

- -independent control of the pressure (with K281 actuator installed) in accordance with the thermal load requirements of the circuit section to be controlled;
- -limitation of the flow rate and/or shut-off of the fluid (without actuator or with R473 thermo-electric actuator installed).

Flow rate adjustment is guaranteed within the declared differential pressure range, with a maintained error of  $\pm$  10 % on the controlled flow rate value.

The valve is equipped with pressure outlets for measuring the differential pressure in combination with a differential pressure gauge and its own probes.

R73PY010 regulation key for the presetting of the flow rate included.

# **R206AM**

PRODUCT CODE	SIZE	o A
R206AY056	1 1/4"	1 -
R206AY057	1 1/2"	1 -
R206AY058	2"	1 -

# (i) INFO

## Accessories

- K281X032: actuator 24 V, 0÷10 V, for valves 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.
- P206Y001: probe holder
- R225EY001: differential pressure gauge.



## **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).
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.

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.

		P					
	<b>R473X221</b> ON/OFF 230 V	<b>R473X222</b> ON/OFF 24 V	<b>K281X062</b> 010 24 V	<b>K281X032</b> 010 24 V	<b>K281X042</b> 010 24 V	P206Y001	R225EY001
R206AY113	✓	$\checkmark$	✓			✓	✓
R206AY103	✓	$\checkmark$	✓			✓	✓
R206AY104	✓	✓	✓			✓	✓
R206AY105	✓	✓	✓			✓	✓
R206AY125	✓	✓	✓			✓	✓
R206AY106			✓			✓	✓
R206AY056				✓		✓	✓
R206AY057					✓	✓	✓
R206AY058					✓	✓	✓



# **R280K**

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

#### (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 ON/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

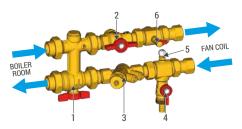
valve of R280KY004 kit



#### © 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
- √ 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.



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.

# **R280**

PRODUCT CODE	SIZE	ō	$\blacksquare$
R280Y003	DN15 - G 1/2"F X G 3/4"M	1	10
R280Y004	DN20 - G 1-1/4"M	1	10

Spare part valve for R280K kit.



# **R280W**

INCLUATION FOR PROPE

INSULATION FUN NZO	ж		
PRODUCT CODE	SIZE		
R280WY003	1/2"	1	2
R280WY004	3/4"	1	2
INSULATION FOR R280	DAK		
PRODUCT CODE	SIZE		
R280WY020	1/2"F	1	8
D290WV021	3///"E	1	0

Insulation for R280K and R280AK.

# **R280AK**

PRODUCT CODE	SIZE		$\blacksquare$
R280AKY113	1/2"F (50-800 l/h)	1	8
R280AKY114	3/4"F (50-1300 l/h)	1	4

Compact preassembled kit for fan coils. The kit includes a ball valve and a PICV on the delivery loop and a ball valve with integrated filter on the return loop.



# **R225E**

PRODUCT CODE	SIZE		$\oplus$
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.



# **P206**

PRODUCT CODE	SIZE		
P206Y001	1/4" - straight	1	-
P206Y011	1/4" - adjustable fitting	1	-

Probe holder for pressure outlets, to measure the flow rate in the balancing valves. Suitable for pressure outlets with needle  $\emptyset 3$  mm and length  $30 \div 40$  mm.



# **P225E**

PRODUCT CODE	SIZE		
P225EY001	Needle Ø 3 mm	1	

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.



# P206C

PRODUCT CODE	SIZE		$\blacksquare$
P206CY111	For R206C and R206C-1	1	32

Copper capillary tube for valves R206C and R206C-1, 1 m length.





# Distribution mixing groups

# **R586R**









R586RY104

R586RY101

WITH CIRCULATOR		
PRODUCT CODE	SIZE	o 🖽
R586RY101	1 1/2"M x 1"F - NO mixing valve	1 -
R586RY102	11/2"M x 1"F - Mix. valve(R296)	1 -
R586RY103	1 1/2"M x 1"F - Mix. valve(R297)	1 -
P286BV104	11/2"M v 1"F - Thermostatic miv	1 -









R586RY114

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 1 1/2"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.

## (i) INFO

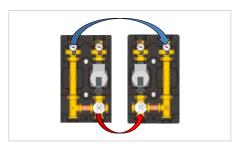
# OPTIONAL COMPONENTS

- 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 Para, 180 mm centre distance
- Grundfos Alpha series, 180 mm centre distance

## WITHOUT CIRCULATOR

PRODUCT CODE	SIZE	o E	3
R586RY111	1 1/2"M x 1"F - NO mixing valve	1	-
R586RY112	1 1/2"M x 1"F - Mix. valve(R296)	1	-
R586RY113	1 1/2"M x 1"F - Mix. valve(R297)	1	-
R586RY114	1 1/2"M x 1"F - Thermostatic mix	1	-





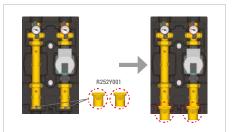
#### Reversible delivery/return outputs

R586RY101-111-102-112-104-114 units include reversible delivery and return outputs. On the contrary, R586RY103-113 units are not reversible.



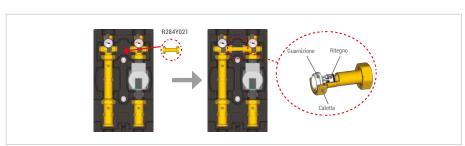
#### Check valve integrated in return output

All R586R units include a check valve inside the upper part of the spacer on the return output. The check valve can be disassembled by removing the Seeger ring used to fit the spacer.



#### Installation of R252Y001 ball valve

The R586R units can be shut off by installing upstream the R252Y001 ball valves. The valves can be opened and closed using a 5-mm Allen wrench.



## Installation of the R284Y021 differential by-pass kit

The differential by-pass is used to protect the circulator by enabling water recirculation inside the R586R unit when the secondary circuit is off or closed. The kit consists of a brass spacer including an integrated check valve with fixed setting at 5 mH20, two nuts to be screwed on the check valves and two PTFE gaskets.





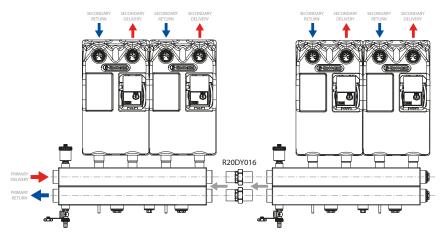
# R586SEP

PRODUCT CODE	SIZE	ā	
R586SEY02	11/4"F x 1"M (2 outputs)	1	-
R586SEY03	1 1/4"F x 1"M (3 outputs)	1	-



Scan the QR-Code with

The modular design enables to install two R586SEP manifolds in series so that up to six R586R distribution units can be installed; this is the ideal solution for large installations with proper balancing. To install the R586SEP manifolds in series, use the special R20DY016 3-piece fittings.





