

Heating and Cooling Applications

Installation Instructions

General

Conex Bänninger >B< Press Carbon fittings should be professionally installed by an appropriately trained and qualified installer. All installations **must** be completed in line with local regulations and by-laws governing the installation, and all applicable health and safety practices must be adhered to.

Important

Select the correct size of tube, fitting, and jaw for the installation. Ensure the fitting and tube are kept free of any dust or dirt, and that the O-ring is undamaged. Check the inner pressing contour of the jaw is free of dirt and debris.

Do not force tube ends together prior to making joints. Joints should only be made on an unstressed pipework assembly.

Tube compatibility

- >B< Press Carbon fittings are suitable for joining carbon steel tubes to: **EN 10305-3**.

Joint information

- A joint is finished after one complete compression cycle of the tool.
- **Do not** press any >B< Press Carbon fitting more than once.
- Pipework alignment **must** be completed prior to pressing.
- **Do not** rotate joints after they have been pressed.

Further Information

Please visit - www.conexbanninger.com or email - technical@ibpgroup.com, for information on:

- Compatible press tools and jaws.
- Space required for pressing.
- Minimum distance between joints.

Applications

Applications	Flow Medium	Pressure bar	Temp °C
Hot water heating systems EN 12828	Heating water	16	110
Local and district heating pipelines	Heating water	16	110
Cooling systems	Water and water-glycol mixtures mixing ratio max. 50/50%	16	-10
Oil-free compressed air	Compressed air classes 1-3 as per ISO 8573-1	10	25
Vacuum piping for non-medical purposes	NA	-0.8	Ambient temp
Note: This product is not suitable for drinking water applications.			

Tube preparation

To ensure a secure and permanent joint the tube **must** be correctly prepared prior to installation. Incorrect tube preparation can result in damaging the O-ring and causing the fittings to leak.

Note: Avoid hand held grinding wheels, fast cutting saws and hacksaws, as these are **not suitable** for cutting tube ends square. If tube ends do become distorted, remove the damaged section, using an appropriate cutting method.

Safety Note: Before using a press tool please refer to the manufacturer’s operating and safety instructions. Care must be taken to ensure hands are kept away from the jaw during the pressing process. Always wear ear and eye protection.

Leave the fittings in the packaging prior to installation, to protect them from contamination, and to preserve the lubrication of the O-rings.



1. Cut the tube to length

- A manual pipe cutter may be used (for suitably sized tube).
- If available, we recommend using a pipe-cutting machine, fitted with an appropriate cutting wheel.
- Ensure that the tube is cut square.
- Check the tube has maintained its shape and is damage free.



2. Deburr tube internally and externally

- Use a deburring tool or a fine file, chamfer the tube end, and remove sharp edges.
- Where possible angle the tube downwards to prevent filings entering the tube.
- Make sure the internal and external surfaces of the tube ends are smooth and free from burrs and sharp edges.
- **IMPORTANT:** Please ensure that the tube surface is free from any deep scores or scratches.



3. Inspect the fitting and O-rings

- Check the fitting is the correct size for the tube.
- Check the O-rings are present, undamaged, and correctly seated.
- Note: It is good practice to add a small amount of Conex Bänninger press fitting lubricant to the O-rings to aid tube insertion.



4. Assemble, and mark the tube insertion depth

- The tube **must** be fully inserted into the fitting until it reaches the tube stop.
- To reduce the risk of dislodging the O-ring, rotate the tube (if possible) while pushing it into the fittings.
- Mark the insertion depth on the tube.
- Prior to pressing **ensure the tube has not moved out from the fitting socket.**



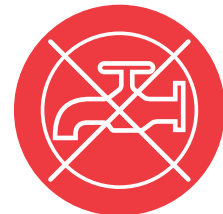
5. Complete the joint with the press tool

- Ensure the pipework is correctly aligned prior to pressing.
- Ensure the correct size jaw is inserted into the tool.
- The jaws **must** be placed squarely on the fitting, locating the groove on the bead.
- The bead on the fitting should fit centrally in the groove of the jaw.
- Depress and hold the start button on the press tool to complete the pressing cycle.
- Pressing is complete when the jaws are fully closed.
- **IMPORTANT: The joint is complete after one full cycle of the tool. DO NOT crimp any fitting more than once.**



6. Mark the completed joint

- Mark the completed joint after pressing.
- This enables joints to be inspected easily before testing.



Product not suitable for drinking water applications.

The content of this publication is for general information only. It is the user's responsibility to determine suitability of any product, product data and specifications, for the purpose intended and reference should be made to our Technical Department if clarification is required – technical@ibpgroup.com. All products must be installed in accordance with our installation instructions. In the interests of technical development we reserve the right to change specification, design and materials without notice.

Conex Bänninger products are approved by numerous Standards Authorities and Certification Bodies. This is a representation of the full range from Conex Universal Ltd. Patents and trademarks are registered in numerous countries. Details on registered and pending patents protecting our products is available at public patent registers or can be requested from legal@ibpgroup.com. All documents, images and technical data are © of Conex Universal Limited. E&OA.