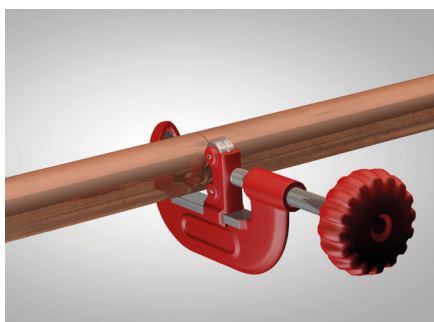


5.0 >B< Sonic Installation Process

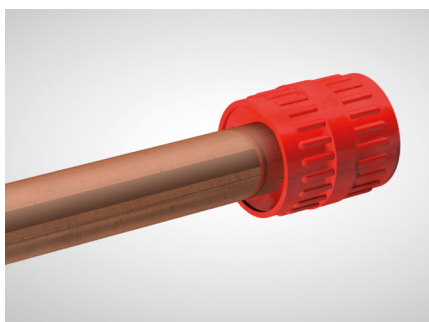
5.1 Instructions

It is advisable to leave the fittings in the packaging prior to final installation to protect them from contamination and to conserve the lubrication of the O-rings.



1. Cutting to length

Tubes should be cut perpendicularly to the required length with a pipe cutter. An angle grinder or cutting torch must not be used for cutting to length.



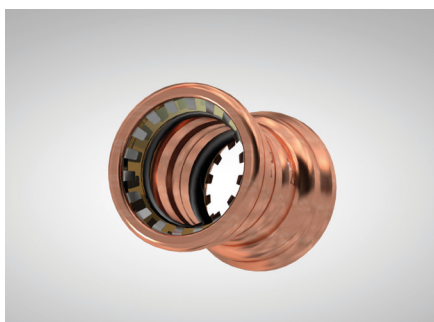
2. Internal and external deburring

The tubes should then be carefully deburred inside and out to remove all sharp edges and debris.



3. Cleanliness

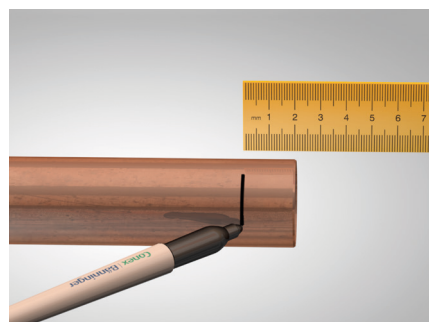
Once the tube has been prepared, check for any deep scratches and scores in the tube. If either are visible cut the tube back and start the process again.



4. Checking the fittings

The fittings should be inspected visually for damaged o-ring or grip ring prior to use.

Caution: When checked, if the fitting is dry, add a suitable WRAS approved lubricant to the O-ring. For more details please contact the technical department: technical@ibpgroup.com.



5. Marking the insertion depth

Before assembly, mark the insertion depth of the fitting on the tube. (Please see the table in section 4).



6. Connecting the tube and fitting

Insert the tube into the fitting using the insertion depth mark as a guide.

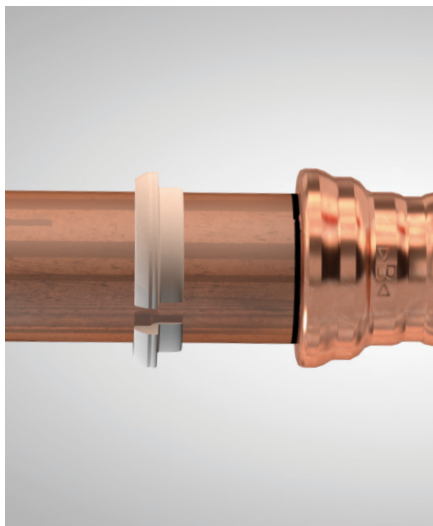
Please note the insertion depth line marking must be within 3 mm from the end of the fitting. If not remove the fitting using the release tool and check for internal obstructions and recheck the correct marking depth.

Caution: It is important that the tube is fully inserted to the correct depth to avoid joint failure.

5.2 Demounting

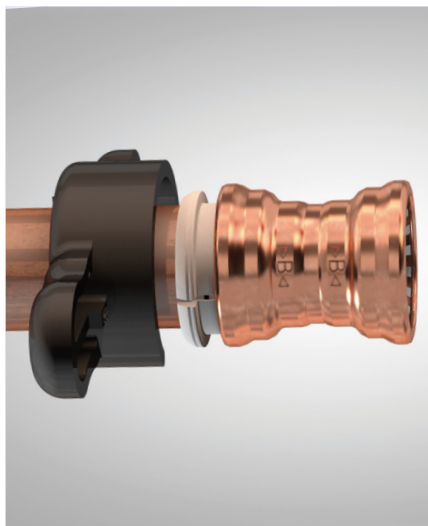
>B< Sonic fittings are designed to be demountable and reusable up to 20 times. To prevent accidental disassembly, they can only be demounted with a purpose designed release tool.

Please note the following steps:



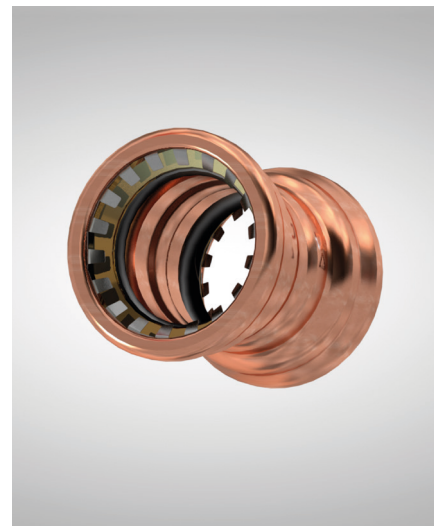
Step 1:

- Locate demounting ring on tube, push ring against fitting end.



Step 2:

- Locate black pulling handle on tube and align with demounting ring.
Pull the black handle towards the fitting, this releases the grip ring allowing the fitting to be removed from the tube.
- **Caution:** Do not attempt to dismantle the fitting prior to applying the force with the release tool.



Step 3:

- Before re-use, ensure that the grip ring or the O-ring has not been damaged.
- >B< Sonic has been designed for demounting and re-assembling to allow for system alteration.
- **Caution:** Please check the seal carefully for damage before re-using the fitting.

If a >B< Sonic fitting has been demounted from a tube end, check the tube end for any deep scratches and scores in the tube. If either are visible cut the tube back to a scratch free section and prepare the tube end again.

5.3 Brazing and soldering near >B< Sonic fittings.

Caution: Brazing or soldering near to >B< Sonic joints should be avoided as this may cause the seal to degrade due to heat transfer. The table to the right states the minimum distance away from the >B< Sonic joint which is acceptable to solder. If this distance cannot be maintained then adequate precautions must be taken such as fabricating the soldered section prior to assembly with the >B< Sonic fittings, wrapping in a wet rag or applying a heat barrier spray, gel or putty, to prevent heat transfer to the >B< Sonic fitting during brazing.

Tube size (mm)	Minimum clearance (mm)
12	300
15	300
18	300
22	300
28	300