

A piece of life.

**FROM COMPONENTS TO INTEGRATED SYSTEMS:
GIACOMINI SOLUTIONS FOR THE UTMOST COMFORT.**



Our products give life to water, to provide useful services and well-being. That is why our motto is water e-motion: thanks to water, our components and systems help manage and create ideal solutions to make life better with a strong focus on energy efficiency. At home, in the office, at work: wherever water flows, may be hot or cold, Giacomini brings top quality Made in Italy products.

Giacomini, a piece of life.



PLIABLE SANITARY GIACOMINI DISTRIBUTION

Sanitary distribution, since the last years is becoming more and more important in engineering, because of the continuous research for innovative and comfortable solutions, able to satisfy the increasing needs of the customers looking for maximum comfort and conserving water.

The bathroom is now one of the most important rooms of the house equipped with expensive ceramics and components, which in order to be exploited to their best, require distribution systems to be functional and long-lasting.

In a modern system, dangerous soldering of pipes must be eliminated, as they always present the risk of cracking with discharge of water, and which, to be repaired require the breaking of coverings and ceramics, with great damage and problems for screening the repairs.

Pliable sanitary distribution presented by Giacomini, using cross link Polyethylene pipe, combined with proper fittings and distribution manifolds equipped with regulating lockshields, is the solution preventing all those maintenance problems, providing advantages which have never been guaranteed by any other distribution system.

ADVANTAGES :

1 Stability

Pipes remain clean for a long period, ensuring continuity of water flow, even when the system is not in continuous use, thus ensures 50 years of life with prescribed condition as per EN15785

2 Controlling the flow

Water flow to taps can be handled and proportioned as one likes, to avoid useless waste, optimizing the functioning of the tap.

When repairs are needed, it is possible to intercept the flow at the single connection without altering the functions of the remaining taps. In addition it is possible to select a more suitable diameter of pipe, to guarantee the best flow.

3 Pressure stability

With the use of sanitary distribution by manifolds, there is constant pressure to the connections, even when more taps are opened. This is a very important point for the correct operation of the mixing taps, and avoids the unpleasant drop of flow happening with different types of installations (for ex. in a traditional system, if the kitchen tap is opened while someone is taking a shower, water flow decreases, unbalancing the regulation of temperature)

4 Low noise

Pliable sanitary systems have a high level of acoustic protection. Cross link Polyethylene pipe and sleeve render the distribution silent, thanks to the lack of soldered connections creating turbulences in the flow.

5 Maintenance possibility

In case of accidental damage of the pipes, it is possible to replace without breaking walls and ceramics. This operation can easily be performed if, when placing the pipe, elementary rules have been followed.

6 Saving time

In order to carry out a pliable distribution, the time needed is less than one required for an other system. No special equipment is needed (soldering machines, tools, Glue etc.), with consequent saving of time and money.

7 System with total guarantee

When installing a pliable Giacomini system, a total guarantee of the installation is provided. All components (distribution manifolds, pipes, fittings, adaptors) have been developed with great care, to have perfect consistency and maximum sealing.

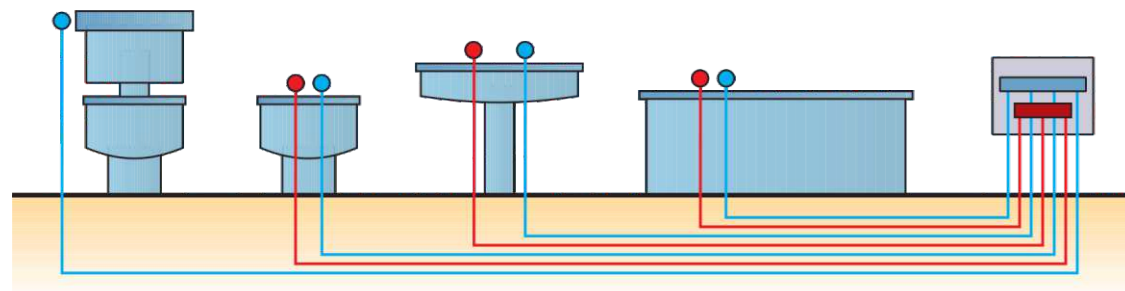
8 System designed with least no. of joints behind the wall.

