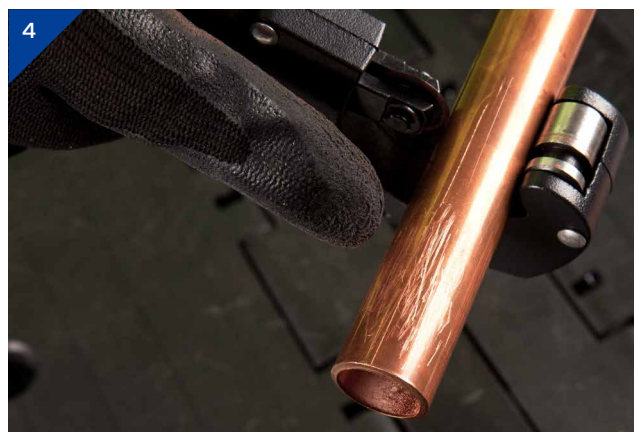
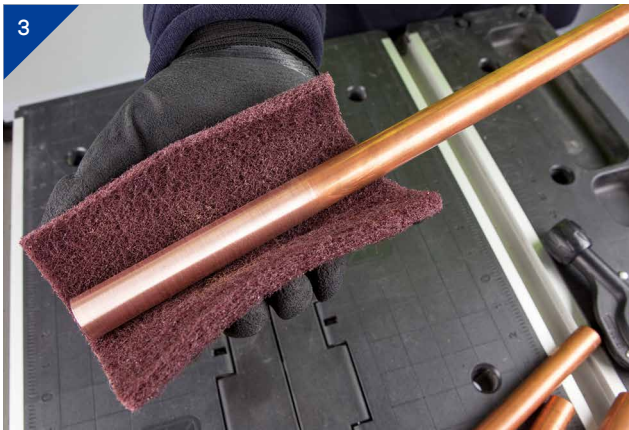


► Installation Instructions



1. Cut the Tube: Tube should be cut completely square and there should be no defects and scratches on the tube which may affect the integrity of joints.

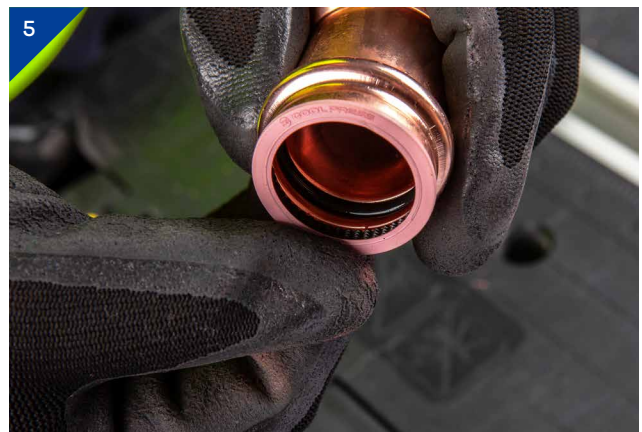


4. Check for defects: If deep scratches are still visible, cut the tube back to a clean section and repeat steps 2 - 3.



2. Deburr the Tube: Using the deburring tool to make sure both inside and outside of the tube end are free from any burrs or sharp edges to avoid damaging the sealing element.

3. Clean the tube end: Thoroughly clean the tube end using a general purpose hand pad or sand cloth in a rotating motion. Tube ends must be free from scratches, oxidation, dirt and debris.



5. Ensure the O-ring is seated: Check the fitting is the correct size for the tube. Check the O-rings are present and correctly seated.



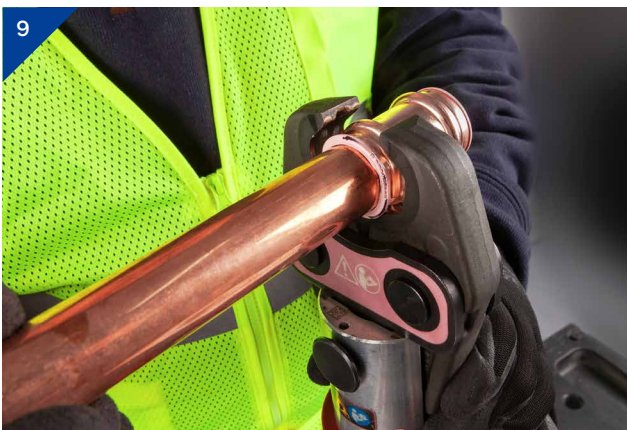
6. Insert the tube into the fitting and mark the insertion depth. Tube needs to be fully inserted into the fittings stop end. Marking the tube will allow any movement of the fitting to be seen before pressing.