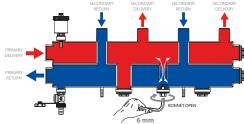
R586SEY03



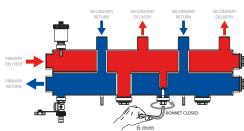
Multifunction boiler room manifold, steel made, with hydraulic separator function and connections for primary and secondary circuits. Equipped with automatic air vent valve, drain cock and insulation shell.

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

R586SEP can be used both as a basic boiler room manifold and hydraulic separator, based on the installation requirements. On the manifold lower side is an adjustment bonnet (components - ref. 5) to mechanically activate or deactivate the hydraulic separator function. Open the bonnet completely with a 6 mm Allen wrench to put the delivery and return circuits in communication and transform it into a hydraulic separator to balance the secondary side flow, if required.



Close the bonnet completely to interrupt the communication path between delivery and return circuits and transform R586SEP back into a boiler room manifold.



# R588SEP

PRODUCT CODE SIZE	R588SEY01	-	1	-
	PRODUCT CODE	SIZE	o	

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



# **R147N**

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

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



# R284-1

R284Y021	26/19	1	30
PRODUCT CODE	SIZE	ð	$\blacksquare$

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.



# R<sub>2</sub>ODL

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

Three pieces adaptor with self-sealing.



# R19DL

PRODUCT CODE	SIZE		
R19DY016	1 1/4"	2	20

Angle fitting in three pieces with flat seat and self-sealing at male thread.



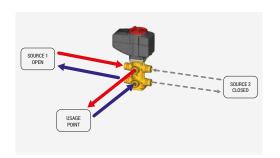


# Zone and mixing valves

# **R274C**

PRODUCT CODE	SIZE	ð	$\blacksquare$
R274CY003	G 1/2"M	1	10







Compact 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: 16 bar.

Valve closed with stem in 45° position.

The 40 mm center distance between inlet and outlet provides direct connection to the fan coils.

## (i) INFO

#### Optional:

- K274Y072: 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.
- R254PY102, R254PY112: ball valves to connect the system pipes.

# **R274N**

PRODUCT CODE	SIZE		
R274Y033	G 1/2"M	1	20
R274Y133	G 1/2"M (DZR brass)	1	20
R274Y045	G 1"M	1	10
R274Y145	G 1"M (DZR brass)	1	10



# (i) INFO

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

- K274Y052: 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.
- R254PY102, R254PY112: ball valves to connect the system pipes.
- R274WY002: insulation.

Optional for R274Y045, R274Y145 (1"):

- K274Y052: 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, P15FY004, P15FY005: fittings to connect the system pipes.
- R274WY001: insulation.

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.



#### **⊙** VIDEO

Scan the QR-Code with a smartphone or tablet to view the video-tutorial



					OPTIONAL	
PRODUCT CODE	SIZE	VALVE BODY MATERIAL	CALIBRATED WASHERS	ACTUATOR	INSULATION	FITTINGS
R274CY003	G 1/2″M	CW617N	P21SY001 ÷ P21SY006	K274Y072	-	RM179Y053 (1/2"F x 16x2) RM179Y056 (1/2"F x 20x2) P15FY013 (1/2"F x 1/2"F) P15Y018 (1/2"F x 1/2"M) R254PY102 (1/2"F x 1/2"M) red R254PY112 (1/2"F x 1/2"M) blue
R274Y033	G 1/2"M		P21SY001 ÷ P21SY006	K274Y052 K274Y072	R274WY002	RM179Y053 (1/2"F x 16x2) RM179Y056 (1/2"F x 20x2)
R274Y133	G 1/2"M	CW602N DZR	P21SY001÷P21SY006	K274Y052 K274Y072	R274WY002	P15FY013 (1)'2"F x 1/2"F) P15Y018 (1/2"F x 1/2"M)
R274Y045	G 1″M	CW617N	P21SY011 ÷ P21SY018	K274Y052 K274Y072	R274WY001	RM179Y073 (1"F x 26x3) RM179Y074 (1"F x 32x3) RM252Y003 (1"F x RM16x2) RM252Y004 (1"F x RM20x2)
R274Y145	G 1″M	CW602N DZR	P21SY011 ÷ P21SY018	K274Y052 K274Y072	R274WY001	R252Y023 (1"F x 1/2"M) / R252Y025 (1"F x 18) P15Y015 (1"F x 1/2"M) P15Y016 (1"F x 3/4"M) P15Y017 (1"F x 1"M) P15FY004 (1"F x 3/4"F RP, EN 10226) P15FY005 (1"F x 1"F RP, EN 10226)

# **P21S**

## FOR R274N, R274C SIZE 1/2"

PRODUCT CODE	SIZE		$\blacksquare$
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, R274C six-way zone valves.

#### (i) INFO

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

# **R274W**

PRODUCT CODE	SIZE	ā	
R274WY001	1"	1	-
R274WY002	1/2"	1	-

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

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

Couple of brass tail pieces, male threaded, with nut and gasket, for the connection of R274N, R274C six-way zone valves.

# **P15F**

**P15M** 

PRODUCT CODE	SIZE	ð	$\oplus$
P15FY013	1/2"F x 1/2"F	5	50
P15FY004	1"F x 3/4"F	1	50
P15FY005	1"F x 1"F	1	50

Couple of brass tail pieces, female threaded, with nut and gasket, for the connection of R274N, R274C six-way zone valves.



# **R295**

R295Y001	11/2"	1	10
PRODUCT CODE	SI7F	П	A

Four-way mixing valve male-female connections.

Centre distance: 120 mm.

#### (i) INFO

To be completed with K274 or K275 actuator.



# **R296**

R296Y001	1 1/2"	1	
PRODUCT CODE	SIZE	o	

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	o	
R197PY001	1 1/4" x 1 1/2"	10	100

Fitting for horizontal installation of R295, R296 mixing valves.



# **R297**

PRODUCT CODE

#### THREADED CONNECTIONS

R297Y004	3/4"	1	-
R297Y005	1"	1	-
R297Y006	1 1/4"	1	-
R297Y007	1 1/2"	1	-
R297Y008	2"	1	-
FLANGED CONNECTIO	NS		
PRODUCT CODE	SIZE		$\blacksquare$
R297Y105	DN50	1	-
R297Y106	DN65	1	-
R297Y108	DN80	1	-
R297Y110	DN100	1	-

Sector mixing valve female-female threaded or flanged connections.