9 Universal method of installation

TYPES OF INSTALLATIONS

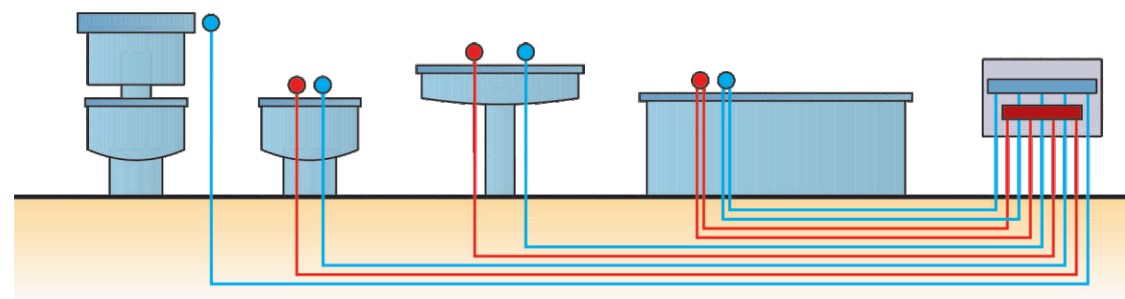
Distribution with single connections

This system is made by distribution manifolds equipped with the same number of connection as the connection to be used. Each tap is fitted to two pipes, one for hot and the other for cold water, directly to the manifold placed in the cabinet. Some advantages of this kind installation is the possibility to intercept the circuits for servicing (if a manifold with built in lockshields has been used), continuity and the best setting of the flow, and finally the possibility to use different diameters of pipe based on the requirement of the taps.



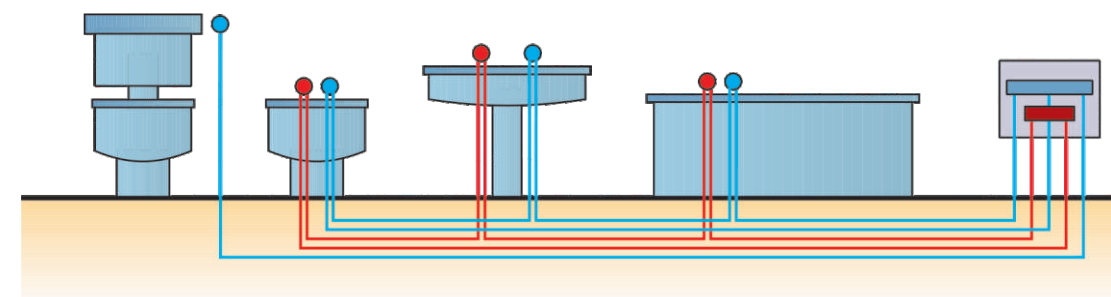
Large flow distribution

This kind of solution is widely used when the supply taps require large flows, i.e. hydro-massage basins, garden valves, connections for hotel kitchens or dining-rooms. It is carried out when pipes of small diameter have been used i.e. a pipe of 15x2.5 or 16x2.2. It is done using double fittings R544 with both connections fitted to the distribution manifold. In this way the distribution manifold. In this way the advantage is that the water goes to the fitting from two pipes, ensuring larger quantity and lower loss of pressure than with a single pipe of the same diameter.



Distribution with closed circuit and HWR / CWR line

In this case supply pipes are not individually connect to the manifold. There is only one pipe for hot water and one for cold water going through all the connections creating a closed circuit. This kind of distribution has the advantage of requiring a low amount of pipe, the best solution where retro! installations are concerned, or when the available space on the wall is limited. This installation is carried out using built in double fittings R544. It has the advantage of having balancing of the pressures, and allowing large flow rates to the taps. With this kind of installation, when carrying out maintenance, it is imperative to intercept the circuit with the lockshield, while single connection system, the interception is made on each supply.



