



>B<Press

Fitting System



100 Years of Innovation

For more than 100 years, Conex Bänninger has been the recognised leader in plumbing fittings, accessories and valves globally – offering a range of innovative and highly versatile jointing solutions.

Since opening its doors in Giessen, Germany in 1909, Conex Bänninger has produced over 20 billion copper fittings, establishing an unrivalled reputation for outstanding quality, first class customer service and market leading expertise.

>B< Press is a versatile press fitting system for use with hard, half hard or annealed copper tube. The unique press indicator ensures a secure, life long, leak-proof joint every time.

Fast Facts

-
- > 20 BILLION FITTINGS SOLD WORLDWIDE SINCE 1909
-
- > CONEX BÄNNINGER >B< MARK INTRODUCED IN 1920
-
- > 850 STAFF WORKING ACROSS THE GLOBE
-
- > CAPACITY TO PRODUCE 500 MILLION PIECES A YEAR
-



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>Key Features<

The >B< Press system moves beyond just being a quality fitting, it gives you the total press solution.

Designed for Australia

Developed in partnership with Reece, Conex and Rothenberger to meet specific needs of Australian plumbers.



Tool Service Support

To ensure optimal performance, your Rothenberger press tools can be serviced through the Reece Tool Service Department.



Extensive testing

>B< Press fittings undergo rigorous internal testing to ensure they meet Australian standards and piping tolerances.



Training and Certification

Reece supports you with training and certification as well as expert advice whenever you need it.



>B< Press Water fittings are Watermark approved and certified to AS3688.

>B< Press Gas fittings are OceanaMark approved and certified to AS3688.

Fully certified

Extensive third party certification offers peace of mind to the client, specifier and installer.



Performance

Corrosion resistant and with a design life of 50 years, >B< Press can be relied on to perform long after installation.



Permanent joint

Secure, permanent joint crimped both sides of deep set O-ring ensures fitting cannot be tampered with.



Practical by design

Lead-in edge aids installation and helps protect O-ring from damage or displacement.



Leak Indicator

The unique pressing indicator in the O-ring shows leaks at low pressures when fittings are not pressed.



>Applications, Warranty & Certifications<





Applications



>B< Press Water Fittings are suitable for:

- Drinking water
- Heating water (non solar)
- Chilled water



>B< Press Gas Fittings are suitable for:

- Natural and LPG
- Compressed air (with or without oil content)
- Fuel lines



>B< Press High Temperature Fittings are suitable for:

- Solar hot water



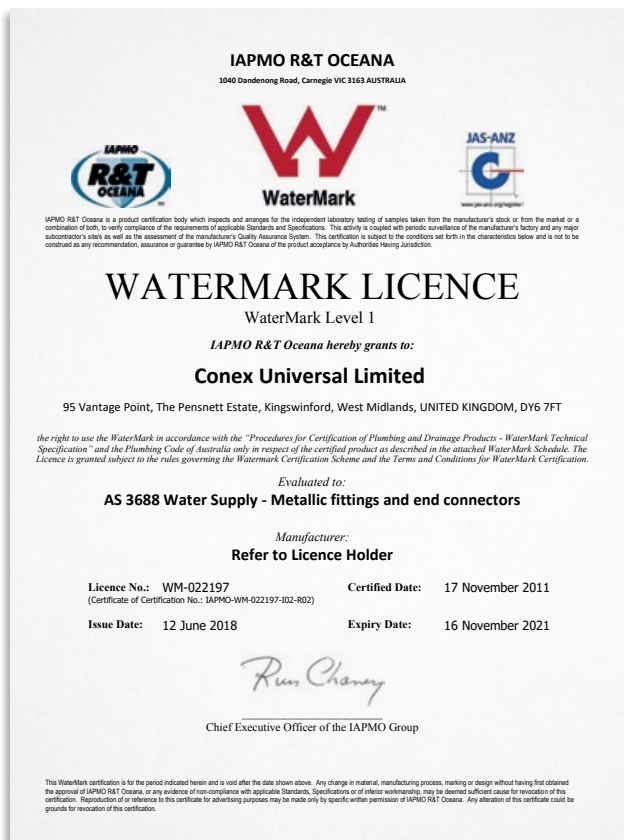
Warranty

A 25 year warranty covers against faults caused by defective manufacture of the fittings. It does not cover faults arising from incorrect installation.

The warranty covers installation with type A and B copper tube conforming to AS1432 but does not cover any faults arising from competitor fittings used on the same installation nor faults caused by damaged >B< Press fittings (through excessive pressure, for example) where competitor fittings created non-compliant conditions.

All >B< Press fittings must be installed by a licensed plumber.

Approvals & Certification



Certification

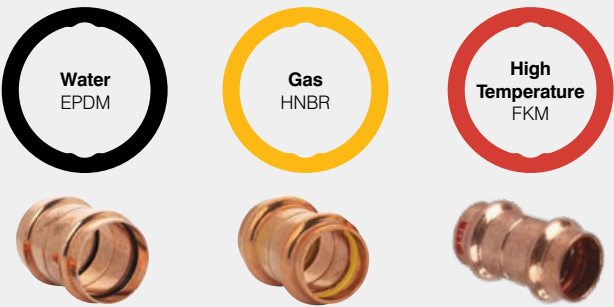
Conex Bänninger is an ISO 9000 Quality assured company. In addition to Watermark approvals in Australia, Conex Bänninger has approvals from numerous national and international bodies including DVGW, KIWA, GASTEC, WRAS and AENOR, plus many well-known others.



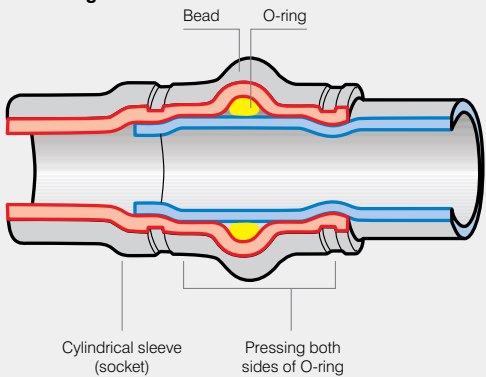
Product Features

O-Ring

>B< Press fittings for water applications are identified with a black O-ring. For natural gas and LPG applications, fittings are identified by a yellow coloured O-ring and a yellow mark on the fitting body. *Important Note: The O-ring colour and identification must meet the application. O-ring in the fittings are not to be removed or changed.



