



## Press-fit Solutions

### For joints 15 to 108mm

Always cut the tube square, using a rotary tube cutter whenever possible.

When using plastic coated carbon steel tube remove the coating using the S115 stripping tool.

Deburr the tube end, both internally and externally.

Check the tube ends are free from damage and clean, wiping away any swarf to avoid damaging the 'O' ring on tube insertion. Tube end must also be free from stickers, tape and adhesive residues.

Mark the socket depth with a marker.

Fitting socket depths		
Size	Copper/Gas	Stainless/Carbon/ Stainless Gas
15mm	20mm	20mm
18mm	-	20mm
22mm	21mm	21mm
28mm	23mm	23mm
35mm	26mm	26mm
42mm	30mm	30mm
54mm	35mm	35mm
67mm	50mm	50mm
76mm	50mm	55mm
89mm	-	64mm
108mm	64mm	78mm

Select the correct type and size of fitting. *Legislation dictates that you must not convert water fittings into gas fittings by substituting the 'O' ring – the fitting must be marked by the manufacturer as suitable for gas.*

The fitting should be kept in its bag until point of use to protect the 'O' ring.

Check the fitting is free from damage and the 'O' ring is seated correctly. Due to the Leak Before Press feature, a slight triangulation of the fitting socket is intentional, and should not be mistaken for damage.

The LBP feature on XPress carbon and stainless is provided by the use of a special 'O' ring that has nodules to form a leak path prior to pressing the fitting.

The 'O' ring integrity is critical, as it is this that forms the seal. This is why tube preparation is vital to ensure the 'O' ring is not compromised on insertion of the tube. Use S130 silicon lubricant sparingly to aid insertion into the bead of the fitting – over lubrication can cause the joint to fail.

Insert the tube into the fitting until it meets the tube stop and corresponds to the depth mark made earlier.

Make the tool safe by isolating it from the power supply.

Select the correct jaws for the joint being made, checking that they are free from damage. Attach the jaws, following the instructions for your particular press-tool, and reconnect the power supply when ready.

Place the jaws over the bead at the mouth of the fitting, maintaining a 90° angle to ensure the integrity of the joint, and to protect you from 'kickback', where there is a risk of the machine moving sideways.

With the tool fully supported and not hanging from the pipe work, and with your hands safely away from the jaws start the pressing cycle.

Release the jaws from the fitting and inspect the joint, ensuring the fitting is fully closed around the pipe, there are no distortions, and the mouth of the fitting still corresponds to the depth mark.

If all is in order mark the joint as complete.

### For joints 42 to 108mm

Tube preparation and joint assembly for 42 to 108mm fittings is the same as for the smaller sizes.

It is essential to use sling jaws, as these provide a more equally distributed force than two piece jaws, ensuring reliability.

Select the correct sling jaw for the joint to be made checking they are free from damage and suitable for the material you are using, as jaws for copper and steel differ at 108mm.

It is essential to lubricate the sling by applying S135 lubricant to the pressing profile groove between the main sling arms and the moving segments and along the pivot pins. Lubrication intervals: after every 50 joints for 42mm to 76mm sizes and every 5 joints for 108mm.

Mount the sling with the groove in the sling sitting over the bead at the mouth of the fitting, taking care not to trap your fingers in the sling.

Make the tool safe by isolating it from the power supply.

Select the correct adaptor and attach it to the press-tool, following the instructions for the press-tool, and then reconnect the power supply when complete.

Attach the adaptor to the sling jaw maintaining a 90° angle to protect you from kickback, and to ensure the integrity of the joint. With the tool fully supported and not hanging from the pipe work and your hands safely away from the jaws start the pressing cycle.

For 108mm fittings the sling jaw is left in place and a second pressing operation is required. Swap the adapter on the press-tool for the second press adaptor and repeat the pressing operation.

Disconnect the adaptor and remove the sling jaw from the fitting.

Inspect the joint ensuring the fitting is fully closed around the pipe, there are no distortions and the mouth of the fitting still corresponds to the depth mark made earlier.

If all is in order mark the joint as complete.

### Notes:

*When using power tools, great care must be taken at all times. Always refer to the manufacturers' instructions for all machines and tools you use. Please refer to [www.pegleyorkshire.co.uk/SHE](http://www.pegleyorkshire.co.uk/SHE) for further COSHH information.*

## The advantages of the XPress System

- A totally heat-free jointing solution
  - Reduced installation times provides major installed cost savings
  - No need for hot works permits or additional costly insurance
  - Sizes from 15mm up to 108mm
  - Systems have an exceptionally clean boar with no flux residues
  - Cover a wide variety of applications in modern building services
  - System guarantees of 30 Year for XPress Copper/Stainless and 10 Years for XPress Carbon
  - Excellent system performance from -24 to 110°C at a maximum working pressure of 16 bar
  - and -20 to 70°C at 5 bar (1 bar within buildings) for Gas fittings
  - Designed for hydraulic system testing at up to 1.5 times working pressure, to a maximum of 16 bar\*
- \*For testing at higher pressures and compressed air pipeline systems advice should be sought from Pegler Yorkshire