INSTALLING A PLIABLE SYSTEM

Sequence of installation

1



Set Manifold Box location

2



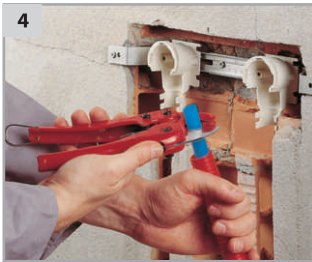
After selecting the required position on the wall for drains and pipes, proceed with the assembly of the fittings using the correct brackets.

3



Correct position of the connections is done using a sprit level.

4



For a correct positioning of the fittings, it is necessary the pipe is cut precisely and perpendicularly with cutters R990.

5



Tightening of the nut of the adaptors is easier when using the end piece R577 and key R131.

6



Once the pipe is cut with the right length, proceed with the connection to the manifold. Ends of the pipe are protected with the covers R998.

Replacement of a damaged pipe

1



Close the lockshield, untighten the nut of the adaptor and disconnect the pipe to be replaced.

2



Connect the new pipe to the damaged one with the GZ 102

R576



GZ 102



3



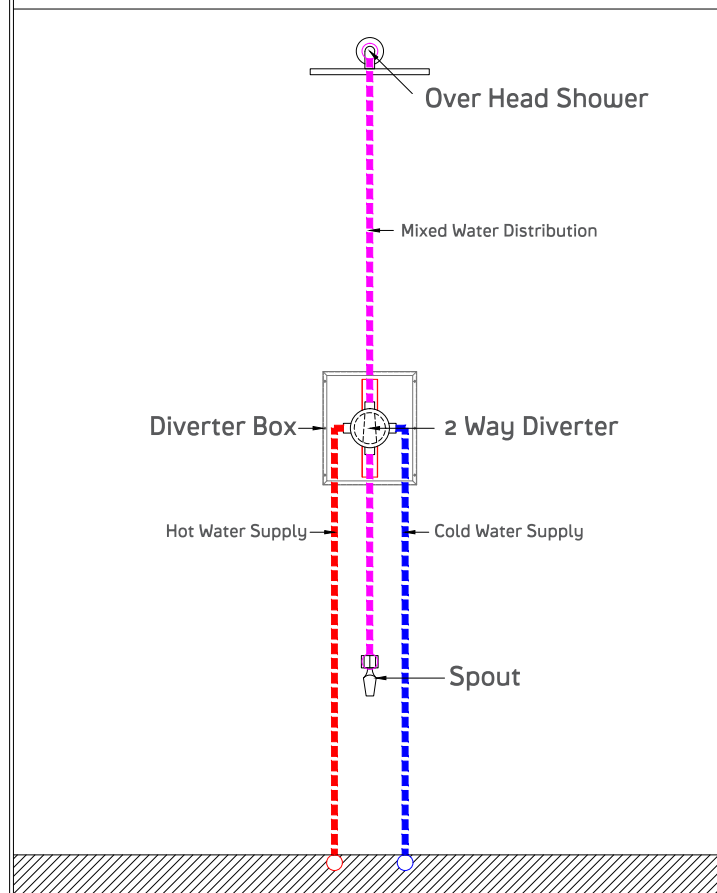
While the pipe is pulled out from the wall fitting side, insert the new pipe on the other side.