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

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**

R298Y027	11/2"	1 -
PRODUCT CODE	SIZE	o 🖽

Three-way mixing valve male-female flat seat connections.

Centre distance: 120 mm. M30 x 1,5 mm actuator connection.

(i) INFO

To be completed with K281 or K282 actuator.

**R279** 

PRODUCT CODE

R279Y004

R279Y005

(i) INFO

To be completed with K270 or K272 actuator.



# **R298N**

PRODUCT CODE	SIZE		$\Box$
R298Y024	3/4"	1	-

Three-way mixing valve female-female connections.

M30 x 1,5 mm actuator connection.

To be completed with K281 or K282 actuator.



# **R276**

PRODUCT CODE	SIZE	ā	$\blacksquare$
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.

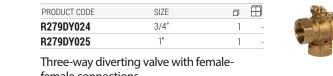


# **R279D**

female connections.

(i) INFO

To be completed with K270 or K272 actuator.



SIZE

3/4"

1"

Three-way zone valve with female-female

connections, with lockshield for adjustment.

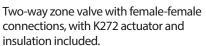
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25

# **R276B**

PRODUCT CODE	SIZE	o <b>8</b>
R276BX006	1 1/4" - 230 V	1 -
R276BX007	1 1/2" - 230 V	1 -
R276BX008	2" - 230 V	1 -
R276BX026	1 1/4" - 24 V	1 -
R276BX027	1 1/2" - 24 V	1 -
R276BX028	2" - 24 V	1 -





# **R277**

PRODUCT CODE	SIZE	0	
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	
R291Y004	3/4"	1	10
R291Y005	1"	1	10

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

**R291** 

To be completed with R473, R473M actuator.



# **R278**

PRODUCT CODE	SIZE	o (	Ħ
R278Y004	3/4"	1	10
R278Y005	1"	1	10

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

To be completed with K270 or K272 actuator.



# **R292**

PRODUCT CODE	SIZE	ā	
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.





# **R292E**

PRODUCT CODE	SIZE	o 🖽
R292EY004	3/4"	1 10
R292EY005	1"	1 10

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



To be completed with R473, R473M actuator.



# **R193K**

PRODUCT CODE	SIZE	o	$\oplus$
R193Y011	Ø18 - for R500 cabinets	1	50
R193Y021	Ø18 - for R500-2 cabinets	1	50

Connection kit for R278, R292, R292E zone valves.



# **P15E**

PRODUCT CODE	SIZE		$\blacksquare$
P15EY004	1" x 3/4"	1	15
P15EY005	1" x 1"	1	15

Eccentric tail piece.



# **P19**

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



Ring nut to change the connection of the mixing valves.

# **P275**

PRODUCT CODE	SIZE		
P275Y001	Kit for R297 flanged valves	1	-



Installation kit for K275/K275-1 actuators on R297 flanged valves.

# Electrical actuators

# **R473**

PRODUCT CODE	SIZE	ð	$\oplus$
R473X221	230 V	1	25
R473X222	24 V	1	25

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



# **R473M**

PRODUCT CODE	SIZE	ō	$\oplus$
R473MX221	230 V	1	25
D/72MV222	24.1/	1	25

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



# **K281**

PRODUCT CODE	SIZE		
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	-
K281X062	24 V - 0÷10 V	1	



Actuator for R298 or R298N mixing valves, R206A, R206AM PICV, R280K compact preassembled kit for terminal units. Operation in combination with Giacomini thermoregulation. M30 x 1,5 mm connection.

- K281X012: actuator for valves R298, R298N, R280K. Power supply 24 V. Version 0÷10 V.
- K281X022: actuator for valves R298, R298N, R280K. 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.
- K281X062: actuator for valves R206A. Power supply 24 V; Version 0÷10 V.

# **K282**

PRODUCT CODE	PRODUCT CODE SIZE		$\oplus$
K282X022	24 V - 3 point floating	1	-

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



# **K270**

PRODUCT CODE	SIZE	ā	
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.



# **K272**

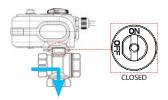
PRODUCT CODE	SIZE	o 🖽
K272Y101	230 V	1 -
K272Y102	24 V	1 -

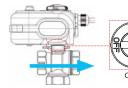


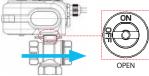
Actuator for R276, R277, R278, R279 zone valves and R279D diverting valve. With stroke-end microswitch and handwheel for manual operation. 90° rotation in around 60 seconds.

#### (i) INFO

Actuator used also in R276B valves.







# K274-2

PRODUCT CODE	SIZE	O	$\blacksquare$
K274Y052	24 V /0-10 V (CE, UL)	1	-
K274Y072	24 V /0-10 V (CE)	1	-

Actuator for R274N, R274C six-way zone valves. Automatic or manual operation by handwheel. Power supply 24 V - 0-10 V.



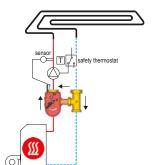
K274Y072

# **K275**

PRODUCT CODE	SIZE		$\blacksquare$
K275Y002	24 V / 230 V	1	-

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





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

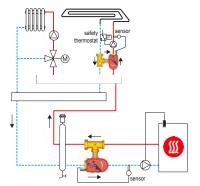
# **K274**

PRODUCT CODE	SIZE	Ō	$\blacksquare$
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.



### 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.



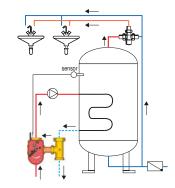
Tank to heat the drinking water Maintain a constant water temperature inside the hot water tank.

# K275-1

PRODUCT CODE	SIZE		$\blacksquare$
K275Y011	230 V - 3-point floating	1	-
K275Y013	24 V - 0-10 V	1	-

Actuator for R296 or R297 mixing valves.





		<b>9</b>								
	K275	K275-1	K274	K281	K282	K274-2	K272	K270	R473	R473M
	✓	<b>√</b>								
R297										
R298				✓	✓					
R298N				✓	✓					
R296	✓	✓	✓							
n290						<b>√</b>				
D074N										
R274N										
							✓	✓		
R276										
							✓	✓		
R277										
							✓	<b>√</b>		
R278										
							✓	✓		
R279										
									✓	✓
R291										
									✓	<b>✓</b>
R292										



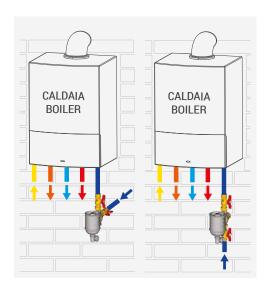
# Dirt and hydraulic separators

# **R146C**

PRODUCT CODE	SIZE	a	$\blacksquare$
R146CX004	3/4"M	1	10
R146CX005	1"M	1	10

# KIT DIRT-SEPARATOR + BALL VALVE + ADJUSTABLE TAIL PIECE

R146CKX004	3/4"M (kit)	-	10
PRODUCT CODE	SIZE		







© VIDEO Scan the QR-Code with a smartphone or tablet to view the 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.