Section through >B< Press fitting



Pressing Indicator (PI) Feature

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 pressurizing the system with a pressure range of 100 kPa to 500 kPa for water (prior to the final pressure testing) 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.

Testing and commissioning installations

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

WATER SYSTEMS

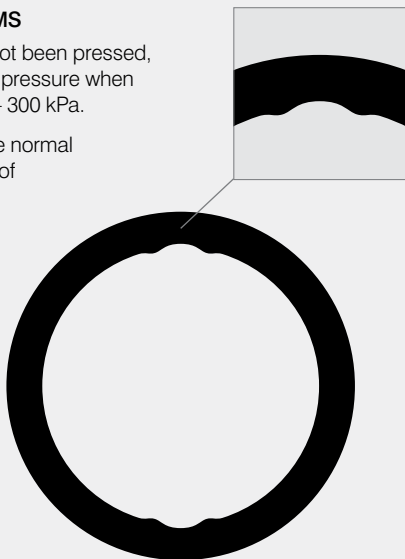
To ensure that all press joints have been successfully completed, a low pressure test is applied as follows:

- 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



>Fittings 15-50mm<





Technical Data

>B< Press is suitable for use with hard, half hard or annealed type A and B copper tube complying with AS1432

Water Supply Systems

Application / Medium	Comments
Hot and cold potable water	Australian Watermark approved. Watermark certification for all plumbing products is restricted to 1400kPa at 95°C.
Fire Services	Capable of the required test pressure of 1700kPa or 1.5 times the design pressure as specified by AS2419.1
Rainwater	
Pump circulated hot water systems	Compliant with EN 12828
Chilled Water	
Steam	Low pressure steam equipment
Solar Collectors	
Conditioned water (partially and fully desalinised water, softened, deionised demineralised distilled)	

Anti-Freeze / Corrosion Protection / Inhibitors

Application / Medium	Comments	
	Product	Manufacturer
Anti-freeze cooling concentration 50%	Antifrogen N	Clariant
	Antifrogen L	Clariant
	Antifrogen Sol (solar systems)	Clariant
	Ethylene Glycol (Ethan-1,2-diol)	Various
	Propylene Glycol (1,2-Propandiol)	Various
	Tyfoxit	Tyforop-Chemie
	Tyfocop	Tyforop-Chemie
	Antifrogen N	Clariant
	Antifrogen L	Clariant
	Antifrogen Sol (solar systems)	Clariant
	Ethylene Glycol (Ethan-1,2-diol)	Various
	Propylene Glycol (1,2-Propandiol)	Various
	Tyfoxit	Tyforop-Chemie
	Tyfocop	Tyforop-Chemie

✓ Indicates compatibility. (Consultation required for unlisted mediums)

*Note: Installations need to comply to the relevant standards and local regulations. The maximum constant or standard operating pressure and temperature are shown. For testing or short spikes higher pressure and temperature may be applicable.

✓ Indicates compatibility. (Consultation required for unlisted mediums)
 *Note: Installations need to comply to the relevant standards and local regulations.

P (kPa)	T (°C)	>B<Press Water	>B<Press Gas	>B<Press HT
1600	110	✓	✗	✓
1600	110	✓	✗	✓
1600	Ambient	✓	✗	✓
1600	110	✓	✗	✓
1000	5	✓	✗	
≤ 100	Up to 120	✓	✗	✓
1600	160	✗	✗	✓
Not compatible				

P (kPa)	T (°C)	>B<Press Water	>B<Press Gas	>B<Press HT
1600	-25 to 110	✓	✗	✗
		✓	✗	✗
		✓	✗	✗
		✓	✗	✗
		✓	✗	✗
		✓	✗	✗
		✓	✗	✗
1600	-15 to 160	✗	✗	✓
		✗	✗	✓
		✗	✗	✓
		✗	✗	✓
		✗	✗	✓
		✗	✗	✓
		✗	✗	✓

Technical Data

Oils, cooling materials and lubricants

Application / Medium	Comments	
Engine oils and Lubricants (Petroleum-based)	Consultation required	
Engine Oils (Synthetic based)		
Bio Diesel		
Heating oil, Diesel in acc. with EN590		

Gas

Application / Medium	Comments	
Natural Gas Liquid gas Propane Butane Methane	The scope of AS5601 for all gas systems is restricted to 200kPa.	
Argon	For welding	
Forming Gas, Dry / Welding Inert Gas	Ar+CO2 (Eg Cargon)	
Vacuum		
Carbon Dioxide (Dry Gas)	Dry CO ²	
Carbon Dioxide (Wet Gas)		
Nitrogen	Nitrogen Gas	
Helium	May leak at <0.001 cm ³ /min	
Neon		
Xenon		
Synthetic Air		
Krypton		
Oxygen		
Acetylene		
Hydrogen		
Carbon Monoxide	XL not compatible	
Compressed Air	Oil Concentration < 25mg/m ³ Oil Concentration > 25mg/m ³	

Special Media

Application / Medium	Comments	
Acetone	Liquid	
Condensate	From gas condenser boiler	
Condensate	From steam	
Ethanol		
Urea		
Methanol		
Sodium Hydroxide		
Ammonia		

✓ Indicates compatibility. (Consultation required for unlisted mediums)

*Note: Installations need to comply to the relevant standards and local regulations.

	P (kPa)	T (°C)	>B<Press Water	>B<Press Gas	>B<Press HT
	1000	70	✗	✓	✗
			✗	✗	✓
	Not compatible				
	500	-20 to 40	✗	✓	✓

	P (kPa)	T (°C)	>B<Press Water	>B<Press Gas	>B<Press HT
	1000	-20 to 70	✗	✓	✗
	1600	70	✓	✓	✓
	1600	70	✓	✓	✓
	-80	Ambient	✓	✓	✓
	1600	Ambient	✓	✓	✓
	Not compatible				
	1600	70	✓	✓	✓
	1600	70	✓	✓	✓
	1600	70	✓	✓	✓
	1600	70	✓	✓	✓
	1600	70	✓	✓	✓
	1600	70	✓	✓	✓
	1600	70	✓	✓	✓
	1000	Ambient	✓	✓	✓
	Not compatible				
	500	70	✓	✗	✓
	1600	70	✓	✓	✓
	1600	70	✓	✓	✓
	1600	70	✗	✓	✓

	P (kPa)	T (°C)	>B<Press Water	>B<Press Gas	>B<Press HT
	500	-10 to 40	✓	✗	✗
	1600	110	✓	✗	✓
	1600	110	✓	✗	✓
	1600	25	✓	✗	✓
	Not compatible				
	Not compatible				
	Not compatible				
	Not compatible				

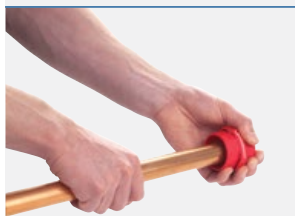
Installation Instructions

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.