4



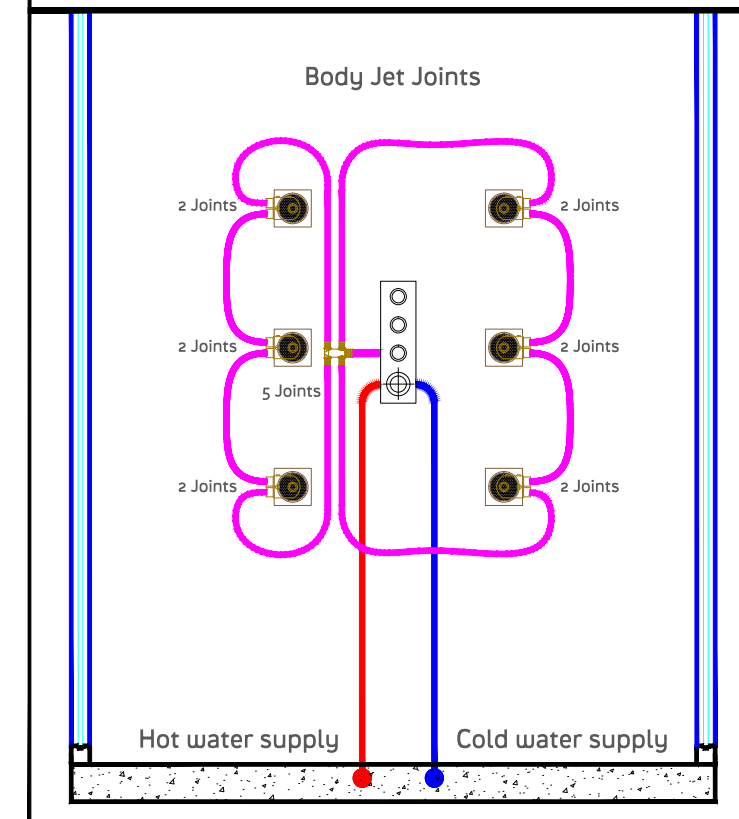
When replacement is over, re-open the lockshield and re-fit the cover of the cabinet.

Two way concealed Diverter Box for Shower Area



- 1) Assembled and Disassembled any period of time
- 2) Easy maintenance
- 3) Easy installation
- 4) Pipe can be replaced if any damaged occurs
- 5) Not obliged to install Diverter during plumbing works
- 6) Install Diverter just one day before possession.

PEX Piping system for Body Jet application only "17" joints



- 1) No pressure drop
- 2) Zero chances of leakage due to less number of joints
- 3) Customization in installation
- 4) Uniform flow
- 5) Flexible Piping

R 544



COMPRESSION SYSTEM

GZ996 Giacoquest pipe in cross linked polyethylene

	ITEM CODE	SIZE
	GZ996Y003	1/2"
	GZ996Y005	3/4"
	GZ996Y006	1"

R 985B Blue sleeve

	ITEM CODE	SIZE
	R985BY001	Ø25
	R985BY002	Ø30

R 985R Red Sleeve

	ITEM CODE	SIZE
	R985RY001	Ø25
	R985RY002	Ø30

R 585T Pair of end manifold, with bayonet connections, DN25 with interception valve

	ITEM CODE	SIZE
	R585TY104	3/4" x 16 x DN25
	R585TY105	1" x 16 x Dn25

R 585M Modular manifold, with bayonet connection, with interception valve

	ITEM CODE	SIZE
	R585MY105	Dn25 x 16

GZ179 Pex pipe adapter

	ITEM CODE	SIZE
	GZ179Y032	16x1/2"
	GZ179Y042	18x1/2"
	GZ179Y045	18x3/4"