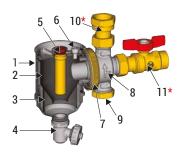
#### (i) INFO

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)
- R176PY018: adjustable 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)



(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).













# A piece of life.





# **NEW R146C DIRT SEPARATOR.**

MAKE YOUR JOB EASIER, GIVE A LONGER LIFE TO YOUR BOILER.

No impurities. No worries. The innovative R146C dirt separator will change everything. Extremely compact, it makes installation and maintenance much easier, giving you a combined solution for cleaning your hydraulic system: classic inox filtration, magnetic action, cyclonic effect. The best supporter for your well-being. For your job and people's comfort. *Giacomini, a piece of life.* 





# **R146M**

## THREADED CONNECTIONS

PRODUCT CODE	SIZE	o 🖽
R146MY014	3/4"	1 -
R146MY015	1"	1 -
R146MY016	11/4"	1 -
R146MY017	1 1/2"	1 -
R146MY018	2"	1 -



PRODUCT CODE	SIZE	o 8
R146MY105	DN50	1
R146MY106	DN65	1
R146MY108	DN80	1
R146MY110	DN100	1
R146MY112	DN125	1
R146MY115	DN150	1

#### 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.





Magnetic dirt separator with female threaded connections (insulation optional) or flanged connections (with insulation).

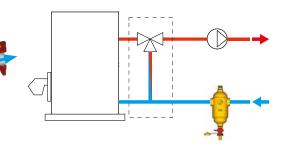
Equipped with magnet holder housing, P146M magnetic kit, drain cock, filter and gaskets.

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)



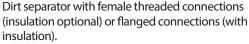
# **R146D**

# THREADED CONNECTIONS

SIZE	o 8	8
3/4"	1	-
1"	1	-
3/4"	1	-
1"	1	-
11/4"	1	-
1 1/2"	1	-
2"	1	_
	3/4" 1" 3/4" 1" 11/4" 11/2"	3/4" 1 1" 1 3/4" 1 1" 1 11/4" 1 11/2" 1







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.

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)



SIZE	a É	B
DN50	1	-
DN65	1	-
DN80	1	_
DN100	1	-
DN125	1	-
DN150	1	_
	DN50 DN65 DN80 DN100 DN125	DN50 1 DN65 1 DN80 1 DN100 1 DN125 1















# **R146I**

## THREADED CONNECTIONS

PRODUCT CODE	SIZE	o 🖽
R146IY005	1"	1 -
R146IY006	11/4"	1 -
R146IY007	11/2"	1 -
R146IY008	2"	1 -



PRODUCT CODE	SI7F	a A	7
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.

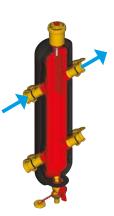
#### (i) INFO

# 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.



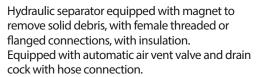
# **R146IM**

#### THREADED CONNECTIONS

PRODUCT CODE	SIZE		
R146IM005	1"	1	-
R146IM006	1 1/4"	1	-
R146IM007	1 1/2"	1	-
R146IM008	2"	1	-







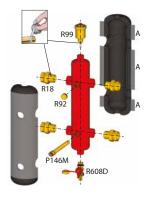
#### (i) INFO

# 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.



# (i) INFO

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.

#### FLANGED CONNECTIONS

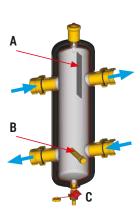
PRODUCT CODE	SIZE	o	
R146IM105	DN50	1	-
R146IM106	DN65	1	-
R146IM108	DN80	1	-
R146IM110	DN100	1	-
R146IM112	DN125	1	-
R146IM115	DN150	1	-













# P146C

## FOR DIRT SEPARATORS WITH NEW RED MAGNET

PRODUCT CODE	SIZE		
P146CY002	3/8" - Length 81 mm	1	-
P146CY012	3/8" - Length 81 mm	1	-
FOR DIRT SEPAR	RATORS WITH OLD TYPE MAGNET		
PRODUCT CODE	SIZE	O	
P146CY003	3/8" - Length. 63 mm + housing	1	-
P146CY012	3/8" - Length 81 mm	1	-
P146CY001	3/8" - Length 51 mm *	1	-
P146CV011	3/8" - Length 81 mm *	1	_

#### Magnetic kit for R146C dirt separator.

#### (i) INFO

P146CY002: for 3/4" R146C dirt separator P146CY012: for 1" R146C dirt separator P146CY003: for 3/4" R146C dirt separator (brass housing included)

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

R176P-1

Adjustable fitting with nut.

PRODUCT CODE

R176PY018

# P146M



P146CY001 P146CY003







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

#### (i) INFO

FOR DIRT SEPARATORS

P146MY003: for all threaded dirt separators. P146MY103: for flanged dirt separators DN50, DN65, DN80. P146MY104: for flanged dirt separators DN100, DN125. P146MY105: for flanged dirt separators DN150 FOR HYDRAULIC SEPARATORS

P146MY002: for threaded hydraulic separators 1", 1 1/4". P146MY003: for threaded hydraulic separators 1 1/2", 2".

# **R142DP**

#### PRODUCT CODE SI7F o 🖽 R142DX003

Polyphosphate proportioner with integrated automatic by-pass. Temperature range: 5÷30 °C. Max. working pressure: 7 bar. Max. flow rate: 20 l/min. Inlet/outlet adjustable brass fitting.



Polyphosphate proportioner R142DP provides a strong antilimestone action for water hardness up to approx. 25/30°f. For higher values we recommend combining a water softener to the proportioner.

# **R73D**

PRODUCT CODE SIZE	R73DY001	For R146C	10	40
	PRODUCT CODE	SIZE	ā	$\oplus$

SI7F

3/4"F x 3/4"F

Maintenance wrench for R146C dirt separator.



 $\blacksquare$ 

30

# P142

PRODUCT CODE	SIZE	a	
P142X003	For R142DP 1/2"	1	12

Kit of 5 replacement cartridges for R142DP.



# **R701**

R701X013	G 1/2"M x G 3/4"M	10	100
PRODUCT CODE	SIZE		$\blacksquare$

Drain cock for R146C dirt separator.



