conex | Bänninger >B< Press

Installation Instructions

To install >B< Press, a Rothenberger Romax mechanical tool with compatible sized jaw to fit each size fitting is required. When pressure is exerted through the press tool, a permanent joint is made and the fitting cannot be disassembled or re-used.



Step 1 - Cut the pipe

- It is important to ensure that the pipe is cut completely square.
- Tube ends should be clean and free from scratches not less than the socket length.



Step 2 – Remove burrs

- Make sure that the internal and external tube end is free from burrs or sharp edges by using a deburring tool in one direction clockwise to prevent damage to the O-ring.
- Then wipe the tube end clean to avoid damaging the O-ring on tube insertion.



Step 3 – Ensure the O-ring is seated and lubricated

- Before inserting the copper tube ensure that the O-ring is seated correctly, free from damage and lubricated.
- If O-ring is dry, a small amount of water can be used to provide lubrication.



Step 4 – Mark insertion depth

- The tube must be fully inserted into the fitting until it reaches the tube stop.
- Mark insertion depth to ensure that any tube movement is detected, which is especially important if the joints are to be pressed at a later time.

Note: As repair couplings do not have a tube stop, both ends of the tube must meet in the middle of the fitting.



Alternatively, use depth gauge

- Insert tube into correct socket in depth gauge.
- Check window to see the tube is fully inserted.
- · Mark the insertion depth on the tube.



Step 6 – Complete the joint with the compression tool

- Ensure that the correct size jaw for the fitting is inserted into the tool. The jaws must be placed square on the fitting.
- Press and hold the trigger/button to begin the compression cycle of the tool. The tool automatically stops when the cycle has been completed.
- Release the button and then remove the jaws from around the fitting. (For further information, refer to complete Romax instructions.)

Note: Do not crimp any >B< Press fitting more than once. You must use an approved tool to maintain your warranty.



Step 5 – Ensure pipe is inserted up to the tube stop

 To assemble the joint, the tube must be inserted into the fitting up to the tube stop. The pressing operation should only be undertaken when the tube reaches the tube stop. Rotate the tube slightly to ease the tube over the O-ring.

IMPORTANT

IT IS IMPORTANT TO KEEP THE FITTING FREE OF ANY DUST OR DIRT AND TO ENSURE THE O-RING STAYS LUBRICATED AND PROTECTED FROM DAMAGE. SELECT THE CORRECT SIZE OF TUBE AND FITTING FOR THE JOB. ENSURE THAT BOTH ARE CLEAN AND FREE FROM DAMAGE AND IMPERFECTIONS.

Design Considerations

Pipework support

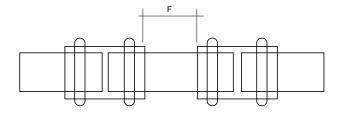
All pipework should be supported by the use of appropriate clips, brackets or supports. Please refer to requirements listed in AS/NZS 3500 for specific details in relation to the particular application.

Distance between fittings

Due to the reforming of the tube profile when pressed, it is advised that a minimum distance is allowed between each fitting.

Tube Size	Minimum Clearance F (mm)
15mm	5
20mm	5
25mm	5
32mm	10
40mm	15
50mm	20

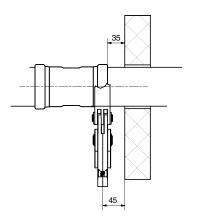




Minimum clearance requirements

The following minimum clearances are required from structural components to allow operation of tool for press fitting.

Tube Size	Minimum Clearance (mm)	
	Romax Compact/Compact TT	Romax 3000/4000
15-25mm	35	45
32-50mm	-	45



Pipework protection

Copper has a high resistance against corrosion. However, in some cases external protection may be necessary against corrosive conditions. Refer to AS/NZS 3500 for full pipework protection requirements.

Localised annealing

To ensure proper sealing of both the brazed and >B< Press fitting, the following minimum distances must be maintained between the two fittings.

Tube Size	Minimum Clearance F (mm)
15mm	5
20mm	5
25mm	5
32mm	10
40mm	15
50mm	20

Note: It is important that there is no residual solder or other foreign debris on the tubing to be inserted into the >B< Press fitting. The surface condition on the area of press joint should be as tube standard AS1432.

Brazing near >B< Press fittings

Caution – Brazing or soldering near >B< Press joints should be avoided as this may cause the seal to degrade due to heat transfer. The table below states the minimum distance away from the press joint which is acceptable to braze. If this distance cannot be maintained then adequate precautions must be taken such as fabricating the brazed section prior to assembly with the press fittings, wrapping in a wet rag or applying a heat barrier such as the Rectorseal Hot Block, to prevent heat transfer to the press fitting during brazing.

Tube Size	Minimum Clearance F (mm)
15mm	350
20mm	500
25mm	650
32mm	800
40mm	1000
50mm	1300

Flushing of water installations

When the installation is complete, it is essential to flush with water to remove dust and debris in accordance with AS/NZS 3500.

Testing and commissioning installations

The unique pressing indicator is a specially designed O-ring. It has a reduced section in two positions that allows water or air past the sealing element of any unpressed connection, thereby providing a visible leakage point during the commissioning of the system. Unpressed fittings are identified by pressurising the system with a pressure range of 100 kPa to 500 kPa for water and 2.2 kPa to 300 kPa for gas. When the fitting is pressed, the O-ring material compresses, filling the gaps, creating a leak free joint. During installation and before putting >B< Press into service, it is advisable to make a certain number of checks including:

All fitting connections in a system should remain visible and accessible until leak and pressure tested.

Water systems

To ensure that all press joints have been successfully completed, a low pressure test is applied as follows:

- After flushing, fill the system with water and check for visible leaks.
- No leak. Apply a test pressure of between 100 and no more than 500 kPa.
- No leak. Final testing should be conducted in accordance with AS/NZS 3500.

Gas systems

- If a joint has not been pressed, it will not hold pressure when tested at 2.2-300 kPa.
- Test as per the normal requirements of AS/NZS 5601.