

Conex | Bänninger

>B< Press Inox XL



>B< Press Inox XL - Technical Brochure

76 to 108 mm
Material Type 316L

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1. General

>B< Press Inox XL range are a quick and simple to install, flame-free M-profile fitting, manufactured using high quality hygienic stainless steel material (AISI 316L) which can be used for multiple applications including drinking water.

1.1 Quality and certifications

Conex Bänninger has 110 years of experience in manufacturing innovative products and operates an accredited Quality Management System to EN ISO 9001.

>B< Press Inox XL press fittings are tested and certified by independent national certification bodies confirming their suitability and reliability for water applications. >B< Press Inox XL is certified by the following bodies:

Table 1

International certifications Sizes 76 -108 mm	
>B< Press Inox XL	
Australia	Watermark
France	ACS
France	CSTB
Germany	DVGW
Poland	ITB
Switzerland	SVGW
UK	WRAS

1.2 Features and benefits

- Suitable for hot and cold water installations, drinking water, local and district heating, rainwater harvesting, oil-free compressed air and vacuum. For additional applications please refer to section 1.2.
- Easy to install, saving on labour time.
- Permanent, flame-free connection – no brazing or soldering consumables or hot works permit required.
- Maximum continuous operating temperature 110 °C.
- Manufactured using high quality materials, including an EPDM O-ring, that is to applicable standards.
- Suitable for rising pipework.
- Tested and approved by national and international standard authorities.
- Full product guarantee for full terms and conditions please see section 13.
- Comprehensive range of fittings – sizes from 76 to 108 mm.
- Compatible with commonly available press tools (see section 8.1).
- Suitable for use with stainless steel tubes to EN 10312 series 1 and 2. See tube compatibility table in section 9.5.

1.3 Materials and threads

>B< Press Inox XL fittings are made from solution-treated molybdenum-steel 1.4404 (AISI 316L) in accordance with EN 10088. These fittings are type tested and approved for drinking water by WRAS and DVGW.

>B< Press Inox XL tubes is also available in 1.4404 (AISI 316L). The tubes correspond in properties and dimensions with the requirements of EN 10312, Series 2.

Threaded connections

>B< Press Inox XL fittings are available with male and female threaded connections to the following standards:

- Jointing threads are to ISO 7-1 and EN 10226-1 Female are parallel and male are taper.
- Fastening threads are to ISO 228 parallel.



1.4 Storage and handling

Store in a cool and dry place to protect the fittings from contamination, damage and dirt. Keep out of direct sunlight. Fittings should be left in their packaging to preserve the lubrication on the O-rings prior to installation.

1.5 Black EPDM sealing elements

>B< Press Inox XL EPDM O-rings are peroxide-cured rubber seals with high elasticity, excellent cold and heat performance.

Please refer to section 2 for the fitting operating parameters for the different applications.

1.6 System testing

Pressure testing should be carried out to the appropriate standard (e.g. EN 806 specifies 1.1 x maximum design pressure) or to the satisfaction of the supervising engineer with a maximum test pressure of 1.5 times the operating pressure.

1.7 Electrical continuity

>B< Press Inox XL fittings maintain earth continuity without increase in the need for additional continuity straps.

1.8 Recommended water velocities

Please note the maximum allowances for water velocities are per the relevant national standards and codes, which includes EN 806 part 2 and part 3.

1.9 COSHH**(Control of substances hazardous to health)**

It is the responsibility of the end user to ensure that adequate protection is available where required and the necessary information regarding possible health and safety regulations is adhered to. Stainless steel fitting is considered non-hazardous under normal circumstances.

1.10 Tube compatibility

>B< Press Inox XL fittings can be used on stainless steel tubes manufactured in accordance with EN 10312 Series 1 and Series 2. Please refer to section 10.5 for the full tube compatibility table.



2. Product Suitability & Applications

>B< Press Inox XL is suitable for use in a variety of applications, including drinking water installations, with the operating parameters outlined in table 2.

Installations must be planned and operated in accordance with local regulations, codes of practise, by laws and standards governing the installation e.g. EN 806: parts 1 to 4: Specifications for installations inside buildings

conveying water for human consumption or EN 12828: Heating systems in buildings. Design for water-based heating systems

For information on corrosion protection please see section 4.

Table 2

Application	Flow medium	Pressure bar	Temp °C	M 316
Drinking water installations EN 806	Drinking water	10 max	95	✓
		16 max	25	✓
Hot water heaters EN 12828	Heating water	16	110 max	✓
Local and district heating tubes	Heating and district heating water	16	110 max	✓
Thermal solar systems with operating temperatures ≤ 110°C EN 12975 /12976	Water and water-glycol mixtures. Mixing ratio max 50/50%.	6	-35 to +110	✓
			180 ≤ 30 h/a**	
			200 ≤ 10 h/a**	
Water based air conditioning systems	Water and water-glycol mixtures. Mixing ratio max 50/50%.	6	-10 min	✓
Rainwater harvesting systems	Rainwater from cisterns.	10	25	✓
Oil-free compressed air	Compressed air classes 1 - 3 in accordance with ISO 8573-1	10	≤60	✓
Industrial and process water	Treated, softened, partially de-ionized water with a pH =/> 6.5**	16	110 max	✓
Vacuum lines for non-medical purposes	N/A	-0.8	Ambient	✓

A chloride limit value of 250 mg applies to drinking water within the EU. The chloride content of other water (e.g. process water) should not exceed 600 mg when using >B< Press Inox XL.