# **R143N**

PRODUCT CODE SIZE	
PRODUCT CODE SIZE	

Acid condensate neutralizer for condensation boilers; including first recharge, straight and 90° curve hose connections (3/4"x Ø20 mm) for various installation needs, two support brackets with screw anchors and boiler anti-block system. Room temperature range: 1÷50 °C. Max. flow rate: 3 l/h.



# **R146W**

# INSULATION FOR THREADED R146D R146M

INSULATION FUR IT	KEADED KI40D, KI40W		
PRODUCT CODE	SIZE		
R146WY001	3/4" - 1"	1	
R146WY002	1 1/4" - 1 1/2"	1	
R146WY003	2"	1	-
INSULATION FOR R1	46C		
PRODUCT CODE	SIZE		
D146WV504	2///"	1	

Insulation for R146D, R146M and R146C threaded dirt separators. Thickness 20 mm, density 30 kg/m<sup>3</sup>, thermal conductibility 0,038 W/m K, fire reaction class B2.



# P143

PRODUCT CODE	SIZE	♬	
P143X004	For R143N 3/4"	1	24

Recharge kit for condensate neutralization R143N.



**CHAPTER 7** 



<sup>\*</sup> Last in production

# Protect the quality of your system and your work





Radiant

Energy Management



▲ Brand new non-acid products to protect system materials and the environment.

▲ Easy to use and measure: 1 liter for 100 liters of system water.

# **K375**



PROTECT-UNIVERSAL is a special and fullyorganic rust and scale inhibitor, suitable for high and low temperature systems, radiant panels and combined hot/cold circuits. It prevents precipitation of calcium carbonate and is an excellent dispersing agent with low-solubility salts such as sulphates, calcium oxalates and magnesium hydroxide.



# **K380**

PRODUCT CODE	SIZE	ā	
K380Y001	11	1	18

CLEAN is a neutral, quick and effective cleaning product for heating systems. It can also be used to flush radiant panel systems. Used in new systems, it removes machining debris, oil, grease, corrosive substances or start-up deposits of different types.



# **K381**

K381Y001	11	1	18
PRODUCT CODE	SIZE	ā	

REMOVE-RAPID Non-acid concentrated product for removal of scales, dirt and oxides in heating systems. Removes iron debris and scales from heat exchangers, radiators and pipes. Also suitable for flushing radiant panel systems. Effective as dispersant and complexing agent and, thanks to its neutral formula (suitable also in presence of aluminum components), it does not require neutralization. Contains rust inhibitors.



# K382

PRODUCT CODE	SIZE	a	
K382Y001	11	1	9

2IN1 Special non-acid descaling, sludge removal, cleaning, anti-corrosion and sanitizing fluid. Suitable for high and low temperature circuits, radiant panels and combined hot/cold circuits. Pour the product in the system to be cleansed and protected, then allow to act. No need to drain the system like traditional sludge removal product. Use with a dirt separator. This is a double-action product: sludge removal, dispersing and sanitizing action; PROTECTS: rust and limestone inhibitor.





# Safety devices

# **R140**

PRODUCT CODE	SIZE		A
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	-	-
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	1 1/4" - 2,5 bar	1	10
R140Y063	1 1/4" - 3 bar	1	10
R140Y065	11/4" - 3,5 bar	1	10
R140Y066	1 1/4" - 4 bar	1	10
R140Y067	11/4" - 4,5 bar	1	10
R140Y068	1 1/4" - 5 bar	1	10
R140Y069	1 1/4" - 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.

# **R140M**

PRODUCT CODE	SIZE	O	$\Box$
R140MY003	1/2" - 3 bar	1	25
R140MY009	1/2" - 6 bar	1	25

Membrane safety valve, male-female connections.

Use with hot/cold water, air. Temperature range: 5÷110 °C. Nominal pressure: 10 bar.



# **R140PT**

PRODUCT CODE	SIZE		
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.

# **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.



# R140C-1

PRODUCT CODE	SIZE	ā	
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.



# **R554E**

PRODUCT CODE	SIZE	ð	
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.



# **R554F**

R554FY001	1"	1	10
PRODUCT CODE	SIZE		

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.





# **R554P**

R554PY005	1"	1	10
PRODUCT CODE	SIZE		

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.



# **R141**

PRODUCT CODE	SIZE	ā	$\square$
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	11/2" x 11/2"	2	20

Brass relief funnel.



# **K374**

PRODUCT CODE	SIZE		
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	-

Pressure switch.

#### (i) INFO

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).



# **K500**

PRODUCT CODE	SIZE	ā	
K500Y002	1"	1	15

Flow switch for pipes from DN25 to DN200. Protection degree: IP65 Max. working pressure: 10 bar Max. working temperature: 110 °C.



K374Y001 - K374Y002

K374Y003 - K374Y004

# **R141C**

PRODUCT CODE	SIZE		$\blacksquare$
R141CY004	3/4" x 3/4"	1	20
R141CY005	1" x 1"	1	20
R141CY006	1 1/4" x 1 1/4"	1	10

90° elbow brass relief funnel.

# **K3731**

PRODUCT CODE	SIZE	ō	$\Box$
K373Y013	-	1	-
K373Y021	1/2"M	1	-
K373Y022	1/2"M	1	-
K373Y023	1/2"M	1	-

Safety thermostat INAIL approved.

#### (i) INFO

K373Y013: contact regulation thermostat. Temperature regulation: 20÷90 °C.

K373Y021: immersion regulation thermostat. Temperature regulation: 0÷90 °C. Max. working pressure: 10 bar. Bulb length: 97 mm. Housing (included): 1/2"NPT-M; length 100 mm.

K373Y022: immersion safety and regulation bi-thermsotat, with manual reset. Temperature regulation: 0÷90 °C Safety limitation: factory set 100 °C. Max. working pressure: 10 bar. Bulb length: 97 mm. Housing (included): 1/2"NPT-M; length 100 mm.

K373Y023: immersion safety thermostat, with manual reset. Safety limitation: factory set 100 °C. Max. working pressure: 10 bar. Bulb length: 97 mm. Housing (included): G 1/2"M; length 100 mm.







K373Y022





# **R227**

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

Thermometer brass housing.



# **R228I**

R228IY003	1/2"	1	5
R228IY001 R228IY002	3/8"	1	5
PRODUCT CODE	SIZE	0	Щ

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





# **R228A**

PRODUCT CODE	SIZE	o 🖽
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.



# **R226**

PRODUCT CODE	SIZE	đ	$\blacksquare$
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.



# **R225I**

PRODUCT CODE	SIZE	ð	
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) INEC

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



# **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.









 $\triangle$  WARNING We recommend installing an interception valve before the filling group to clean and service of the cartridge and filter.