R 180R Male Thread Adapter

	ITEM CODE	SIZE
	R180RY015	1/2"x16
	R180RY016	1/2"x18
	R180RY020	3/4"x16
	R180RY021	3/4"x18

R 562R Elbow male thread adaptor connections

	ITEM CODE	SIZE
	R562RY015	1/2"x16
	R562RY016	1/2"x18
	R562RY021	3/4"x18

R 573D Sanitary system connection, female-adaptor connections

	ITEM CODE	SIZE
	R573DY002	1/2"x16
	R573DY003	1/2"x18

R 578Z Bracket for R573D

	ITEM CODE	SIZE
	R578ZY001	

R 544 Double connection fitting for sanitary distribution

	ITEM CODE	SIZE
	R544Y002	1/2"x16
	R544Y003	1/2"x18

R 570R Tee M-adaptor-adaptor connections

	ITEM CODE	SIZE
	R570RY015	1/2"x16
	R570RY016	1/2"x18
	R570RY021	3/4"x18
	R570RY023	3/4"x22

R 592D Plug for manifolds, self-sealing

	ITEM CODE	SIZE
	R592Y004	3/4"
	R592Y005	1"

R 178R Adaptor for copper or plastic pipe

	ITEM CODE	SIZE
	R178RY011	16x18
	R178RY012	18x22

R 577D End piece for use during the assembly of R573D

	ITEM CODE	SIZE
	R577DY001	1/2"

R 998 End cap-for sleeve

	ITEM CODE	SIZE
	R998Y005	red
	R998Y006	blue

R 595 Plastic cabinet

	ITEM CODE	SIZE
	R595AY001	370 x 300 x 90 mm
	R595BY001	520 x 300 x 90 mm
	R595CY001	670 x 300 x 90 mm

R 584 Plastic cabinets

	ITEM CODE	SIZE
	R584EY001	335x280x85mm

R 598D Bracket for manifolds

	ITEM CODE	SIZE
	R598Y004	for 3/4" x 16 bar manifold

R990 Cutter for Ø16, 20, 25 mm plastic pipes

	ITEM CODE	SIZE
	R990Y001	Ø 0-25

R603 Ball valve with tail piece, female-male

	ITEM CODE	SIZE
	R603X103	1/2"
	R603X104	3/4"

R 585C Modular manifolds with stop valve

	ITEM CODE	SIZE
	R585CY062	3/4" x 1/2" /2 (adapt. Ø 16 mm)
	R585CY063	3/4" x 1/2" /3 (adapt. Ø 16 mm)
	R585CY064	3/4" x 1/2" /4 (adapt. Ø 16 mm)
Recommended use with GZ179Y062		

R 99 Automatic air vent valve

	ITEM CODE	SIZE
	R99Y001	1/4"
	R99Y002	3/8"
	R99Y003	1/2"

GZ 179 Pex pipe adaptor

	ITEM CODE	SIZE
	GZ179Y062	1/2" Eurocone x 1/2"
Recommended use with R585C		

R 564R Tee adaptor connections

	ITEM CODE	SIZE
	R564RY007	base 16
	R564RY008	base 18
	R564RY009	base 22
	R564RY010	base 28

R 93 Reducer male-female thread

	ITEM CODE	SIZE
	R93Y003	3/4" M x 1/2" F

OTHER GIACOMINI PRODUCTS



R 153P



R 156



R 55



R 850



R 851



R 613

“we are jointing experts”

Giacquest system

Is the answer to the needs of every plumber.

- Allowing easy installations.
- The technical innovations are useful provided that they are easy to be used.
- Providing quick installations.
- Time is money also when it comes to the point of making a complete installation.
- Reduced Water Hammering
- Freeze Damage Resistance.
- Prevention of Lime & Mineral Build-up.
- Elimination of Electrolysis (that causes pin holes in metallic pipes).
- No deterioration from low pH levels found in many wells.
- Requires less fittings, reducing potential for installation errors.
- It's light weight for easy handling.
- Offering pipes in the most common sizes familiar to every plumber: 3/8", 1/2", 3/4", 1".

Giacquest system has been designed by respecting:

- Brass used in Giacquest fittings is in accordance with European Norms EN 12164 (CW614N), EN 12165 (CW617N).
- The dimensional requirements contained in ASTM F876 standard for the pipe.
- The test requirements contained in EN ISO 15875 standard for the pipe.
- The dimensional requirements contained in ASTM F1807 standard for the fittings.