* h/a – Hours per annum

** In the event of deviating parameters, please contact the technical department, technical@ibpgroup.com.

For applications outside those stated in the table above, please contact the technical department: technical@ibpgroup.com.

3. Thermal Expansion

3.1 Effects of expansion

Using the general equation for change in length (linear expansion) which is:

$$\Delta L = L \times \Delta t \times \alpha$$

where

ΔL = change in length in mm

L = length in m

Δt = change in temperature °C

α = coefficient of linear expansion.

For example, a 10 m length of stainless steel tube, irrespective of its size, wall thickness or temper, will increase in length by 9.6 mm with a temperature rise of 60 °C where the coefficient of linear expansion for 316 stainless steel = 0.016 i.e. $9.6 = 10 \times 60 \times 0.016$.

Tubes installed on hot water services must be free to accommodate this expansion; otherwise stresses will build up in the pipework that may lead to joints being pulled apart and/or tubes fracturing. Clearly the magnitude and frequency of such changes in length will determine the life of the joint or failure of the tube.

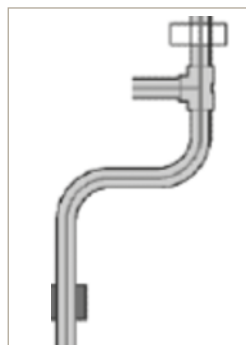
Table 3 shows the amount of tube expansion for a given temperature rise. In the case of tube in domestic hot water and heating installations the limited size of rooms and hence straight tube runs, together with the many bends and offsets that normally occur, will result in thermal movement being accommodated automatically. However, where long straight tube runs exceeding 10 m, are encountered, allowance for expansion should be made.

A quick, economic and effective way of accommodating thermal expansion is to simply incorporate the horseshoe or compensating bend to the system design.

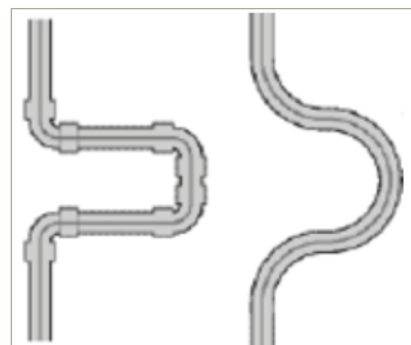
3.2 Expansion devices

Where stainless steel tubes pass through walls, floors and ceilings, they should be able to move as a result of expansion and contraction. This can be arranged by passing the tube through a sleeve or length of larger diameter tube fixed through the whole thickness of the wall, floor or ceiling, or by means of flexible joints on either side of the wall.

Short stubs connected to relatively long straight runs should also be avoided. This can usually be achieved by introducing an expansion loop, thereby increasing the length of pipework fixed between the flow/return legs and the connection. However, expansion accommodation techniques such as the use of loops and horseshoes may not be sufficient to accommodate large expansions and in such cases the use of the bellow type couplers may be necessary.



By change of direction



Horseshoe or compensating bend



The table below shows the increase in length due to thermal expansion as a function of change in temperature Δt and the length of the tube, irrespective of diameter, temper or wall thickness.

Table 3

Tube length m	Thermal Expansion - Stainless Steel 316 - Coefficient of Expansion = 0.016							
	Change in length mm with temperature difference Δt °C							
	$\Delta t=30^\circ$	$\Delta t=40^\circ$	$\Delta t=50^\circ$	$\Delta t=60^\circ$	$\Delta t=70^\circ$	$\Delta t=80^\circ$	$\Delta t=90^\circ$	$\Delta t=100^\circ$
1	0.48	0.64	0.8	0.96	1.12	1.28	1.44	1.6
2	0.96	1.28	1.6	1.92	2.24	2.56	2.88	3.2
3	1.44	1.92	2.4	2.88	3.36	3.84	4.32	4.8
4	1.92	2.56	3.2	3.84	4.48	5.12	5.76	6.4
5	2.4	3.2	4	4.8	5.6	6.4	7.2	8
10	4.8	6.4	8	9.6	11.2	12.8	14.4	16
15	7.2	9.6	12	14.4	16.8	19.2	21.6	24
20	9.6	12.8	16	19.2	22.4	25.6	28.8	32
25	12	16	20.00	24	28	32	36	40

ΔL dimensional increase is stated in mm

4. Corrosion Resistance, Frost / Heat Protection

4.1 Internal corrosion

The term stainless comes from the steels ability to form a thin but dense protective film, known as the passive layer, which minimises the effects of corrosion and provides high levels of hygiene, durability and water quality.

The passive layer is formed when the chromium content of the material reacts with oxygen, resulting in the compound chromium oxide.

Chloride ions have the ability under certain conditions to penetrate the passive layer and cause localised corrosion.

A chloride limit of 250 mg applies to drinking water within the EU. The chloride content of other water (e.g. process water) should not exceed 600 mg when using >B< Press Inox XL.

