

# R178

## Copper pipe adaptors



Water  
Management



Energy  
Management

Datasheet  
0251EN  01/2024




Adaptors for copper pipes for use in plumbing systems.  
Compliant with EN 1254-2 Standard.  
Black O-Ring compliant with EN 681-1.

### Versions and product codes

PRODUCT CODE	CONNECTIONS
R178X012	B.16 x 10
R178X013	B.16 x 12
R178X015	B.16 x 14
R178X016	B.16 x 15
R178X018	B.16 x 16
R178X031	B.18 x 10
R178X032	B.18 x 12
R178X033	B.18 x 14
R178X034	B.18 x 15
R178X035	B.18 x 16
R178X036	B.18 x 18

PRODUCT CODE	CONNECTIONS
R178X041	B.22 x 16
R178X042	B.22 x 18
R178X043	B.22 x 22

 **NOTE.** It is advisable to refer to the current price list catalog or contact the Giacomini technical service, to locate the suitable adaptor intended use.

## ➤ Technical data

- Fluids of use: water, glycol solutions (max. 50 % of glycol)
- Temperature range: 5÷110 °C
- Max. working pressure: 10 bar
- Recommended tightening torque:
  - annealed copper pipe: 30 Nm
  - raw copper pipe or malleable steel: 40 Nm

### Materials

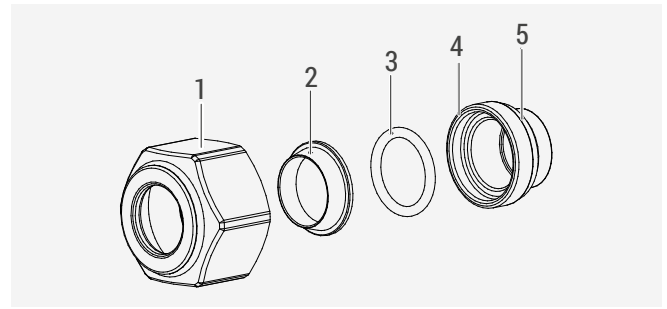
- Nut, mechanical sealing element and adaptor: brass
- Black O-Ring for hydraulic seal: EPDM complying with EN 681-1 Standard

## ➤ Installation

- 1) The pipe must be cut perpendicularly to its axis and deburred on the outer surface. We recommend using a roller pipe cutter.
- 2) Place the cap then the first element of the mechanical seal on the tube.
- 3) Lubricate the hydraulic sealing elements (fundamental operation to prevent damages to the O-Ring during the installation phase, compromising the effectiveness of the junction).
- 4) Install the internal O-Ring into the adaptor seat (where applicable) or the terminal of the plumbing distribution/regulation system.
- 5) Insert the pipe into the adaptor (where applicable) or in the terminal of the plumbing distribution/regulation system until it stops against it.
- 6) Proceed by tightening the cap to the terminal of the plumbing distribution/regulation system.

**▲ WARNING.** The excessive value of the torque to the terminal of the plumbing distribution / regulation system is likely to compromise both mechanical and hydraulic behavior of the fitting.

## ➤ Components



1	Nut
2	Mechanical sealing element
3	Internal O-Ring
4	Adaptor
5	External O-Ring

## ➤ Reference Standards

- **EN 1254-2:** Copper and copper alloys – Plumbing fittings – Part 2: fittings with compression ends for use with copper tubes
- **EN 1254-4:** Copper and copper alloys – Plumbing fittings – Part 4: Fittings combining other end connections with capillary or compression ends.

## ➤ Product specifications

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**▲ Safety Warning.** Installation, commissioning and periodical maintenance of the product must be carried out by qualified operators in compliance with national regulations and/or local standards. A qualified installer must take all required measures, including use of Individual Protection Devices, for his and others' safety. An improper installation may damage people, animals or objects towards which Giacomini S.p.A. may not be held liable.

**♻️ Package Disposal.** Carton boxes: paper recycling. Plastic bags and bubble wrap: plastic recycling.

**ℹ️ Additional information.** For more information, go to [giacomini.com](http://giacomini.com) or contact our technical assistance service. This document provides only general indications. Giacomini S.p.A. may change at any time, without notice and for technical or commercial reasons, the items included herewith. The information included in this technical sheet do not exempt the user from strictly complying with the rules and good practice standards in force.

**♻️ Product Disposal.** Do not dispose of product as municipal waste at the end of its life cycle. Dispose of product at a special recycling platform managed by local authorities or at retailers providing this type of service.