# **R5401**

PRODUCT CODE	SIZE		$\blacksquare$
R540IY001	1/2"	1	-
R540IY002	1/2"	1	-
R540IY003	1/2"	1	-

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

### (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	SI7F	П	A

Female x male filling valve, plastic coated tail piece.



# **R540**

PRODUCT CODE	SIZE	ð	$\blacksquare$
R540Y002	3/8" - 0÷80 °C - Ø40 mm	1	-
R540Y003	1/2" - 0÷120 °C - Ø61,5 mm	1	-
R540Y021	3/8" - 0÷120 °C - Ø40 mm	1	-

Thermometer, back connection.



# **R150**

PRODUCT CODE	SIZE		
R150Y103	1/2"	1	25

Female x female filling valve.



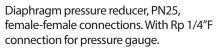
**CHAPTER 7** 



# Water controls

# **R153M**

PRODUCT CODE	SIZE		$\blacksquare$
R153MY003	1/2"	1	-
R153MY004	3/4"	1	-
R153MY005	1"	1	-
R153MY006	1 1/4"	1	-
R153MY007	1 1/2"	1	-
R153MY008	2"	1	-





# R156-1

PRODUCT CODE	SIZE		
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.



# **R153MK**

PRODUCT CODE	SIZE	Ō	
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.



# **R153C**

PRODUCT CODE	SIZE	ō	$\Box$
R153CX003	1/2"	1	-
R153CX004	3/4"	1	-

Piston pressure reducer, PN16, female-female connections. With Rp 1/4"F connection for pressure gauge.



# R156-2

PRODUCT CODE	SIZE		
R156Y223	1/2" - Kv 1,3	1	10
R156Y224	3/4" - Kv 1,4	1	10
R156Y225	1" - Kv 5,0	1	10
R156Y226	1 1/4" - 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.

SIZE 3/4"

Temperature limiter for heating and/or

Automatically controls the temperature of the water flowing through the valve and ensures thermal balance throughout the

domestic hot water systems.

Adjustment range: 35÷65 °C.

With anti-scalding function. Temperature range: 30÷65 °C.



# **R153P**

SIZE		Ш
1/2"	1	-
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

Piston pressure reducer, PN25, female-female connections. With Rp 1/4"F connection for pressure gauge.



# **R225**

hydraulic system.

**R158A** 

PRODUCT CODE

R158AY004

PRODUCT CODE	SIZE	ā	
R225Y001	1/4" 0÷6 bar	1	100
R225Y002	1/4" 0÷10 bar	1	100
R225Y012	1/4" 0÷10 bar	1	100

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



R225Y001, R225Y002: back connection R225Y003: radial connection

# R156

PRODUCT CODE	SIZE	ð	
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.







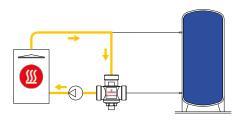
# Components for biomass systems

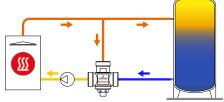
# **R157A**

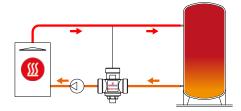
1" CONNECTIONS			
PRODUCT CODE	SIZE	ā	
R157AY051	1" (45 °C)	1	-
R157AY052	1" (55 °C)	1	-
R157AY053	1" (60 °C)	1	-
R157AY054	1" (70 °C)	1	-
1 1/4" CONNECTIONS			
PRODUCT CODE	SIZE	a	
R157AY061	1 1/4" (45 °C)	1	-
R157AY062	1 1/4" (55 °C)	1	-
R157AY063	1 1/4" (60 °C)	1	-
R157AY064	1 1/4" (70 °C)	1	



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







# **R144ST**

PRODUCT CODE	SIZE	o 🖽
R144SY001	3/4"	1 -

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

Max. working pressure: 10 bar.

## (i) INFO

WARNING: PRODUCT INSTALLATION IN ELECTRICAL OR ELECTRONIC EQUIPMENT (EEE)
The product can be installed only if the EEE - Electrical and/or Electronic Equipment - is excluded or not falling within the scope of Directive 2011/65/EU according to the provisions at point e) of par. 4 of art. 2 of the Directive itself, as a product intended for large fixed installations.

# PI R

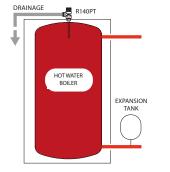
# **R140PT**

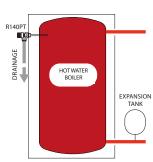
PRODUCT CODE	SIZE		
R140PY021	1/2" x Ø15 mm (4 bar)	1	-
R140PY026	1/2" x Ø15 mm (7 bar)	1	-
R140PY031	3/4" x Ø22 mm (4 bar)	1	-



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.





# R140PT-1

PRODUCT CODE	SIZE	ō	
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.



# **R158**

PRODUCT CODE	SIZE	o <b>=</b>
R158Y001	3/4"	1 -

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

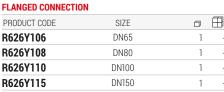




# Backflows, filters, check valves

# **R626**

THREADED CONNECTION			
PRODUCT CODE	SIZE	ō	$\blacksquare$
R626Y003	1/2"	1	-
R626Y004	3/4"	1	-
R626Y005	1"	1	-
R626Y006	1 1/4"	1	-
R626Y007	11/2"	1	-
R626Y008	2"	1	-
FLANGED CONNECTION			
PRODUCT CODE	SIZE	-	Ф



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).





# **R74M**

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

Magnetic Y-filter, brass finishing. Max. working temperature: 90 °C. Max. working pressure: 30 bar.

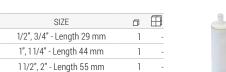


# **P74M**

PRODUCT CODE	SIZE	ō	$\oplus$
P74MY001	1/2", 3/4" - Length 29 mm	1	-
P74MY002	1", 1 1/4" - Length 44 mm	1	-
P74MY003	1 1/2", 2" - Length 55 mm	1	-

Magnetic kit for R74A and R74M filters.

P74MY001: for R74A and R74M filters of 1/2" and 3/4". P74MY002: for R74A and R74M filters of 1" and 1 1/4". P74MY003: for R74A and R74M filters of 1 1/2" and 2".



# **R623**

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

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



# **R60**

# PLATE IN POLYMERIC MATERIAL

PRODUCT CODE	SIZE		
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).