It has also been proven that the risk of crevice and pitting corrosion increases with temperature. It is therefore important that local chloride levels are taken into consideration and risks are minimised with the use of a suitable corrosion inhibitor for heating and cooling systems.

Please refer to manufacturers instructions regarding the use of inhibitors in stainless steel systems.

For further information on the protection of metallic materials against corrosion please refer to EN 12502 and EN 14868.

4.2 Disinfection

It is preferable that stainless steel pipe systems are disinfected with hydrogen peroxide (H_2O_2). Where this is not possible, chlorine of concentrations up to 25 ppm during a 24 hour period are acceptable, providing that the lines are comprehensively flushed with fresh water and that residual chlorine is restricted to < 2ppm. It is recommended that this is verified by analysis.

4.3 External corrosion

In the event that a stainless steel system is exposed to corrosive environments external to the system, such as chloride from cladding materials or coastal/offshore sites, it is recommended that prior to the application of thermal insulation, a suitable protective paint or appropriate thickness aluminium foil wrap or thermal spray is applied.

Any corrosion barriers should be applied in accordance with BS 5970 - Code of practice for thermal insulation of pipework and equipment.



4.4 Thermal insulation

The thermal insulations of tubes should be implemented in accordance with national codes and standard including BS 5970.

4.5 Protection against heat gain and frost

Regulations require that all water services (except warning or overflow pipes) shall be protected from freezing temperatures and heat gain. This is best achieved by protecting the system by use of a suitable thickness of insulation or in the case of particular situations such as unheated roof spaces that require special care, a self-regulating trace heating tape.

In non-drinking water applications, if a frost protection inhibitor is to remain in the pipelines permanently, at least one concentration test must be carried out annually. All chemical additions must be agreed before use to rule out negative interactions with materials and sealing elements (O-rings).

4.6 Connecting to other materials

Stainless steel, copper and copper alloys can be combined in a single system with no restriction of flow direction.

However in order to minimise the likelihood of galvanic corrosion, a direct connection should not be made in systems where the use of corrosion inhibitors is not possible, and a dielectric union or copper alloy spacer of at least 50 mm in length should be used for this connection.

For further information on galvanic corrosion, please refer to EN 14868 for closed water circulation systems and EN 12502-4 for guidance specific to stainless steel systems.

5. Pressure Testing

It is preferable that testing a system containing >B< Press Inox XL fittings is initially carried out pneumatically with oil-free compressed air or inert gas (eg nitrogen).

This is particularly important where systems are to remain idle for extended periods of time, and if tested hydrostatically and not properly drained or flushed (See section 5.1), there is the potential for bacteria growth and or corrosion. Pneumatic testing shall be carried out to a maximum of 3 bar and the pressure shall be increased slowly and incrementally.

A hydrostatic test shall only be carried out immediately prior to commissioning the installation. The system shall be filled with clean drinking water against an open high point valve allowing all trapped air to be removed from the network. Once free of trapped air, the high-level valve should be closed and the system topped up, at that stage testing should be completed between 1-2 bar to ensure any un-pressed joints are identified. The recommended system test pressure should be in accordance with the requirements of EN 806 part 4 (1.1 x maximum design pressure or to the satisfaction of the supervising engineer with a maximum test pressure of 1.5 times the operating pressure). Full test pressure should be maintained for a minimum of 30 minutes without any sign of pressure drop. A full inspection should then be carried out to identify any leaks.

During hydrostatic or pneumatic testing, any joints identified as unpressed and are showing signs of leakage should be pressed upon the return to atmospheric pressure, however it is essential the tube is fully inserted to the tube stop prior to pressing.

All joints shall remain uncovered and visible when pressure testing systems containing >B< Press Inox XL fittings.

Pressure testing should be carried out in accordance with national regulations and appropriate specifications drawn up and a risk assessment must be completed prior to testing.

5.1 Flushing of water installations

It is essential to flush the systems with water after installation to remove dust, and debris. Commissioning should be carried out in accordance with EN 806-4.

If installations are not used immediately after commissioning, they should be flushed at regular intervals, at least once a week. After an extended time, the system should be disinfected to comply with legionella guidelines.

5.2 Water softening

Hard water may be softened to avoid excessive deposits of scale in hot water services. >B< Press Inox XL system is fully compatible with reverse osmosis and ion exchange treatment methods and highly resistant to corruptions with softened decarbonised water or desalinated water.