Products range

Fittings are made of brass special lead wash process. These new products are designed to protect drinking water from lead exposure, and are constructed to comply with several standards. Giacomini ensures continuous improvement in processes that impact on the environment, including those not subject to regulation currently. This is consistent with our environment policy and our ISO 14001 registration. The fittings are manufactured accordingly to the ASTM American standard. This testifies the reliability of the system granted by clear and precise norms.

GZ996 Giacquest pipe in cross linked polyethylene

	ITEM CODE	SIZE
	GZ996Y003	1/2"
	GZ996Y005	3/4"
	GZ996Y006	1"

GZ61 Crimp ring

	ITEM CODE	SIZE
	GZ61Y003	1/2"
	GZ61Y005	3/4"
	GZ61Y006	1"

GZ102 Straight Fitting

	ITEM CODE	SIZE
	GZ102Y003	1/2"x1/2"
	GZ102Y004	3/4"x3/4"
	GZ102Y005	1"x1"

GZ103 Reducing Straight Fitting

	ITEM CODE	SIZE
	GZ103Y004	3/4"x1/2"
	GZ103Y005	1"x1/2"
	GZ103Y006	1"x3/4"

GZ107 Straight fitting, male thread

	ITEM CODE	SIZE
	GZ107Y033	1/2"x1/2"M
	GZ107Y043	1/2"x3/4"M
	GZ107Y034	3/4"x1/2"M
	GZ107Y044	3/4"x3/4"M
	GZ107Y054	3/4"x1"M
	GZ107Y035	1"x1/2"M
	GZ107Y045	1"x3/4"M
	GZ107Y055	1"x1"M

GZ109 Straight fitting, female thread

	ITEM CODE	SIZE
	GZ109Y033	1/2"x1/2"F
	GZ109Y034	3/4"x1/2"F
	GZ109Y044	3/4"x3/4"F
	GZ109Y045	1"x3/4"F
	GZ109Y055	1"x1"F

GZ122 90° elbow

	ITEM CODE	SIZE
	GZ122Y003	1/2"x1/2"
	GZ122Y004	3/4"x3/4"
	GZ122Y005	1"x1"

GZ127 90° elbow, male thread

	ITEM CODE	SIZE
	GZ127Y003	1/2"x1/2"M
	GZ127Y043	1/2"x3/4"M
	GZ127Y044	3/4"x3/4"M
	GZ127Y045	1"x3/4"M
	GZ127Y055	1"x1"M

GZ129 90° elbow, female thread

	ITEM CODE	SIZE
	GZ129Y033	1/2"x1/2"F
	GZ129Y034	3/4"x1/2"F
	GZ129Y044	3/4"x3/4"F
	GZ129Y045	1"x3/4"F
	GZ129Y055	1"x1"F

GZ139 90° elbow with wall bearing

	ITEM CODE	SIZE
	GZ139Y003	1/2"x1/2"F
	GZ139Y004	3/4"x1/2"F
	GZ139Y044	3/4"x3/4"F
	GZ139Y045	1"x3/4"F

GZ573 90° elbow sanitary system connection

	ITEM CODE	SIZE
	GZ573Y033	1/2" x 1/2"F

GZ150 Tee fitting

	ITEM CODE	SIZE
	GZ150Y003	1/2"
	GZ150Y004	3/4"
	GZ150Y005	1"

GZ151 Reducing Tee

	ITEM CODE	SIZE
	GZ151Y009	1/2"x3/4"x1/2"
	GZ151Y014	3/4"x1/2"x1/2"
	GZ151Y015	3/4"x1/2"x3/4"
	GZ151Y016	3/4"x3/4"x1/2"
	GZ151Y023	1"x1/2"x1"
	GZ151Y025	1"x3/4"x3/4"
	GZ151Y017	3/4"x1"x3/4"
	GZ151Y026	1"x3/4"x1"
	GZ151Y027	1"x1"x3/4"