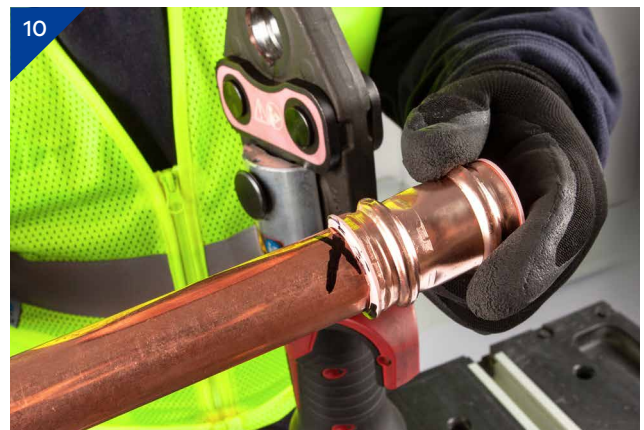
7. Align jaws squarely on the fitting: Ensure pipework is correctly aligned prior to pressing. Ensure the correct size jaw is inserted into the tool. The jaws must be placed squarely on the fitting locating the groove over the o-ring. The o-ring on the fitting should fit centrally in the groove of the jaw.



8. Depress and hold the button to complete the pressing cycle. Pressing is complete when the jaws are fully closed and the piston retracts. Complete the press cycle once only - do not repress.

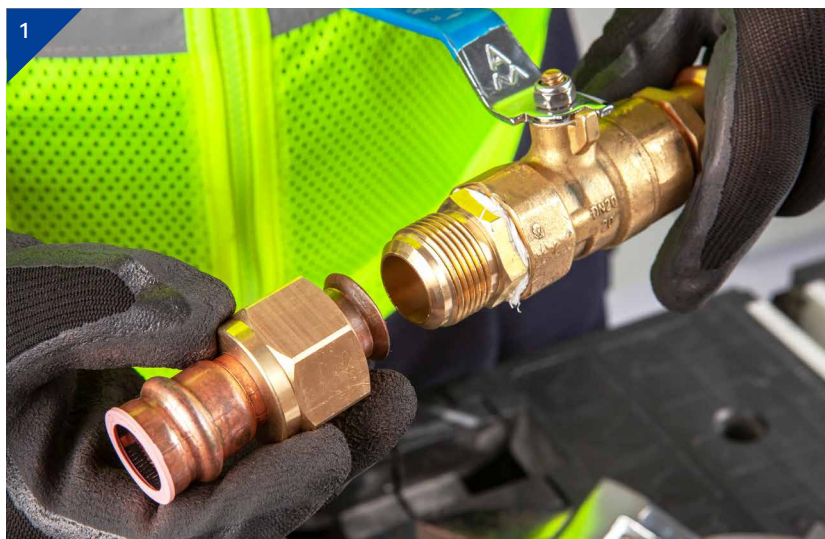


9. Release the jaw.



10. Mark the completed joint: Mark the completed joint after pressing. This enables joints to be inspected easily before testing and insulating the pipework.

► Flares Installation Instructions



1.Align the centers of both flares and tighten the flares by hand.

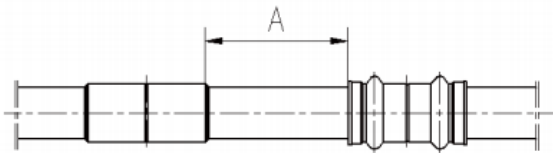


2.Fully tighten using an open end wrench and torque wrench to the torque values set out in the table. Do not overtighten.

Flares Tightening Torque		
Tube Diameter	Recommended Torque (ft.lbs)	Recommended Torque (N.M)
1/4"	11-13	14-18
3/8"	25-31	33-42
1/2"	37-45	50-62
5/8"	47-56	63-77
3/4"	67-81	90-110

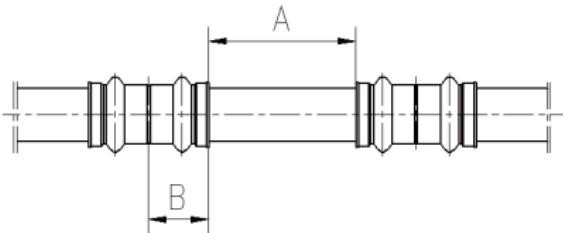
► Installation Requirements

1.1 Brazing or soldering near to press joints should be avoided as this may cause the seal to degrade due to heat transfer. Following table 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 hot block, to prevent heat transfer to the press fitting during brazing.