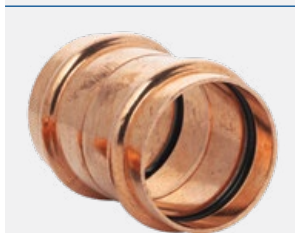
1. Cut the pipe

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.



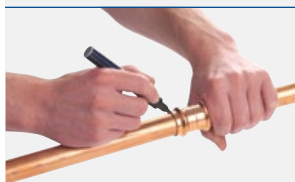
2. Remove burrs

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



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 not lubricated a small amount of water can be used to provide lubrication.



4. Mark insertion depth

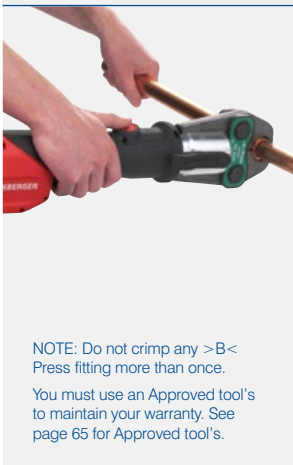
The tube must be fully inserted into the fitting until it reaches the tube stop. Mark insertion depth to ensure that any tube movement is detected, which is especially important if the joints are to be pressed at a later time.

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



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.



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's to maintain your warranty. See page 65 for Approved tool's.

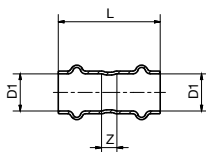
IMPORTANT

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.



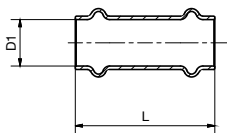
STRAIGHT CONNECTOR

Product Code	Size (D1)	L	Z
404600	15mm	39	3
404860	18mm	49	3
404601	20mm	47	3
404602	25mm	49	3
404603	32mm	53	3
404604	40mm	64	2
404605	50mm	80	2



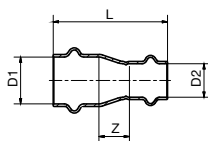
REPAIR COUPLING

Product Code	Size (D1)	L
404661	15mm	39
405098	18mm	49
404662	20mm	47
404663	25mm	49
404664	32mm	53
404665	40mm	64
404666	50mm	80



COUPLING - REDUCING

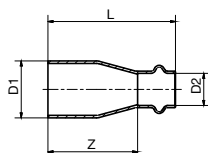
Product Code	Size (D1 x D2)	L1	Z
404863	18 x 15mm	43	2
404631	20 x 15mm	47	7
404864	20 x 18mm	48	4
404632	25 x 15mm	54	13
404633	25 x 20mm	52	7
405169	32 X 20mm	59	13.5
404634	32 x 25mm	55	7
404635	40 x 25mm	67	13
404636	40 x 32mm	62	6
404637	50 x 25mm	86	24
404638	50 x 32mm	83	19
404639	50 x 40mm	84	14



FITTING REDUCER

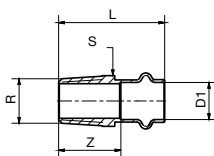
Product Code	Size (D1 x D2)	L	Z
404652	20 x 15mm	50	32
404653	25 x 15mm	55	37
404654	25 x 20mm	54	32
404655	32 x 20mm	62	40
404656	32 x 25mm	57	34
404657	40 x 25mm	68	45
404658	40 x 32mm	65	40
404659	50 x 32mm	84	59
404660	50 x 40mm	86	55

Note: Reduces >B< Press Fitting, not to be soldered.



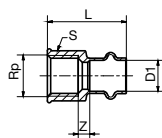
COUPLING - MALE

Product Code	Size (D1 x R)	L	Z	S
404640	15 x 1/2" BSP	43	25	22
404641	15 x 3/4" BSP	47	29	27
404865	18 x 1/2" BSP	46	23	24
404642	20 x 1/2" BSP	48	26	27
404643	20 x 3/4" BSP	48	26	27
404644	25 x 3/4" BSP	50	27	27
404645	25 x 1" BSP	54	31	34
404646	32 x 1 1/4" BSP	59	34	43
404647	40 x 1 1/2" BSP	67	36	50
404648	50 x 2" BSP	80	41	62



COUPLING - FEMALE

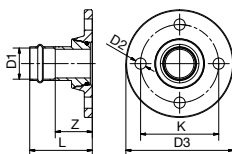
Product Code	Size (D1 x Rp)	L	Z	S
404667	15 x 1/2" BSP	41	8	26
404866	18 x 1/2" BSP	44	6	26
404668	20 x 3/4" BSP	45	7	31
404669	25 x 1" BSP	50	8	39
404670	32 x 1 1/4" BSP	56	10	48
404671	40 x 1 1/2" BSP	63	11	55
404672	50 x 2" BSP	76	11	70





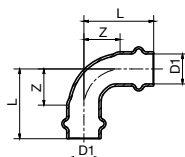
FLANGE ADAPTOR (TABLE E)

Product Code	Size (D1)	L	Z	K	D2	D3
404689	40mm	79	48	98	14	135
404690	50mm	85	47	114	18	150



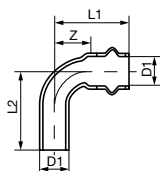
ELBOW - 90 DEG

Product Code	Size (D1)	L	Z
404606	15mm	32	14
404861	18mm	38	15
404607	20mm	43	21
404608	25mm	53	30
404609	32mm	60	35
404610	40mm	76	45
404611	50mm	100	61



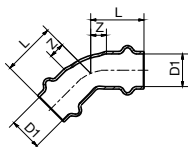
ELBOW M&F - 90 DEG

Product Code	Size (D1)	L1	Z	L2
404851	15mm	32	14	34
404852	20mm	43	21	46
404853	25mm	53	30	55
404854	32mm	60	35	62
404855	40mm	76	45	78
404856	50mm	100	61	102