GZ153 Tee fitting, male thread

	ITEM CODE	SIZE
	GZ153Y033	1/2"x1/2" Mx1/2"
	GZ153Y034	3/4"x1/2" Mx3/4"

GZ154 Tee fitting/female thread

	ITEM CODE	SIZE
	GZ154Y033	1/2"x1/2" Fx1/2"
	GZ154Y034	3/4"x1/2" Fx3/4"
	GZ154Y035	1"x1/2" Fx1"
	GZ154Y045	1"x3/4" Fx1"

Gz179 Pex pipe adapter

	ITEM CODE	SIZE
	GZ179Y032	16x1/2"
	GZ179Y042	18x1/2"
	GZ179Y045	18x3/4"

GZ152-3 Manifold with 3 outlets 1/2" and 2 inlet 3/4".

	ITEM CODE	SIZE
	GZ152Y043	3/4"x1/2"x1/2"x1/2"x3/4"

GZ152-1 Manifold with 3 outlets 1/2" and 1 inlet 3/4".

	ITEM CODE	SIZE
	GZ152Y041	3/4"x1/2"x1/2"x1/2"

GZ152-2 Manifold with 4 outlets 1/2" and 1 inlet 3/4".

	ITEM CODE	SIZE
	GZ152Y042	3/4"x1/2"x1/2"x1/2"x1/2"

GZ152-4 Manifold with 4 outlets 1/2" and 2 inlet 3/4".

	ITEM CODE	SIZE
	GZ152Y044	3/4"x1/2"x1/2"x1/2"x1/2"x3/4"

GZ651 Ball valve

	ITEM CODE	SIZE
	GZ651Y003	1/2"
	GZ651Y004	3/4"
	GZ651Y005	1"

GZ165 Cap

	ITEM CODE	SIZE
	GZ165Y003	1/2"
	GZ165Y004	3/4"
	GZ165Y005	1"

R990 Cutter for Ø16, 20, 25 mm plastic pipes

	ITEM CODE	SIZE
	R990Y001	Ø 0-25

GZ200C Medium crimping tool

	ITEM CODE	SIZE
	GZ200Y103/ GZ200Y203	1/2"
	GZ200Y105/ GZ200Y205	3/4"

GZ200 Large crimping tool

	ITEM CODE	SIZE
	GZ200Y003	1/2"
	GZ200Y004	3/4"
	GZ200Y005	1"

GZ201 Crimp ring remover

	ITEM CODE	SIZE
	GZ201Y001	

GZ211 Checking Gauge

	ITEM CODE	SIZE
	GZ211Y001	3/8"-1/2"-3/4"
	GZ211Y003	1"

R 583 Metallic insert for R580, R585 and modular manifolds

	ITEM CODE	SIZE
	R583Y004	for 3/4" bar manifold
	R583Y005	for 1" bar and DN25 modular man.
	R583Y014	3/4" for R580C-R585C

How to make a Connection

1



After having cut the pipe being sure that you have a square burr-free cut. An uneven cut may cause an improper connection.

2



Slip the special copper crimp ring onto the pipe.

3



Insert the fitting into the pipe up to the fitting shoulder. Position the crimp ring 3-6 mm from the end of the tube. Tighten the ring with a pincers in order to avoid displacements of it.

4



Position the crimping tool so that the ring will be completely covered from its jaws. Keep the tool open at 90° and close it completely.

DO'S:



Always place the gauge opening on the crimp ring at 90° angle for an accurate check.



Be certain you use the gauge opening sized for the diameter of your pipe.



Always check every finished crimp with this gauge.

DON'TS:



Don't slide the gauge onto the connection. Push it directly onto the crimped ring.



Do not try to save time by crimping again a ring, that does not properly fit on the gauge. The pipe must be cut and the connection re-done.



Don't modify the gauge opening areas for any reason. they have been carefully manufactured to 0.05mm tolerance.