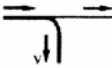
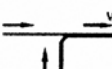
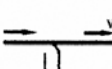
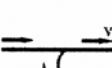















6. Loss Coefficients (Zeta Values)

Table 4

Symbol	Designation	ζ	Application		Symbol	Designation	ζ	Application		
			DW	H				DW	H	
	Angle or elbow reference value in accordance with DIN 1988 T3	0,70	X	X		Distributor outlet	0,5	X	X	
						Collective inlet	1,0	X	X	
	Angle 90° r/d = 0,5	1,0	X	X		Reservoir outlet	0,5	X		
	(r/d = 1,2 = 1,0	0,35	X	X		Inlet	1,0	X	X	
	with fittings = 2,0	0,20	X	X						
	complying with DIN EN 1254) = 3,0	0,15	X	X						
	Angle β = 90°	1,3	X	X		Reducer	0,4	X	X	
	= 60°	0,8	X	X						
	= 45°	0,4	X	X						
	Crossover	0,5	X	X		Constriction β - constant =	30°	0,02	X	X
							45°	0,04	X	X
							60°	0,07	X	X
	Branch, square flow separation	1,3	X	X		Expansion β - constant =	10°	0,10	X	X
	Flow merging	0,9	X	X			20°	0,15	X	X
	Clearance at flow merging	0,3	X	X			30°	0,20	X	X
	Clearance at flow merging	0,6	X	X			40°	0,20	X	X
		Counter-flow at flow merging	3,0	X	X		Expansion bends	1,0	X	X
		Counter-flow at flow separation	1,5	X	X					

Symbol	Designation	ζ	Application	
			DW	H
	Branch, curved flow separation	0,9	X	X
	Flow merging	0,4	X	X
	Clearance at flow separation	0,3	X	X
	Clearance a flow merging	0,2	X	X
	Angle valves DN 10 DN 15 DN 20 to DN 50 DN 65 to DN 100	7,0 4,0 2,0 3,5 4,0	X X X X X	X X X X X
	Diaphragm valves DN 15 DN 20 DN 25 to DN 32 DN 40 to DN 100	10,0 8,5 7,0 6,0 5,0	X X X X X	X X X X X
	Shutter valves Piston valves Ball valves DN 10 to DN 15 DN 20 to DN 25 DN 32 to DN 150	1,0 0,5 0,3	X X X	X X X
	Radiator valves	4,0		X
	Control valve	2,0		X
	Pressure regulator fully open	30,0		X
	Shut-off valve Straight seat valve DN15 DN20 DN25 DN32 DN40 to DN100	10,0 8,5 7,0 6,0 5,0	X X X X X	X X X X X
	Angle seat valve DN 15 DN20 DN 25 to DN50 DN65	3,5 2,5 2,0 0,7	X X X X	X X X X
	Return flow inhibitor DN 15 to DN 20 DN 25 to DN 40 DN 50 DN 65 to DN 100	7,7 4,3 3,8 2,5	X X X X	
	Control valve with return flow inhibitor DN 20 DN 25 to DN 50	6,0 5,0	X X	
	Valve tapping sleeve DN 25 to DN 80	5,0	X	
	Boiler	2,5		X
	Heating radiator	2,5		X
	Panel radiator	3,0		X

7. Compatible Press Tools

7.1 Tool chart

Table 5

64 to 108 mm Standard 32 kN machines			
Manufacturer	Press machine	Press jaws/Chain/Collar/Ring	Jaw profile
Novopress	ACO202XL/203XL	Novopress - Collars + ZB231 + ZB322 adaptor	M
Klauke	UAP4/UAP4L/UAP432	Klauke - Chains + SBKQC adaptor	KSP3
Rems*	Power Press XL ACC	Rems - Sling + Z6XL adaptor	M

Note: Do not use 108 mm copper only jaw.

8. Installation Requirements

8.1 Space required for the pressing process

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

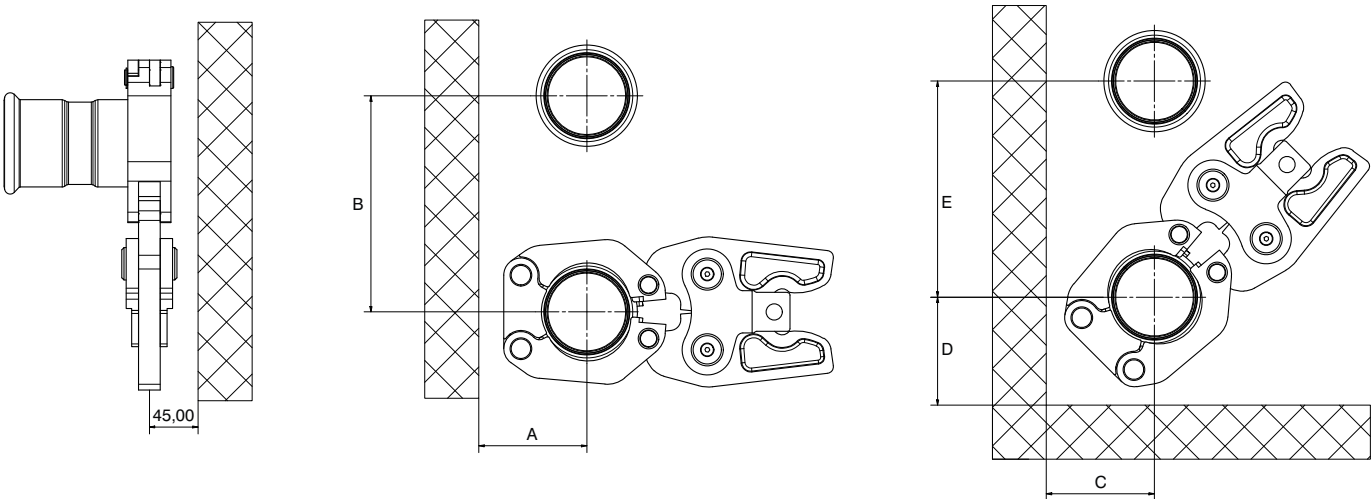


Table 6

Minimum clearance required for pressing					
Size (mm)	A	B	C	D	E
76.1	115	165	115	115	165
88.9	125	185	125	125	185
108	135	200	135	135	200