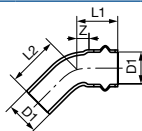
ELBOW - 45 DEG

Product Code	Size (D1)	L	Z
405118	15mm	24	6
405119	20mm	31	9
404673	25mm	35	12
404674	32mm	39	14
404675	40mm	50	19
404676	50mm	64	25



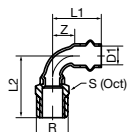
ELBOW M&F - 45 DEG

Product Code	Size (D1)	L1	Z	L2
404844	25mm	35	12	37
404845	32mm	39	14	41
404846	40mm	50	19	52
404847	50mm	64	25	66



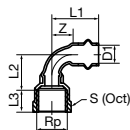
ELBOW - MALE 90 DEG

Product Code	D1 x R	L1	Z	L2	S
405138	15 X 1/2" BSP	32	14	42	22
405139	20 X 3/4" BSP	43	21	51	27
405155	15X20 BSP	32.5	14.5	46	27



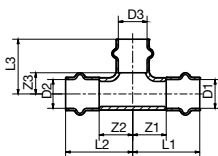
ELBOW - FEMALE 90 DEG

Product Code	D1 x Rp	L1	Z	L2	L3	S
405140	15 X 1/2" BSP	32	14	25	15	22
405141	20 X 3/4" BSP	43	21	33	16	27

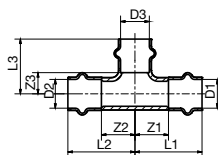




TEE							
Product Code	Size D1xD2xD3	L1	L2	L3	Z1	Z2	Z3
404612	15mm	33	33	28	15	15	10
404862	18mm	40	40	34	17	17	11
404613	20mm	42	42	36	20	20	14
404614	25mm	47	47	40	24	24	17
404615	32mm	49	49	46	24	24	21
404616	40mm	58	58	58	27	27	27
404617	50mm	73	73	73	34	34	34

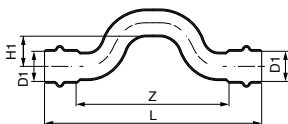


REDUCER TEE							
Product Code	Size D1xD2xD3	L1	L2	L3	Z1	Z2	Z3
404618	20 x 20 x 15mm	39	39	32	17	17	14
404629	20 x 15 x 20mm	42	40	36	20	22	14
404630	20 x 15 x 15mm	39	40	32	17	22	14
404619	25 x 25 x 15mm	38	38	35	15	15	17
404620	25 x 25 x 20mm	42	42	39	19	19	17
404621	32 x 32 x 15mm	39	39	39	14	14	21
404622	32 x 32 x 20mm	43	43	44	18	18	22
404623	32 x 32 x 25mm	46	46	44	21	21	21
404624	40 x 40 x 20mm	49	49	47	18	18	25
404625	40 x 40 x 25mm	50	50	48	19	19	25
404626	40 x 40 x 32mm	53	53	52	22	22	27
404627	50 x 50 x 25mm	59	59	56	20	20	33
404628	50 x 50 x 40mm	66	66	64	27	27	33



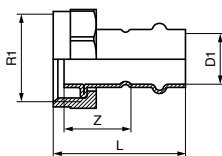
CROSS OVER BEND

Product Code	Size (D1)	L	Z	L1
405186	15mm	40.3	22.5	45.6
405187	20mm	43.7	27	45.1
405188	25mm	54.5	32	62.8



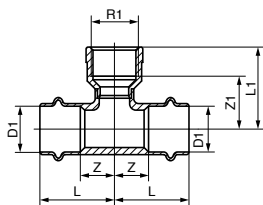
VALVE ADAPTOR

Product Code	Size (D1)	R1	L	Z
405157	15mm x 3/4"	3/4"	45	22.6
405158	20mm x 1"	1"	52	26
405159	25mm x 1 1/2"	1.1/4"	55	27
405160	32mm x 1 1/2"	1.1/2"	61	31
405161	15mm x 1/2"	1/2"	41	19.6
405162	20mm x 3/4"	3/4"	56.5	30.5
405163	25mm x 1"	1"	60.5	33.5
405164	32mm x 1 1/4"	1.1/4"	66.5	37
405165	40mm x 1 1/2"	1.1/2"	80.7	44.5



FEMALE TEE

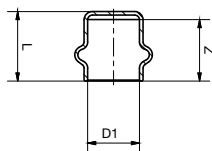
Product Code	Size (D1)	R1	L	Z	L1	Z1
405103	15mm X 15 X 1/4"	1/4"	33	15.5	29.7	18.7
405104	15mm X 15 X 3/8"	3/8"	33	15.5	31	19.7
405105	15mmX 15 X 1/2"	1/2"	33	15.5	36.5	21.5
405107	20mmX 20 X 1/4"	1/4"	39	17.5	33.7	22.7
405108	25mm X 25 X 1/4"	1/4"	38	16	36.7	25.7
405109	32mm X 32 X 1/4"	1/4"	39	14	40.7	29.7





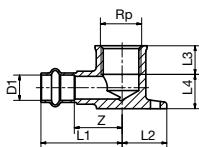
END CAP

Product Code	Size (D1)	L	Z
404691	15mm	20	18
404949	18mm	22	20
404692	20mm	24	22
404693	25mm	25	23
404694	32mm	27	25
404695	40mm	33	31
404696	50mm	41	39



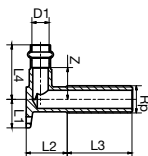
WALL PLATE ELBOW - FEMALE

Product Code	Size (D1 x Rp)	L1	Z	L2	L3	L4
404650	15 x 1/2" BSP	42	24	24	15	18
404651	20 x 3/4" BSP	47	25	27	16	24



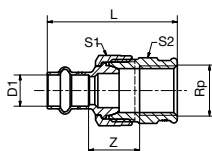
WALL PLATE ELBOW - MALE

Product Code	Size (D1 x GB)	L1	Z	L2	L3	L4
404649	15 x 1/2" BSP	22	24	30	52	42



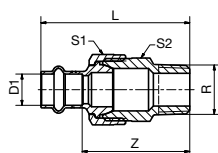
FEMALE UNION

Product Code	Size (D1 x Rp)	L	Z	S1	S2
404683	15 x 1/2" BSP	55	22	30	28
404684	20 x 3/4" BSP	68	30	37	34
404685	25 x 1" BSP	64	22	46	42
404686	32 x 1 1/4" BSP	83	38	53	50
404687	40 x 1 1/2" BSP	94	42	65	57
404688	50 x 2" BSP	106	42	83	72