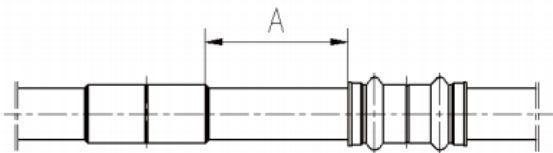
Tube OD	Minimum Distance A (inches)	Minimum Distance A (mm)
1/4"	10	250
3/8"	12	300
1/2"	14	350
5/8"	18	450
3/4"	20	500
7/8"	24	600
1-1/8"	28	700

1.2 Minimum distance between pressings and insertion depth. Due to the reforming of the tube profile when pressed, it is advised that a minimum distance is allowed between each fitting.



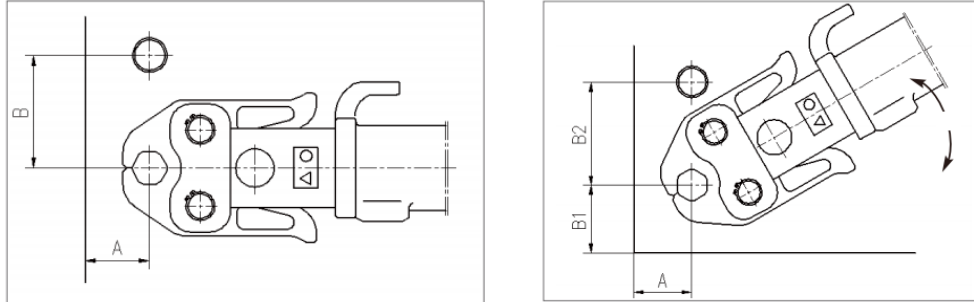
TUBE OD	Insertion Depth (inches)	Insertion Depth (mm)	Minimum Distance (inches)	Minimum Distance (mm)
1/4"			3/8"	10
3/8"			3/8"	10
1/2"			3/8"	10
5/8"			5/8"	15
3/4"			7/8"	22
7/8"			7/8"	22
1-1/8"			7/8"	22

1.3 Minimum distance for press fittings from an existing brazed joint.



Tube OD	Minimum Distance A (inches)	Minimum Distance A (mm)
1/4"	3/8"	10
3/8"	3/8"	10
1/2"	3/8"	10
5/8"	5/8"	15
3/4"	7/8"	22
7/8"	7/8"	22
1-1/8"	7/8"	22

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



Tube OD	Minimum Distance A (inches)	Minimum Distance A (mm)	Minimum Distance B (inches)	Minimum Distance B (mm)
1/4"	3/4"	19	1-5/8"	41
3/8"	3/4"	19	1-5/8"	41
1/2"	3/4"	19	1-5/8"	41
5/8"	7/8"	22	1-5/8"	41
3/4"	7/8"	22	2-1/8"	54
7/8"	7/8"	22	2-1/8"	54
1-1/8"	1"	26	2-1/8"	54

Tube OD	Minimum Distance A (inches)	Minimum Distance A (mm)	Minimum Distance B1 (inches)	Minimum Distance B1 (mm)	Minimum Distance B2 (inches)	Minimum Distance B2 (mm)
1/4"	7/8"	22	1-3/8"	35	2-1/2"	64
3/8"	7/8"	22	1-3/8"	35	2-1/2"	64
1/2"	7/8"	22	1-3/8"	35	2-1/2"	64
5/8"	7/8"	22	1-3/8"	35	2-1/2"	64
3/4"	1"	26	1-1/2"	38	2-1/2"	64
7/8"	1"	26	1-1/2"	38	2-1/2"	64
1-1/8"	1-1/8"	29	1-3/4"	45	3"	76

1.5 Pressure drop table with standard and long radius elbows

Elbow Equivalent length of tube				
Tube OD	Standard Radius (Inch)	Standard Radius (mm)	Long Radius (Inch)	Long Radius (mm)
1/4"	0.7	17.78	*	*
3/8"	0.8	20.32	*	*
1/2"	1.26	29.15	0.7	17.78
5/8"	1.31	33.32	0.8	20.32
3/4"	1.64	41.66	1	25.4
7/8"	1.79	45.82	1.1	27.94
1-1/8"	2.31	58.31	1.4	35.56