8.2 Minimum distances between pressings

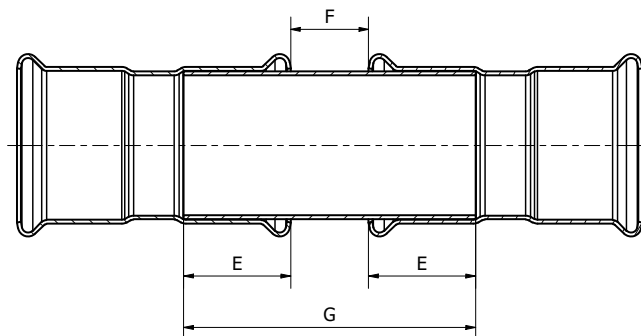


Table 7

Minimum distance between pressings				
Size (mm)	D	E	F	G
76.1	81	52	40	142
88.9	94	52	50	142
108	114	60	50	170

8.3 Minimum distance for press fittings from an existing welded joint

To ensure proper sealing of both welded and pressed joints, the following minimum distances must be maintained. Please see Table 8 for further information.

Table 8

Minimum distance from a welded joint	
Tube size	mm
76.1	40
88.9	50
108	50

8.4 Minimum welding distance to an existing pressed fitting

Caution: Welding near >B< Press joints should be avoided as this may cause the seal to degrade due to heat transfer. Table 9 states the minimum distance away from the press joint acceptable to weld. If this distance cannot be maintained then adequate precautions must be taken such as fabricating the welded 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 welding.

Table 9

Minimum distance welding	
Tube size	mm
76.1	2000
88.9	2000
108	2000

11

8.5 Tube compatibility table

The dimensions of light stainless steel tube, to standard EN 10312 Series 1 or Series 2.

Table 10

Tube wall thickness (mm)		
Tube O/D	Wall thickness (Series 1)	Wall thickness (Series 2)
76.1	1.5	2.0
88.9	N/A	2.0
108*	N/A	2.0

*108 x 1.5 mm - additional requirement over EN 1057, the minimum wall thickness must not be below 1.4 mm.

9. Tube Preparation

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

Note: Avoid grinding wheels, fast cutting saws and hacksaws as they are not suitable for cutting tube. If the tube ends become distorted, remove the damaged section by using the appropriate cutting method.

When preparing tube ensure that the tube is correctly supported and eye protection is worn. If using power tools, great care must be taken. Refer to the manufacturers instructions before use.

Safety note: When using press tools, care must be taken to ensure hands are kept away from the jaw during the pressing process. Always wear ear and eye protection. For instructions on how to cut the tube please refer to section 10.



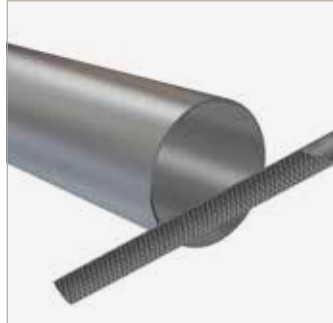
10. Fitting Installation Instructions

To install >B< Press Inox XL, a press tool, actuator and compatible sized press ring to fit each size fitting is required. When force is exerted through the press tool a permanent joint is made and the fitting cannot be disassembled or reused.



1. Cut tube to length

- Use a rotary tube cutter.
- Ensure that the tube is cut square.
- Check the tube has maintained its shape and is damage free.



2. Deburr

- Deburr the tube both internally and externally.
- 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.

Caution: Please ensure that the tube surface is free from any deep score or scratches.



3. Check the fittings

- Check the fitting is the correct size for the tube.
 - Check the O-rings are present and correctly seated.
- 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 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 slipping 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. Fit the pressing ring

- Using the appropriate size pressing ring, open the pressing ring, locate on the fitting bead and close the pressing ring.



6. Engage the actuator and check installation depth

- With the actuator fitted in the press tool, open the actuator and locate the actuator onto the aperture of the pressing ring.
- Check for any tube movement prior to pressing.



7. Press the joint

- Depress and hold the trigger of the tool until the press cycle of the tool is automatically completed. Keep hands clear of the press actuator and press ring until the cycle is completed.

Caution: The >B< Press Inox XL joint is complete after one full cycle of the tool. Do not press any >B< Press Inox XL fitting more than once.



8. Mark the completed joint

- Remove the actuator and the press ring from the tube and mark the joint to indicate that it is complete.
- This enables joints to be inspected easily before testing.

Important

It is important to keep the fitting free of any dust or dirt, and to ensure the seal 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. When using a press tool always wear ear and eye protection.