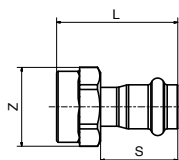
MALE UNION

Product Code	Size (D1 x R)	L	Z	S1	S2
404677	15 x 1/2" BSP	63	46	29	27
404678	20 x 3/4" BSP	77	55	37	34
404679	25 x 1" BSP	84	61	46	43
404680	32 x 1 1/4" BSP	93	68	53	50
404681	40 x 1 1/2" BSP	106	75	65.5	64
404682	50 x 2" BSP	124	86	83	80



TAP CONNECTOR - STRAIGHT

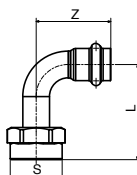
Product Code	Size (D1 x R)	L	Z	S
405134	15 X 1/2" BSP	42	27	27
405135	20 X 3/4" BSP	52	33	36





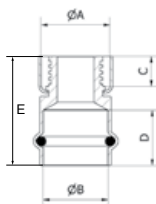
TAP CONNECTOR - BENT

Product Code	Size (D1 x Rp)	L	Z	S
405136	15 X 1/2" BSP	45	35	24
405137	20 X 3/4" BSP	55	46	31



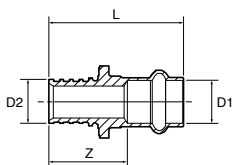
AUSPEX ADAPTOR

Product Code	Size (ØA x ØB)	C	D	E
1544580	16 x 15mm	10	18	33
1544581	20 x 20mm	10	22	38.5
1544582	25 x 25mm	10	23	44



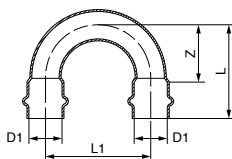
REHAU ADAPTOR

Product Code	Size	Size (D1xD2)	L	Z
405111	15mm	15 x 16mm	42	24
405112	20mm	20 x 20mm	54	32
405117	25mm	25 x 25mm	64	41



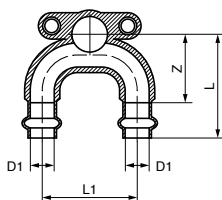
RETURN BEND

Product Code	Size D1	L	Z	H1
405194	15mm	127	92	21.7
405195	20mm	145	102	19.5
405196	25mm	175	130	23.3



LOOPED WALL PLATE

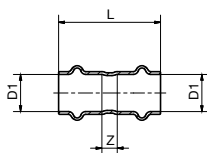
Product Code	Size D1	L	Z	L1	R1
405192	15mm	53.8	36.3	50	15
405193	20mm	56.2	34.7	50	20





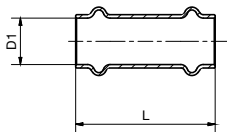
STRAIGHT CONNECTOR

Product Code	Size (D1)	L	Z
404697	15mm	39	3
404698	20mm	47	3
404699	25mm	49	3
404700	32mm	53	3
404701	40mm	64	2
404702	50mm	80	2



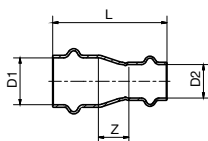
REPAIR COUPLING

Product Code	Size (D1)	L
404757	15mm	39
404758	20mm	47
404759	25mm	49
404760	32mm	53
404761	40mm	64
404762	50mm	80



COUPLING - REDUCING

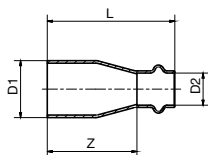
Product Code	Size (D1 x D2)	L	Z
404728	20 x 15mm	47	7
404729	25 x 15mm	54	13
404730	25 x 20mm	52	7
404731	32 x 25mm	55	7
404732	40 x 25mm	67	13
404733	40 x 32mm	62	6
404734	50 x 25mm	86	24
404735	50 x 32mm	83	19
404736	50 x 40mm	84	14



FITTING REDUCER

Product Code	Size (D1 x D2)	L	Z
404748	20 x 15mm	50	32
404749	25 x 15mm	55	37
404750	25 x 20mm	54	32
404751	32 x 20mm	62	40
404752	32 x 25mm	57	34
404753	40 x 25mm	68	45
404754	40 x 32mm	65	40
404755	50 x 32mm	84	59
404756	50 x 40mm	86	55

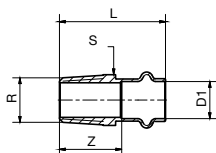
Note: Reduces >B< Press Fitting, not to be soldered.





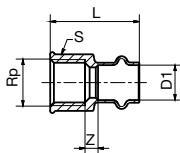
COUPLING - MALE

Product Code	Size (D1 x R)	L	Z	S
404737	15 x 1/2" BSP	43	25	22
404738	15 x 3/4" BSP	47	29	27
404739	20 x 1/2" BSP	48	26	27
404740	20 x 3/4" BSP	48	26	27
404741	25 x 3/4" BSP	50	27	27
404742	25 x 1" BSP	54	31	34
404743	32 x 1 1/4" BSP	59	34	43
404744	40 x 1 1/2" BSP	67	36	50
404745	50 x 2" BSP	80	41	62



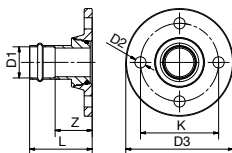
COUPLING - FEMALE

Product Code	Size (D1 x Rp)	L	Z	S
404763	15 x 1/2" BSP	41	8	26
404764	20 x 3/4" BSP	45	7	31
404765	25 x 1" BSP	50	8	39
404766	32 x 1 1/4" BSP	56	10	48
404767	40 x 1 1/2" BSP	63	10	55
404768	50 x 2" BSP	76	11	70



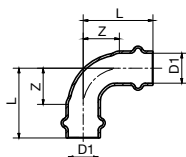
FLANGE ADAPTOR (TABLE)

Product Code	Size (D1)	L	Z	K	D2	D3
404785	40mm	79	48	98	14	135
404786	50mm	85	47	114	18	150



