bonfix®

BRASS AND BRASS NICKEL PLATED (SANITARY) COMPRESSION FITTINGS

COMPRESSION FITTINGS

20 YEAR WARRANTY

TECHNICAL DOCUMENTATION

UK 001

PRODUCT CATALOGUE Brass and Brass Nickel Plated (sanitary) compression fittings

 **Straight coupling** 2 x compression ends	 **Reduced, straight coupling** 2 x compression ends	 **Straight coupling without** abutment 2x compression	 **Straight coupling** male x compression end	 **Straight coupling** female x compression end
 **Stop end** 1 x compression end	 **Elbow coupling** 2 x compression ends	 **Elbow reduced** 2 x compression ends	 **Elbow coupling** male x compression end	 **Elbow coupling** female x compression end
 **T-coupling** 3 x compression end	 **T-coupling, reduced** 3 x compression ends	 **T-coupling** Compression end x female x compression end	 **T-coupling** Compression end x compression x male	 **T-coupling** Compression end x compression x female
 **Corner Tee** 3 x compression ends	 **Cross** 4 x compression ends	 **Wall plate coupling** female x compression end	 **Wall plate coupling** male x compression end	 **Elbow with drain plug** 2 x compression ends
 **Straight coupling with air escape** 2 x compression ends	 **Coupling elbow with drain plug** 2 x compression	 **Elbow coupling with drain** male x compression end	 **Elbow coupling with air escape** 2 x compression ends	 **Push-in elbow compression** end x male

Available in brass Available in brass & brass- nickel plated

Renovation coupling
2 x compression ends

T - Renovation coupling
1 x compression end

Raccord de réparation pour robinet
1 x compression

Radiator coupling, straight
male x compression end

Radiator coupling, square
male x compression end

Tank connector with counter plate
1 x compression end

Reducing set
1-pce

Compression nut

End plug

Compression ring

Compression set
universal

Compression set
type Danfoss

Compression set
type Heimeier

Compression set
For ALU-PEX (Multilayer)

Open ring wrench
24 x 32 mm for
Compr nuts 15 / 22 mm

Available in brass Available in brass & brass- nickel plated

GENERAL

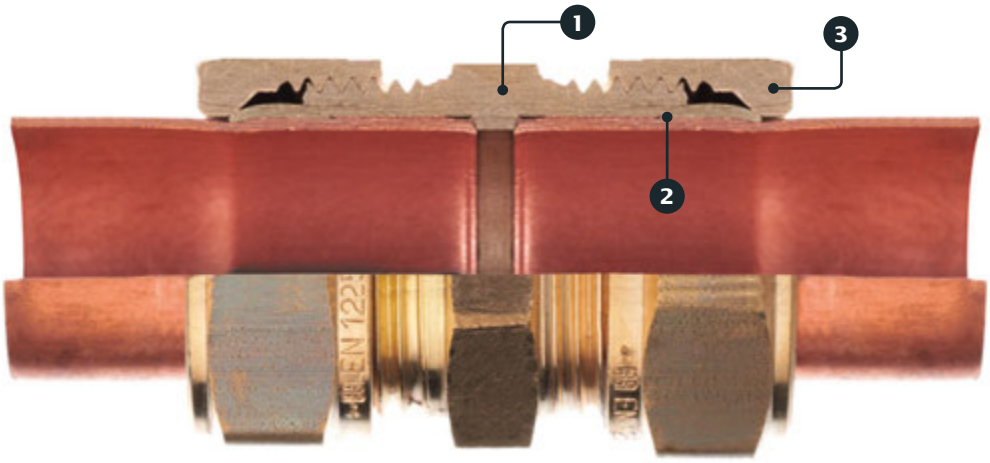
In modern installation technology the following are important requirements:

- Quick, time-saving applications
- Simple and quick replacement of connecting parts & fittings
- Guaranteed high quality.

As a consequence, traditional fitting practices such as soldering, spot threading, glued and forced connections have now been largely superseded by brass compression fittings. Compression fittings can be applied in heating installations, water and gas pipes, and industrial transport systems.

To determine if compression fittings can be used in your installation, the following must be carefully considered.