## (i) INFO

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")

# R624

PRODUCT CODE	SIZE	ð	$\blacksquare$
R624Y003	1/2" - drain 1/2"F	1	20
R624Y004	3/4" - drain 1/2"F	1	25

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



# **R74A**

# NOT MAGNETIZABLE VERSION

PRODUCT CODE	SIZE	ō	$\blacksquare$
R74AY009	2 1/2"	1	9
R74AY010	3"	1	6
R74AY011	4"	1	2

# MAGNETIZABLE VERSION

PRODUCT CODE	SIZE	0	$\blacksquare$
R74AY103	1/2"	1	10
R74AY104	3/4"	1	5
R74AY105	1"	1	5
R74AY106	1 1/4"	1	4
R74AY107	1 1/2"	1	4
R74AY108	2"	1	2

Y-filter, brass finishing.



## (i) INFO P74MY001: for R74A and R74M

filters of 1/2" and 3/4". P74MY002: for R74A and R74M filters of 1" and 1 1/4". P74MY003: for R74A and R74M filters of 1 1/2" and 2".



# **R701F**

# **UNI EN 12165 CW617N BRASS**

PRODUCT CODE	SIZE	ð	$\blacksquare$
R701FY023	G 1/2"F	1	25
R701FY024	G 3/4"F	1	25
R701FY025	G 1"F	1	14
UNI EN 12165 CW602	N BRASS "DZR"		
PRODUCT CODE	SIZE	ð	$\blacksquare$
R701FY112	Rc 3/8"	1	25
R701FY112 R701FY113	Rc 3/8"	1	25 25



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

# **N5**

PRODUCT CODE	SIZE	Ð	$\oplus$
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.

**P36S** 

FOR R74A NOT MAGN	ETIZABLE		
PRODUCT CODE	SIZE		
P36SY003	1/2"	1	-
P36SY004	3/4"	1	-
P36SY005	1"	1	-
P36SY006	1 1/4"	1	-
P36SY007	1 1/2"	1	-
P36SY008	2"	1	-
P36SY009	2 1/2"	1	-
P36SY010	3"	1	-
P36SY011	4"	1	-
FOR R74A MAGNETIZ	ABLE AND R74M		
PRODUCT CODE	SIZE	a	
P36SY103	1/2"	1	-
P36SY104	3/4"	1	-
P36SY105	1"	1	-
P36SY106	1 1/4"	1	-
P36SY107	1 1/2"	1	-

Filter cartridge for R74A and R74M filters.

2"



# P36-1

P36SY108

PRODUCT CODE	SIZE	o	
P36Y013	G 1/2"F	12	300
P36Y014	G 3/4"F	10	250
P36Y015	G 1"F	8	200

Filter cartridge for R701F valves.



# **N6**

PRODUCT CODE	SIZE	ð	$\blacksquare$
N6Y003	1/2"	1	-
N6Y004	3/4"	1	-
N6Y005	1"	1	-
N6Y006	1 1/4"	1	-
N6Y007	11/2"	1	-
N6Y008	2"	1	-
N6Y009	2 1/2"	1	-
N6Y010	3"	1	-

Clapper check valve, metal seat, brass finish.





BACKFLOWS, FILTERS, CHECK VALVES

191

# Gate valves

# **R55**

PRODUCT CODE	SIZE	ð	$\oplus$
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"	-	-
R55Y009	2 1/2"	1	6
R55Y010	3"	1	3
R55Y012	4"	1	2



# **R54**

PRODUCT CODE	SIZE	ā	$\blacksquare$
R54Y004	3/4"	5	50
R54Y005	1"	4	20
R54Y006	1 1/4"	5	30

Brass gate valve, female-male connections.



# **R230**

PRODUCT CODE	SIZE	o	
R230Y005	Ø22	5	50
R230Y006	Ø28	4	20

Brass gate valve, welding connections.



# **P22C**

PRODUCT CODE	SIZE	a	
P22CY001	3/8" - 1/2"	1	-
P22CY002	3/4" - 1"	1	-
P22CY003	1 1/4"	1	-
P22CY004	1 1/2"	1	-
P22CY005	2"	1	-
P22CY008	2 1/2" - 3"	1	-

Red handwheel for R54, R55, R230 gate valves.



# Automatic air vent valves

# **R88**

PRODUCT CODE	SIZE	ð	$\blacksquare$
R88Y001	1/4"	1	100
R88Y002	3/8"	1	100

Automatic air vent valve, brass finish.



# **R991**

PRODUCT CODE	SIZE	0	
R99IY002	3/8"	1	1
R99IY003	1/2"	1	50

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



# **R88I**

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

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



# **R160**

PRODUCT CODE	SIZE	o <b>A</b>
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.



# **R99**

PRODUCT CODE	SIZE	5	$\blacksquare$
R99Y001	1/4"	1	50
R99Y002	3/8"	1	50
R99Y003	1/2"	1	50

Automatic air vent valve, brass finish.



# **R99S**

PRODUCT CODE	SIZE		
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	ð	
R252Y001	1"F x 1 1/2"F nut	2	50
R252Y002	1 1/4"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**

SIZE	ā	
1" x 1/2"	30	-
11/4" x 3/4"	25	-
1 1/2" x 1"	25	-
2" x 1 1/4"	10	-
	1" x 1/2" 1 1/4" x 3/4" 1 1/2" x 1"	1" x 1/2" 30 11/4" x 3/4" 25 11/2" x 1" 25



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

# **R39**

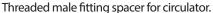
PRODUCT CODE	SIZE		
R39Y001	1 1/2" x 1"	2	50





# **R197**

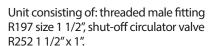
PRODUCT CODE	SIZE	ō	
R197Y001	130 mm	1	50
R197Y002	180 mm	1	36



# m 1 50 m 1 36

# **R197M**

PRODUCT CODE	SIZE		
R197MY001	130 mm	1	10
R197MV002	180 mm	1	10





# **R182AM**

PRODUCT CODE	SIZE	o	
R182MY002	1 1/4"	1	10

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



# **R285L**

PRODUCT CODE	SIZE		
R285LY001	1"F x 1 1/2" nut connection	4	40
R285LY003	1 1/4"F x 2" nut connection	4	20

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



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		$\blacksquare$
R285Y001	1"F x 1 1/2" nut connection	4	40
R285Y002	11/4"F x 11/2" nut connection	4	20
R285Y003	1 1/4"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.

# **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.



# **R284**

PRODUCT CODE	SIZE	
R284Y001	3/4"	1 20

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





# **R284M**

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

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



# **R287M**

PRODUCT CODE	SIZE	đ	$\blacksquare$
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	O	
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 system components

# N1

## **NYLON GLASS AND INOX FILTER**

PRODUCT CODE	SIZE		
N1UY001	3/8"MM	1	20
N1Y001	3/8"FF	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.