Additional >B< Press lubricant (silicon oil) may be used to aid tube insertion. (MPABPSOIL100ML)

11. The Range

PS4130G

Tee with Female Branch



PS4243G

Male Straight Coupler



PS4270G

Female Straight Coupler



PS4275

Slip Coupler



PS5001

90° Street Elbow



PS5002

90° Elbow



PS5040

45° Obtuse Street Elbow



PS5041

45° Obtuse Elbow



PS5130

Equal Tee



PS5130RB

Tee - Reduced Branch



PS5230D

Flange Adaptor PN16



PS5243

Fitting Reducer



PS5270

Straight Coupler



PS5301

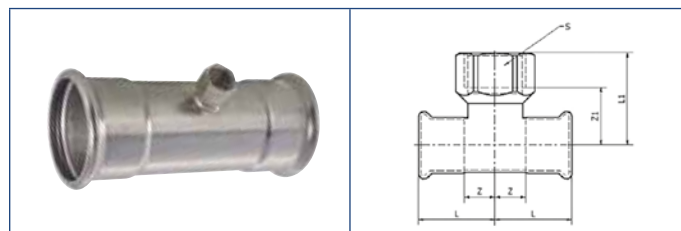
Stop End



MPABPSOIL100ML

Fitting Lubricant for O-ring

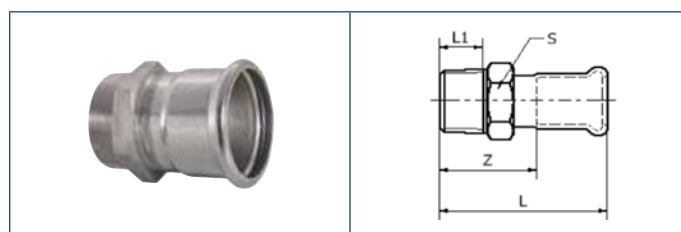




PS4130G** Tee with Female Branch

Code	Fitting size	L	L1	Z	Z1	S
PS4130G0760676	76 x 3/4" x 76	113	71	59	56	30
PS4130G0761676	76 x 2" x 76	113	91	59	62	65
PS4130G0890689	89 x 3/4" x 89	128	78	70	63	30
PS4130G0891689	89 x 2" x 89	128	97	70	68	65
PS4130G10806108	108 x 3/4" x 108	150	87	81	72	30
PS4130G10816108	108 x 2" x 108	150	107	81	78	65

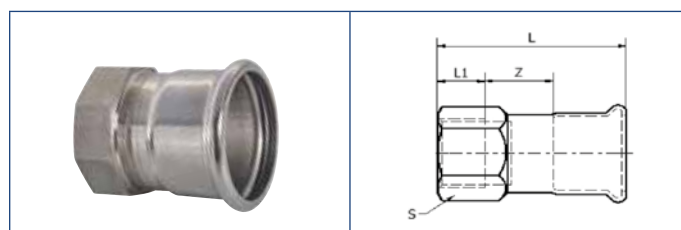
** The above description reads end, branch, end.



PS4243G Male Straight Coupler

Code	Fitting size	L	L1	Z	S
PS4243G0762000	76 x 2.1/2"	127.5	30	74	80
PS4243G0892400	89 x 3"	142	30	86	95
PS4243G1083200	108 x 3.1/2"	161	40	91	120

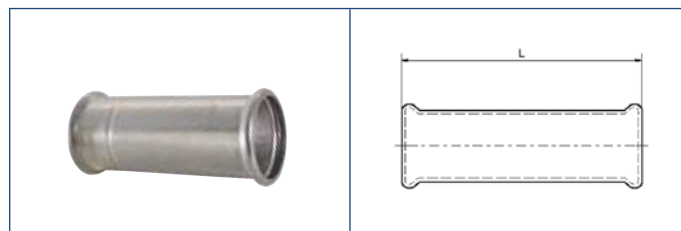
15



PS4270G Female Straight Coupler

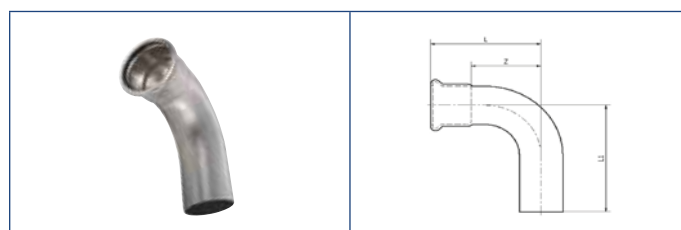
Code	Fitting size	L	L1	Z	S
PS4270G0762000	76 x 2 1/2"	129	30	45	84
PS4270G0892400	89 x 3"	126	30	38	96

*All above measurements are in mm unless stated differently.