3/8", 1/2", 3/4", 1" pex pipe according to astm F876/F877

(Table 1 - pipe dimensions)

Nominal size	Outside diameter(mm)	Tolerance for outside diameter	Minimum wall-thickness(mm)	Tolerance on wall-thickness(mm)
3/8"	12.70	± 0.08	1.78	+ 0.25
1/2"	15.88	± 0.1	1.78	+ 0.25
3/4"	22.22	± 0.1	2.47	+ 0.25
1"	28.58	± 0.12	3.18	+ 0.33

(Table 2 - test at 1000 h)

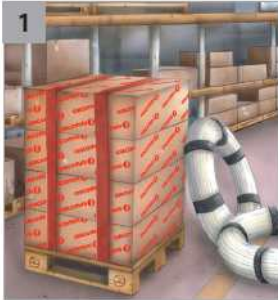
Nominal size	Temperature 23°C	Temperature 82.2°C	Temperature 93.3°C
3/8"	36.2 bar	17.2 bar	14.5 bar
1/2"	22.8 bar	13.4 bar	11.4 bar
3/4"	22.4 bar	13.1 bar	11.4 bar
1"	22.4 bar	13.1 bar	11.4 bar

(Table 3 - maximum pressure)

Nominal size	Temperature 23°C	Temperature 82.2°C	Temperature 93.3°C	Temperature 99°C*
3/8"	42.7 bar	19.0 bar	16.2 bar	10.34 bar
1/2"	33.1 bar	14.8 bar	14.8 bar	10.34 bar
3/4"	32.7 bar	14.5 bar	12.4 bar	10.34 bar
1"	32.7 bar	14.5 bar	12.4 bar	10.34 bar

Test at 720h for tubing and fittings

Practical advices for the installation of Giacomini plastic pipes, in sanitary and heating systems



1 It is important to deliver and stock the pipe in the original packaging provided by the manufacturer.



2 Pipe must be protected against direct exposure (ultra violet rays).



3 Pipe must be protected against mechanical damage.



4 In order to obtain the connection of the pipes to the set (i.e. to manifolds), it is important to fit the pipe at the correct angle.



5 Position the pipe in a way to have a radius 5 times more than the outside diameter of the pipe for heating installations. This angle must be respected even when making a service installation.



6 For bending the pipe with heat, or repairing it, heat the pipe till it becomes transparent (max. 140° C) and use hot air only (PEX only). Do not allow the pipe to come into direct contact with flames.

Giacquest system guarantee

All products and components supplied by Giacomini are submitted to the guarantee and responsibility indicated in the European Laws (Directive 1994/44/CE, Directive 2001/95/CE i CEE 85/374).

The guarantee is not applicable under the following conditions:

- 1 If working conditions are different than those prescribed.
- 2 If the Giacquest System is used with fluid not compatible with the material and/or installed in contact with products which could damage it.
- 3 If the installation instructions are not strictly followed.
- 4 If the Giacquest System presents defects when installed, due to incidental factors easily recognizable at the time of installation or when the System is submitted to pressure test.
- 5 If the Giacquest System is installed with components which are not manufactured by Giacomini, or different from those recommended.



**We cultivate our future
to strengthen yours.**

In the future that awaits us, buildings will be less of a “roof over our heads” , and more places that are vital to our health, our personal and professional relationships, our well-being and the one of our planet.

As such, they will become more than just buildings - they will increasingly become environments in which light, temperature and water will be used with greater intelligence and a increased sense of responsibility.

In such a scenario, our mission is to become a Leading company in the production of components and systems that use water to produce comfort, to manage its usage “in situ” and to extinguish fire. All of this with a strong green attitude.

Our products give Life to water, in order to provide useful services and well-being to people. For this reason, our motto is : “WATER E-MOTION”. At home, in the office, at work and wherever water flows, is heated or is cooled - there is a Giacomini product

Additional information

For additional information please check the Giacomini website at the following address: www.giacomini.in

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