- Size and material of the pipe
- Temperature and pressure of the gas or liquid transported in the system
- Industry standards of the country where the fittings are to be used:
    - DIN-DVWG quality standard for Germany
    - V.A. quality certification for Denmark
    - BS864-2-quality standard for the UK
    - KVBG/ARGB quality standard for Belgium.
    - KIWA-ATA and GASTEC QA quality standard for the Netherlands.

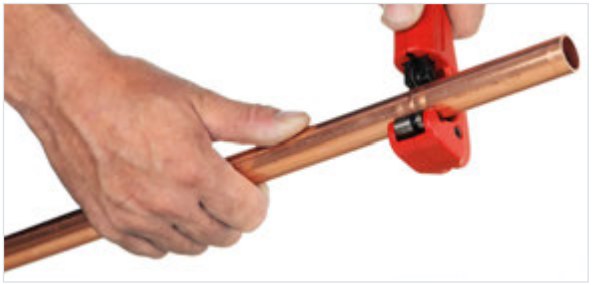


COMPONENTS

A compression fitting consists of 3 individual components: body, or housing (1), compression ring (2) and coupling nut (3). Every compression fitting comes fully assembled for quick, easy connection to a copper pipe.
The compression ring is squeezed in between the bore of the compression buckle and the housing (body). As the nut is tightened, the ring begins to deform first to the side of the body, since the recess in the body is smaller than the recess in the buckle nut. As the nut is further tightened the ring is compressed also on the opposite side. This delivers the necessary pressure to assure a hermetic seal.

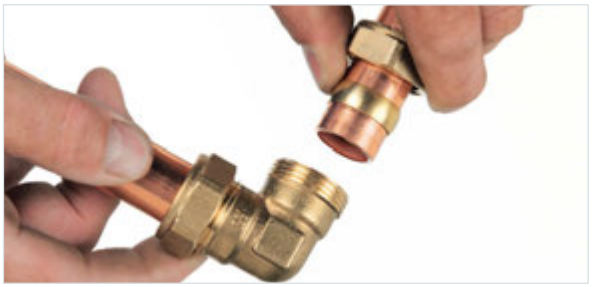
INSTALLATION INSTRUCTIONS

✔ Cut the pipe to the correct length.

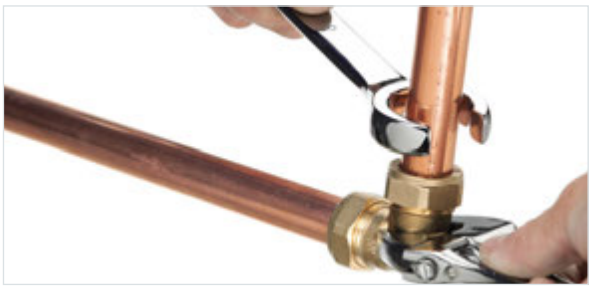


✔ Remove any burrs and check pipe end for scratches, contamination or deformation.

✔ Check the fitting for correct position of the compression ring and feed pipe into fitting until stopped. The ring should now be around the pipe. Fasten the coupling nut by hand.



✔ Tighten the nut with a wrench in compliance with the industry code. A full turn for 12 / 15 mm pipe; 1/2 – 3/4 turn for 22m pipe; approx. 3/4 turn for pipe diameters 28mm and larger.



✔ Pipe and fitting joined after correct tightening. Check the connection for leakage.

⚠ *Using excessive force when tightening a nut may result in breakage or leakage.*

QUALITY MARKS

Industry body	Medium	Max. Temp/pressure	Pipe material
KIWA-ATA BRL639/02	Water	+90 °C / 10 Bar (1 mPa)	CU 10 - 54 mm
GASTEC QA KE35	Gas	0,2 Bar (20kPa)	CU 10 - 54 mm

The popular sizes bear the KIWA-ATA- quality mark and/ or GASTEC QA quality mark. To identify the quality certification code the products are marked K or G respectively in the BONFIX product catalogue. You can also check www.bonfix.nl

WARRANTY AND LIABILITY

Warranty and liability apply as per our general terms and conditions, filed with the Chamber of Commerce Oost-Nederland (Trade Registry No. 05054087), which are also printed in our product catalogue and published on our website.

A claim under warranty is invalid when other than the original components of a BONFIX compression fitting are used.

Damage caused by **stress corrosion** is not covered under product warranty. Warranty cover expires if products are not used within the specified scope of application (temperature, pressure, medium, etc.).