PS4275 Slip Coupler

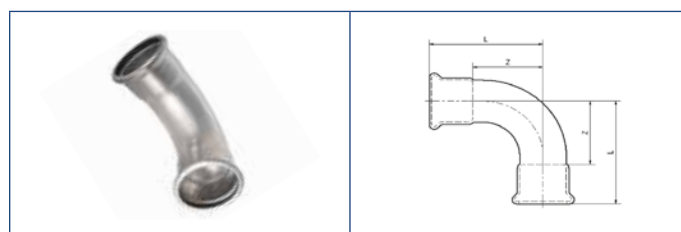
Code	Fitting size	L
PS4275 0760000	76.1	226
PS4275 0890000	88.9	255
PS4275 1080000	108.0	300



PS5001 90° Street Elbow

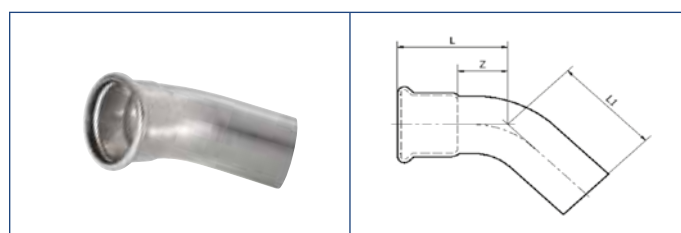
Code	Fitting size	L	L1	Z
PS5001 0760000	76.1	177	195	124
PS5001 0890000	88.9	181	202	123
PS5001 1080000	108.0	214	240	140

16



PS5002 90° Elbow

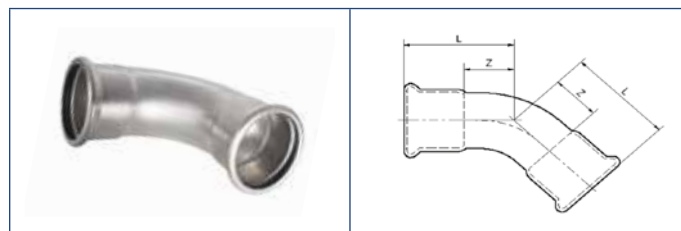
Code	Fitting size	L	Z
PS5002 0760000	76.1	177	124
PS5002 0890000	88.9	181	124
PS5002 1080000	108.0	214	140



PS5040 45° Obtuse Street Elbow

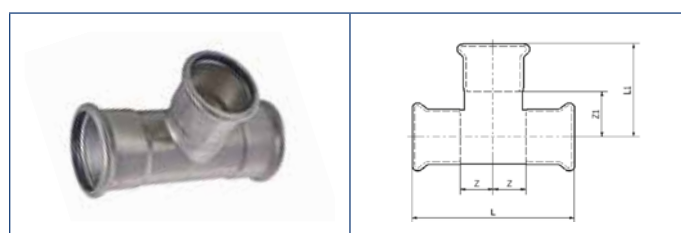
Code	Fitting size	L	L1	Z
PS5040 0760000	76.1	111	128	58
PS5040 0890000	88.9	114	135	56
PS5040 1080000	108.0	138	169	64

*All above measurements are in mm unless stated differently.



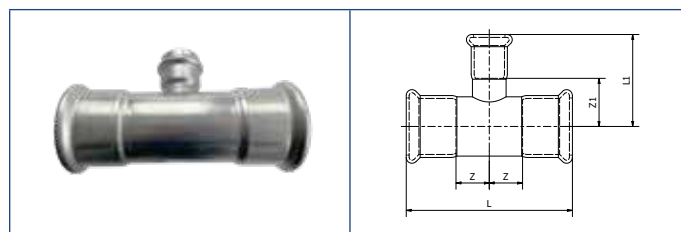
PS5041 45° Obtuse Elbow

Code	Fitting size	L	Z
PS5041 0760000	76.1	111	58
PS5041 0890000	88.9	114	56
PS5041 1080000	108.0	138	64



PS5130 Equal Tee

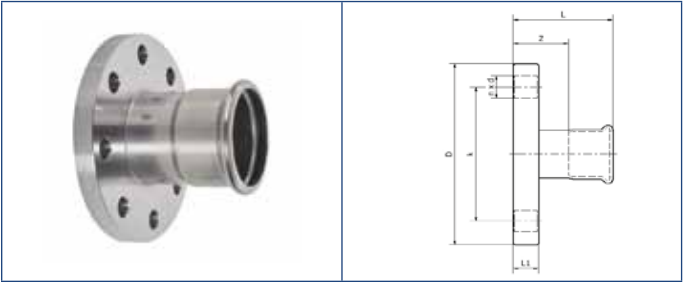
Code	Fitting size	L	L1	Z	Z1
PS5130 0767676	76.1	226	59	110	55
PS5130 0898989	88.9	256	72	128	69
PS5130 10800EQ	108.0	300	81	154	58



PS5130RB Tee - Reduced Branch

Code	Fitting size	L	L1	Z	Z1
PS5130 0762276	76.1	228	68	45	61
PS5130 0762876	76.1	227	70	47	60
PS5130 0763576	76.1	227	74	46	60
PS5130 0764276	76.1	227	83	49	61
PS5130 0765476	76.1	227	90	48	61
PS5130 0892289	88.9	256	75	52	71
PS5130 0892889	88.9	256	76	53	71
PS5130 0893589	88.9	256	81	53	72
PS5130 0894289	88.9	256	89	55	72
PS5130 0895489	88.9	256	97	56	70
PS5130 10822108	108.0	300	84	60	79
PS5130 10828108	108.0	300	84	60	82
PS5130 10835108	108.0	300	87	60	82
PS5130 10842108	108.0	300	95	60	83
PS5130 10854108	108.0	300	102	60	84

*All above measurements are in mm unless stated differently.