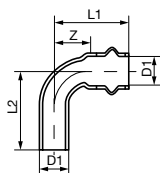
ELBOW - 90 DEG

Product Code	Size (D1)	L	Z
404703	15mm	32	14
404704	20mm	43	21
404705	25mm	53	30
404706	32mm	60	35
404707	40mm	76	45
404708	50mm	100	61



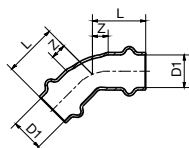
ELBOW M&F - 90 DEG

Product Code	Size (D1)	L1	Z	L2
404917	15mm	32	14	34
404918	20mm	43	21	46
404919	25mm	53	30	55
404920	32mm	60	35	62
404921	40mm	76	45	78
404922	50mm	100	61	102



ELBOW - 45 DEG

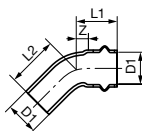
Product Code	Size (D1)	L	Z
404769	25mm	35	12
404770	32mm	39	14
404771	40mm	50	19
404772	50mm	64	25





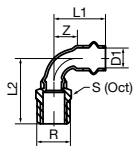
ELBOW M&F - 45 DEG

Product Code	Size (D1)	L1	Z	L2
404910	25mm	35	12	37
404911	32mm	39	14	41
404912	40mm	50	19	52
404913	50mm	64	25	66



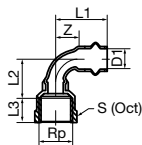
ELBOW - MALE 90 DEG

Product Code	D1 x R	L1	Z	L2	S
405146	DN15 x 1/2	32	14	42	22
405147	DN20 x 3/4	43	21	51	27



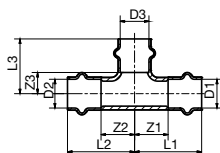
ELBOW - FEMALE 90 DEG

Product Code	D1 x Rp	L1	Z	L2	L3	S
405148	15 X 1/2" BSP	32	14	25	15	22
405149	20 X 3/4" BSP	43	21	33	16	27



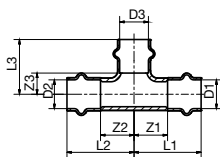
TEE

Product Code	Size (D1 x D2 x D3)	L1	L2	L3	Z1	Z2	Z3
404709	15mm	33	33	28	15	15	10
404710	20mm	42	42	36	20	20	14
404711	25mm	47	47	40	24	24	17
404712	32mm	49	49	46	24	24	21
404713	40mm	58	58	58	27	27	27
404714	50mm	73	73	73	34	34	34



REDUCING TEE

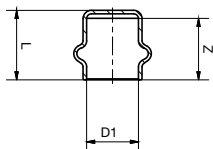
Product Code	Size (D1 x D2 x D3)	L1	L2	L3	Z1	Z2	Z3
404715	20 x 20 x 15mm	39	39	32	17	17	14
404726	20 x 15 x 20mm	42	40	36	20	22	14
404727	20 x 15 x 15mm	39	40	32	17	22	14
404716	25 x 25 x 15mm	38	38	35	15	15	17
404717	25 x 25 x 20mm	42	42	39	19	19	17
404718	32 x 32 x 15mm	39	39	39	14	14	21
404719	32 x 32 x 20mm	43	43	44	18	18	22
404720	32 x 32 x 25mm	46	46	44	21	21	21
404721	40 x 40 x 20mm	49	49	47	18	18	25
404722	40 x 40 x 25mm	50	50	48	19	19	25
404723	40 x 40 x 32mm	53	53	52	22	22	27
404724	50 x 50 x 25mm	59	59	56	20	20	33
404725	50 x 50 x 40mm	66	66	64	27	27	33





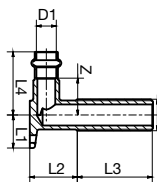
END CAP

Product Code	Size (D1)	L	Z
404787	15mm	20	18
404788	20mm	24	22
404789	25mm	25	23
404790	32mm	27	25
404791	40mm	33	31
404792	50mm	41	39



WALL PLATE ELBOW - MALE

Product Code	D1 x Rp	Rp	Z	L2	L3	L4
405102	DN15 x 1/2	22	24	30	52	42

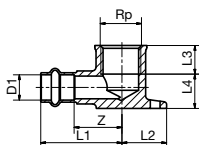


Note: As per AS/NZS 5601.1 Gas Installations

A brass external parallel thread to a brass internal parallel thread may be used, provided that the joint is welded or a suitable permanent quick-setting thread compound is used and a means of disconnection is provided immediately downstream. Wherever possible the fitting should be secured against disturbance.

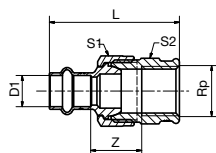
WALL PLATE ELBOW - FEMALE

Product Code	Size (D1 x Rp)	L1	Z	L2	L3	L4
404746	15 x 1/2" BSP	42	24	24	15	18
404747	20 x 3/4" BSP	47	25	27	16	24



FEMALE UNION

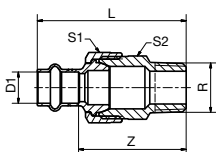
Product Code	Size (D1 x Rp)	L	Z	S1	S2
404779	15 x 1/2" BSP	55	22	30	28
404780	20 x 3/4" BSP	68	30	37	34
404781	25 x 1" BSP	65	23	46	42
404782	32 x 1 1/4" BSP	83	38	53	50
404783	40 x 1 1/2" BSP	94	42	65	57
404784	50 x 2" BSP	106	42	83	72





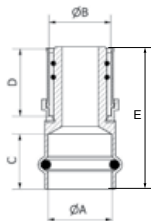
MALE UNION

Product Code	Size (D1 x R)	L	Z	S1	S2
404773	15 x 1/2" BSP	63	46	29	27
404774	20 x 3/4" BSP	77	55	37	34
404775	25 x 1" BSP	84	61	46	43
404776	32 x 1 1/4" BSP	93	68	53	50
404777	40 x 1 1/2" BSP	106	75	65.5	64
404778	50 x 2" BSP	124	85	83	80



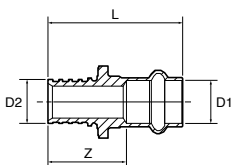
DUOPEX ADAPTOR

Product Code	Size (ØA x ØB)	C	D	E
1435237	15 x 16mm	18	24	50
1435238	20 x 20mm	22	24	54.5
1435239	25 x 26mm	23	24	56.5
1435244	20 x 26mm	22	24	59.5
1435245	25 x 32mm	23	24	60.5
1435246	32 x 40mm	25	24	64.5
1435247	40 x 50mm	31	36.5	82.5



REHAU ADAPTOR

Product Code	Size	Size (D1xD2)	L	Z
405113	15mm	15 x 16mm	42	24
405114	20mm	20 x 20mm	54	32
405116	25mm	25 x 25mm	64	41



INSTALLATION TAG

Product Code Size

2130197

90 x 55mm



>B< Press copper press fit system has been used on this copper installation.