REASSEMBLY OF EXISTING CONNECTION

An existing connection can safely be disconnected and reconnected as the crimped compression ring on the pipe will stay in its fixed position. NOTE: This is not permitted with compression fittings in gas installations (refer Building Decree (NPR) 3378-11). The compression ring is re-tensioned by fastening the coupling nut by hand and then tightening it by a quarter turn.

The compression ring can be removed by cutting it slantwise, without damaging the pipe. The ring can now be dislodged by placing a screw driver in the slot and gently rotating the screw driver. Alternatively the compression ring can be gripped and gently squeezed several times with a pair of slip joint pliers, rotating the pliers. The stretched ring will now come sliding off the pipe.

CAUTION WHEN USING COMPRESSION RINGS OF UNKNOWN ORIGIN

For various reasons, trade professionals use more compression rings than they do compression fittings. Hence, the fitting manufacturers offer a generous supply of compression rings, in every shape and size. Without placing too much emphasis on this particular aspect of the trade, it is prudent to acknowledge the risk of poor quality connections resulting from the use of substandard products. Each brand of compression fittings is a combination of a certain type of compression fitting with a matching compression ring. Therefore, compression rings that belong with brand A should not be used for fitting a coupling piece of brand B. The reason being that the design and material composition of the various type of compression rings can vary from one to the next. Thus, there is no guarantee of achieving the necessary permanent sealing and stress resistance when using a random product. “How can I know what particular compression fitting a single-sold compression ring is designed for, if the compression ring shows neither make or quality mark?", you might ask.

Here, you must rely on the system in place at the manufacturer’s and the wholesaler for distributing spare rings. If the packaging in which the compression rings are sold also contains the corresponding coupling nuts, you don’t have a problem, because the coupling nut is imprinted with a code that identifies its make. But even when purchasing a package containing compression rings only, there is no reason for confusion. By and large most brands that supply approved compression rings show the brand name and product type clearly visible on the package. And what about the rings sold in blank packages? If the compression fittings for which the rings are sold cannot be identified, you cannot be certain of the quality. Where circumstances necessitate the use of such products, it is prudent to be aware that there may be a higher risk of leakage.

CONCRETE CASTING/ IMMUREMENT

Under VEWIN Worksheets, water pipes may be concrete cast provided the pipes are protected from the impact of the wall or floor material.

Hot water pipes, however, must be provided with a casing. We recommend that all concrete cast pipes (both hot and cold water) are provided with a casing. In areas that are not readily accessible, a pipe sleeve is required for leakage detection. In gas pipe construction, a distinction applies between accessibly and inaccessibly installed pipes. For a complete list of exceptions refer to the Building Decree (NPR) 3378. For example, compression fittings with (half-hard) copper pipe may be installed in a concrete casing using pipe ducts.

INSTALLING A ONE-PIECE REDUCER

BONFIX supplies a range of one-piece reducer sets allowing for almost any pipe reduction.

The one-piece reducer has a break strip midway in the fitting. When the coupling nut is tightened, the break strip will break under pressure. After ± ¼ turn the reducer set breaks; this is noticeable during tightening of the nut. After the breakpoint, the coupling is effective but still must be further tightened by ¾-1 turn. This pushes both parts together and clamps and seals the pipe.

STRESS CORROSION

Stress Corrosion Cracking (SCC) is a form of corrosion that results in cracking of the metal due to interaction between metal, the environment and a mechanical load (tensile stress during installation).

Stress corrosion can occur by any combination of the following factors:

- Presence of ammonia in the insulating material or other corrosive substances near the installation.
- Condensation on installation
- Tensile stress or residual stress in the material.

Caution must be observed when installing brass compression fittings on refrigeration systems and heat pumps. **We discourage this practice unconditionally and such installations are strictly for the installer's risk.** We recommend copper solder fittings or bronze thread/ solder fittings for these types of installations as these fittings are resistant to stress corrosion.

⚠ *Use appropriate tools for installation and prevent damage.*

WARRANTY AND LIABILITY

Warranty and liability apply as per general terms and conditions of BONFIX B.V.
Damage caused by stress corrosion is not covered under product warranty.

bonfix® Superieur

COMPRESSION FITTINGS

SUPERIOR IN PRICE & QUALITY

UNIQUE: 20 YEAR WARRANTY!

LIKE BONFIX ON FACEBOOK

- Always up to date on new products
- Fun actions and specials
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