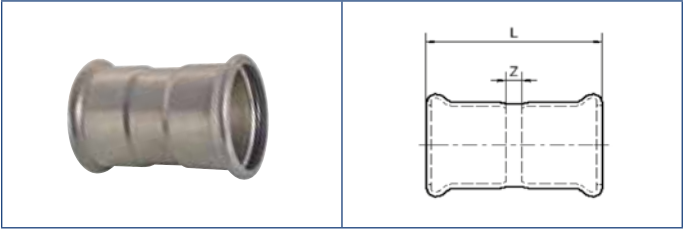
PS5230D
Flange Adaptor PN16

Code	Fitting size	L	L1	Z	D	k	d	n
PS5230D0760000	76.1	132	20	78	185	145	18	4
PS5230D0890000	88.9	146	20	91	200	160	18	8
PS5230D1080000	108.0	169	20	100	220	180	18	8



PS5243
Fitting Reducer

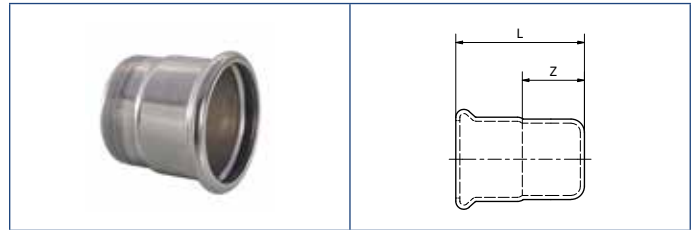
Code	Fitting size	D	L	L1	Z
PS5243 0764200	76 x 42	76	134	70	97
PS5243 0765400	76 x 54	76	137	70	95
PS5243 0894200	89 x 42	89	162	95	125
PS5243 0895400	89 x 54	89	165	95	123
PS5243 0897600	89 x 76	89	185	80	131
PS5243 1085400	108 x 54	108	179	110	145
PS5243 1087600	108 x 76	108	198	110	145
PS5243 1088900	108 x 89	108	206	101	148



PS5270
Straight Coupler

Code	Fitting size	L	Z
PS5270 0760000	76.1	140	33
PS5270 0890000	88.9	160	45
PS5270 1080000	108.0	197	58

PS5301 Stop End



Code	Fitting size	L	Z
PS5301 0760000	76.1	90	36
PS5301 0890000	88.9	102	45
PS5301 1080000	108	125	56

Fitting Lubricant for O-ring



Code	Size
MPABPSOIL100ML	100 ml

12. Product Guarantee

When professionally installed, used and maintained in accordance with the installation and maintenance instructions detailed in the >B< Press Inox XL brochure or its installation instructions available on the Conex Bänninger website www.conexbanninger.com.

Conex Universal Ltd. guarantees that >B< Press Inox XL supplied by Conex Universal Ltd. will be free of material defects resulting from errors in manufacture, for twenty five (25) years from the date of first purchase by an end user. This Guarantee is limited to the repair or replacement of defective product(s) (at the sole discretion of Conex Universal Ltd.). At the request of Conex Universal Ltd. the allegedly defective product(s) must be returned to the address below* and Conex Universal Ltd. reserves the right to inspect and test the alleged defects. This guarantee provided by Conex Universal Ltd. does not affect your statutory rights.

The Guarantee set out above is given by Conex Universal Ltd. and subject to the following conditions:

- A. Any alleged defects must be reported to Conex Universal Ltd. within one month of the first occurrence of any such alleged defect, clearly setting out the nature of the claim and the circumstances surrounding it.
- B. Conex Universal Ltd. shall be under no liability in respect of any defect in any product arising from:
- defective installation,
 - fair wear and tear,
 - wilful damage,
 - negligence of any party other than Conex Universal Ltd.,
 - abnormal working or environmental conditions,
 - failure to follow the installation and maintenance instructions detailed in the products technical brochure or installation instructions, and any other instructions of Conex Universal Ltd. Communicated through the Conex Bänninger website or its successor, www.conexbanninger.com (the Website) or otherwise,
 - misuse (which includes any use of the product(s) concerned for a purpose or in a situation / environment or for an application other than that for which it was designed), or
 - alteration or repair of any product without the prior approval of Conex Universal Ltd.

- C. At the request of Conex Universal Ltd. the person claiming under this guarantee must deliver to Conex Universal Ltd. written evidence of the date of first purchase by an end user of the product(s) concerned.

*** The address for returns is:**

Customer Services
Conex Universal Limited.
Global House
95 Vantage Point
The Pensnett Estate
Kingswinford
West Midlands
DY6 7FT
UNITED KINGDOM

International Contacts

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China Tel: 0086 4001085686 Email: nbibp@ibpchina.com	Technical Service Center Floor 43, Building A, International Trade Center, Ningbo Chamber of Commerce No.558 of Taikangzhong Road, Yinzhou District, Ningbo, China 315100	
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Germany and Central Europe Tel: +49 (0) 6403 / 77 85 – 0 Email: customerservicede@ibpgroup.com	Theodor-Heuss-Strabe 18 35440 Linden, Germany	
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Delcop End Feed

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Delbrazé

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