# **N3**

PRODUCT CODE	SIZE		
N3Y001	3/8"FF	1	25
Oil filter.			



# N<sub>1</sub>UB

PRODUCT CODE	SIZE		$\oplus$
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		
N10Y002	3/8"	1	200
N10Y003	1/2"	1	100

Check valve for tank.

Nylon glass and inox filter.



# **N2**

PRODUCT CODE	SIZE	ā	$\Box$
N2Y001	3/8"FF	1	20

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



# **N12**

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

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





# **N14**

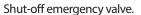
N14Y001	2" x 2"	1	50
PRODUCT CODE	SIZE	ð	

Tank plug with female connection.



# **N17**

PRODUCT CODE	SIZE	O	
N17Y002	3/8"	10	100
N17Y003	1/2"	10	100





# **N15**

PRODUCT CODE	SIZE	ō	$\blacksquare$
N15Y005	1"	1	150
N15Y006	1 1/4"	1	100
N15Y007	1 1/2"	1	50
N15Y008	2"	1	50

Air vent valve for tank.

# **P36**

P36Y001	-	1	-
PRODUCT CODE	SIZE	ā	

Filter insert stainless for N1, N2, N3.



# N16-1

PRODUCT CODE	SIZE	ō	$\blacksquare$
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.

WARNING: PRODUCT INSTALLATION IN ELECTRICAL OR ELECTRONIC EQUIPMENT (EEE)

The product can be installed only if the EEE - Electrical and/or Electronic Equipment - is excluded or not falling within the scope of Directive 2011/65/EU according to the provisions at point e) of par. 4 of art. 2 of the Directive itself, as a product intended for large fixed installations.

# **P78T**



# N16-2

PRODUCT CODE	SIZE		
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.

WARNING: PRODUCT INSTALLATION IN ELECTRICAL OR ELECTRONIC EQUIPMENT (EEE)

The product can be installed only if the EEE - Electrical and/or Electronic Equipment - is excluded or not falling within the scope of Directive 2011/65/EU according to the provisions at point e) of par. 4 of art. 2 of the Directive itself, as a product intended for large fixed installations.





**CHAPTER 7** 

# Solar thermal systems components

# R586S-0

PRODUCT CODE SIZE	R586SY002	3/4"	1	
	PRODUCT CODE	SIZE		

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.



# **KTDS**

KTDSY001	-	1	
PRODUCT CODE	SIZE		

PT1000 (180 °C) probe, for KTD electronic unit.



# **R586S**

PRODUCT CODE SIZE 🗇 🖽	R586SY001	3/4"	1	-
	PRODUCT CODE	SIZE	ð	$\blacksquare$

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.



# **GS556**

GS556Y001	-	1	-
PRODUCT CODE	SIZE	ā	

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



# P586S

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



# **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.



# 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. P586SY007: air separator for R586S 1 1/2"x1/2". P586SY008: R252 1 1/2"xØ22 (for solar system).

# **R99S**

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

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



# KTD

PRODUCT CODE	SIZE	o 🖽
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.



# R227-1

PRODUCT CODE	SIZE	ō	
R227Y003	1/2" x 6 mm	25	250

Probe housing.



# **KTDP**

KTDPY001	-	1	
PRODUCT CODE	SIZE	ð	

Protection device against overvoltage, for KTD electronic unit.



# R<sub>2</sub>OSC

PRODUCT CODE	SIZE		
R20SCY004	3/4"	10	100

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





# **R182**

PRODUCT CODE	SIZE	O	
R182Y006	3/4"F x 3/4"F x 3/4"M	5	50

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



# 316

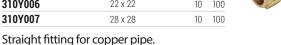
<b>316Y002</b> G 3/4"M x Ø 22 10 10				
<b>316Y001</b> G 1/2"M x Ø 15 25 25	316Y004	G 1"M x Ø 28	10	100
	316Y002	G 3/4"M x Ø 22	10	100
PRODUCT CODE SIZE 🗇 🖽	316Y001	G 1/2"M x Ø 15	25	250
	PRODUCT CODE	SIZE	a	

Elbow fitting, male threaded, for copper pipe. With metallic seal. Suitable for solar thermal systems. In compliance with EN1254-2 standard.



# 310

PRODUCT CODE	SIZE	O	$\blacksquare$
310Y004	15 x 15	20	200
310Y010	18 x 18	10	100
310Y006	22 x 22	10	100
310Y007	28 x 28	10	100





In compliance with EN1254-2 standard.

With metallic seal. Suitable for solar thermal



# 317

PRODUCT CODE	SIZE		$\blacksquare$
317Y001	G 1/2"F x Ø 15	25	250
317Y002	G 3/4"F x Ø 22	10	100
317Y004	G 1"F x Ø 28	5	50

Elbow fitting, female threaded, for copper pipe. With metallic seal. Suitable for solar thermal systems. In compliance with EN1254-2 standard.



# 311

SIZE	0	$\blacksquare$
1/2" x 15	25	250
1/2" x 18	20	200
3/4" x 18	20	200
3/4" x 22	10	100
1" x 28	10	100
	1/2" x 15 1/2" x 18 3/4" x 18 3/4" x 22	1/2" x 15 25 1/2" x 18 20 3/4" x 18 20 3/4" x 22 10

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

In compliance with EN1254-2 standard.



# 318

PRODUCT CODE	SIZE	o	
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

Tee fitting, for copper pipe.

With metallic seal. Suitable for solar thermal systems.

In compliance with EN1254-2 standard.



# 312

315

315Y001

315Y010

315Y003

315Y004

PRODUCT CODE

PRODUCT CODE	SIZE		$\blacksquare$
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

Straight fitting female thread, for copper pipe.

With metallic seal. Suitable for solar thermal

SIZE

15 x 15

18 x 18

22 x 22

28 x 28

o 

25 250

10 100

10 100

5 50

In compliance with EN1254-2 standard.



# **351**

PRODUCT CODE	SIZE		
351Y001	Ø 15	50	500
351Y002	Ø 22	25	250
351Y003	Ø 28	10	100

End fitting (plug), for copper pipe. With metallic seal. Suitable for solar thermal systems.

In compliance with EN1254-2 standard.



# **R189**

PRODUCT CODE	SIZE	ā	
R189Y004	3/4"	25	250
R189Y005	1"	20	200

Nipple with male-male threaded connections.

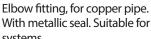


# **R564P**

PRODUCT CODE	SIZE	ō	
R564PY004	3/4"	1	25
R564PY005	1"	1	10

Tee fitting, flat seat male thread connections.





With metallic seal. Suitable for solar thermal systems.

In compliance with EN1254-2 standard.