WARNING: O-ring seals are used in this system and must be protected against heat transfer from brazing.

Further information: www.reece.com.au

Conex | Bänninger

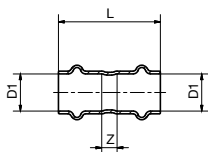
EXCELLENCE SINCE 1909





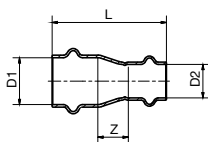
STRAIGHT CONNECTOR

Product Code	Size (D1)	L	Z
404926	15mm	39	3
404927	20mm	47	3
404928	25mm	49	3



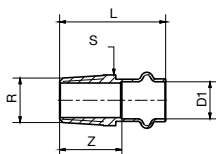
COUPLING - REDUCING

Product Code	Size (D1 x D2)	L	Z
405133	20 x 15mm	47	7
404935	25 x 15mm	54	13
404936	25 x 20mm	52	7



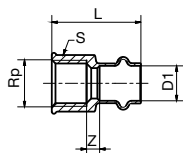
COUPLING - MALE

Product Code	Size (D1 x Rp)	L	Z	S
404937	15 x 1/2" BSP	43	25	22
404938	20 x 3/4" BSP	48	26	27
404939	25 x 1" BSP	54	31	34



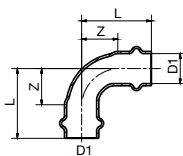
COUPLING - FEMALE

Product Code	Size (D1 x Rp)	L	Z	S
404940	DN15 x 1/2" BSP	41	8	26
404941	DN20 x 3/4" BSP	45	7	31
404942	DN25 x 1" BSP	50	8	39



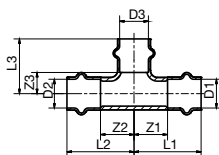
ELBOW - 90 DEG

Product Code	Size (D1 x Rp)	L	Z
404929	15mm	32	14
404930	20mm	43	21
404931	25mm	53	30



TEE

Product Code	Size (D1 x D2 x D3)	L1	L2	L3	Z1	Z2	Z3
404932	15mm	33	33	28	15	15	10
404933	20mm	42	42	36	20	20	14
404934	25mm	47	47	40	24	24	17



Note: When installing High Temperature fittings for solar applications the fittings should not be left in 'dry' installations as the temperature can exceed the performance of the fittings. Solar panels/tubes should be covered during installation until such time as the system is commissioned with water.

> B < Press Valves





Technical Data

>B< Press Quarter Turn Ball Valves are suitable for use with hard, half hard or annealed type A and B copper tube complying with AS1432.

PRESSURE AND TEMPERATURE RATING		
Valve series	Size (DN)	PN
Water (blue handle)	15 to 50	16
Gas (yellow handle)	15 to 50	10

Valves should only be installed in a system where the normal pressure and temperature does not exceed the stated rating of the valve. The maximum allowable pressure in valves as specified in standards is for non-shock conditions. Systems which create water hammer or impact should be avoided. Where system testing will subject a valve to pressures in excess

Water Supply Systems

Application / Medium	Comments	
Hot and cold potable water	Australian Watermark approved. Watermark certification for all plumbing products is restricted to 1400kPa at 95°C.	
Pump circulated hot water systems	Capable of the required test pressure of 1700kPa or 1.5 times the design pressure as specified by AS2419.1	
Chilled water		
Steam	Not compatible	

Anti-Freeze / Corrosion Protection / Inhibitors

Application / Medium	Comments	
	Product	Manufacturer
Anti-freeze cooling concentration 50%	Antifrogen N	Clariant
	Antifrogen L	Clariant
	Antifrogen Sol (solar systems)	Clariant
	Ethylene Glycol (Ethan -1, 2-diol)	Various
	Propylene Glycol (1,2-Propandiol)	Various
	Tyfoxit	Tyforop-Chemie
	Tyfocop	Tyforop-Chemie

Maximum Operating Parameters	
	1600 kPa from -20° to 95°C
	1050 kPa from -20° to 100°C

of the working pressure rating, such testing should be within the “shell test pressure” for the body, to a maximum of 1.5 times the PN rating given for the valve. Any such test should be carried out with the valve in the fully open condition.

✓ Indicates compatibility. (Consultation required for unlisted mediums)
 *Note: Installations need to comply to the relevant standards and local regulations.

	P (kPa)	T (°C)	>B<Press Water QT Ball Valves	>B<Press Gas QT Ball Valves
	1600	95	✓	✗
	1600	95	✓	✗
	1000	5	✓	✗

	P (kPa)	T (°C)	>B<Press Water QT Ball Valves	>B<Press Gas QT Ball Valves
	1600	-20 to 95	✓	✗
			✓	✗
			✓	✗
			✓	✗
			✓	✗
			✓	✗
			✓	✗

Technical Data

Oils, cooling materials and lubricants

Application / Medium	Comments	
Engine oils and Lubricants (Petroleum-based)		
Heating oil, Diesel in acc. With EN590		

Gas

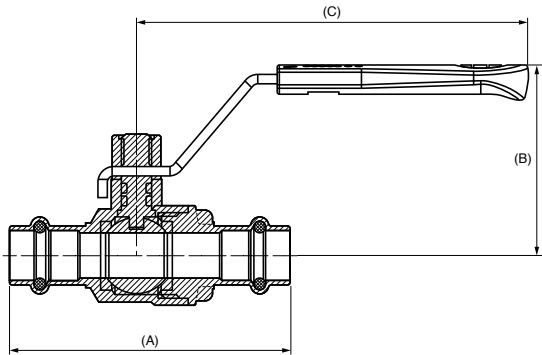
Application / Medium	Comments	
Natural Gas Liquid gas Propane Butane Methane	The scope of AS5601 for all gas systems is restricted to 200kPa	
Nitrogen		
Oxygen	Not compatible	
Compressed Air	Oil Concentration <25mg/m3 Oil Concentration >25mg/m3	

	P (kPa)	T (°C)	>B<Press Water QT Ball Valves	>B<Press Gas QT Ball Valves
	1000	100	✗	✓
	500	-20 to 40	✗	✓

	P (kPa)	T (°C)	>B<Press Water QT Ball Valves	>B<Press Gas QT Ball Valves
	1050	-20 to 100	✗	✓
	1050	100	✗	✓
	1050	100	✓	✓
	1050	100	✗	✓



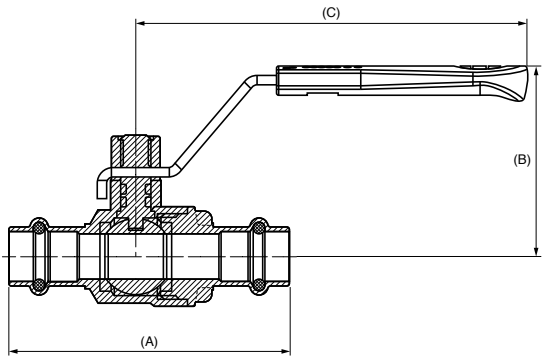
>B< Press Quarter Turn Ball Valves for Water Applications



WATER BALL VALVES					
Product code	Size	D1	A	B	C
1005700	15mm	15	74	50	103
1005701	20mm	20	88.5	61	125
1005702	25mm	25	94.5	65	125
1005703	32mm	32	113	72	125
1005704	40mm	40	136.5	91	182
1005705	50mm	50	169	99	182



>B< Press Quarter Turn Ball
Valves for Gas Applications



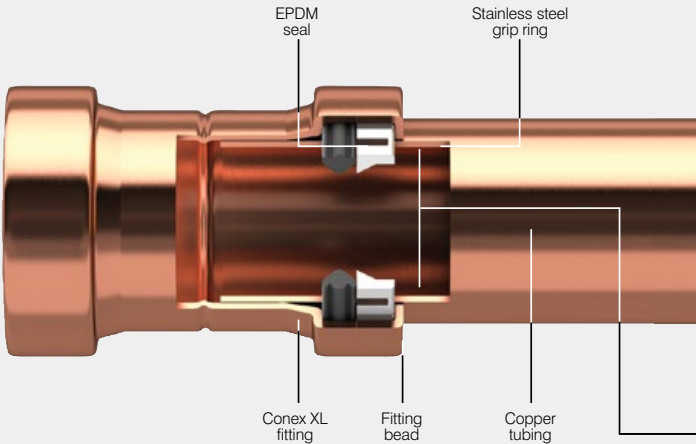
GAS BALL VALVES					
Product code	Size	D1	A	B	C
1005706	15mm	15	74	50	103
1005707	20mm	20	88.5	61	125
1005708	25mm	25	94.5	65	125
1005709	32mm	32	113	72	125
1005710	40mm	40	136.5	91	182
1005711	50mm	50	169	99	182

>XL Fittings 65-100mm<





Conex XL 65, 80 and 100mm copper fittings




Product Features

>B< Press XL has only two internal parts, the grip ring and the seal. Both parts have an internal diameter larger than the tube, which allows for easy tube insertion and pre press leak indication.

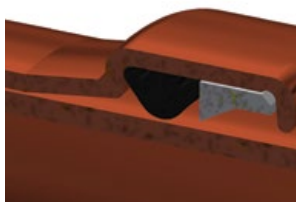


Stainless Steel Grip Ring

Complete diameter grip with equally spaced collapse zones ensures all round equal grip on the tube diameter and even seal compression between tube and fitting after pressing.

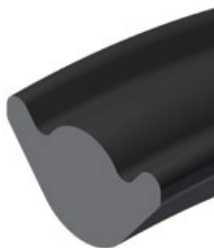


The stainless steel grip rings pressed on top, forcing the grip ring teeth against the tube, making a high strength connection.



Unique Seal Design

The seal is not easily displaced by tube insertion. Triple point seal on the post pressed fitting body counters any pressing distortion. Greater seal contact area on tube. Self setting seal area for correct function of seal. Seal security and longevity increased as a result.



Installation Instructions

To install >B< Press, a Rothenberger Romax 3000/4000 mechanical tool with actuator and 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.



1. Cut the pipe

We recommend you use a Rothenberger pipe cutter. 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.



2. Remove burrs

Make sure that the internal and external tube end is free from burrs or sharp edges by using a file or deburring tool. Then wipe the tube end clean to avoid damaging the seal on tube insertion.



3. Inspect the fitting

Keep fittings in original wrapping until required. Make sure the fitting is protected against dirt and contamination before use. Make sure the fitting and the bag are marked up for the correct application (Water or Gas). Select the correct size fittings for the tube. Before inserting the tube check seal and grip ring for correct placement.

IMPORTANT

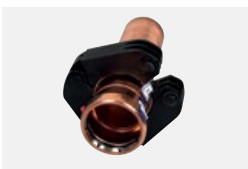
IT IS IMPORTANT TO KEEP THE FITTING FREE OF ANY DUST OR DIRT AND TO ENSURE THE O-RING STAYS LUBRICATED AND PROTECTED FROM DAMAGE. SELECT THE CORRECT SIZE OF TUBE AND FITTING FOR THE JOB. ENSURE THAT BOTH ARE CLEAN AND FREE FROM DAMAGE AND IMPERFECTIONS.



Tube Size	Insertion Depth
DN65	43 mm
DN80	50 mm
DN100	60 mm

4. Insert the tube

The tube must be fully inserted into the fitting until it reaches the tube stop in order to make a perfect joint. Marking insertion depth will ensure that any tube movement is detected, which is especially important if the joints are to be pressed at a later time. The depth marking must be visible on the pressed fitting.



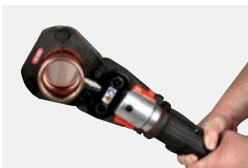
5. Fit the pressing ring

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 insertion depth

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



7. Press the joint

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.



8. Joint completion

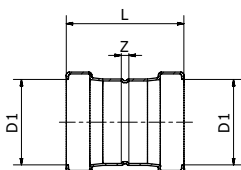
Remove the actuator from the press ring, remove the press ring from the tube and remove the label to indicate the joint is pressed and complete.

You must use an Approved tool to maintain your warranty. See page 65 for Approved tools.



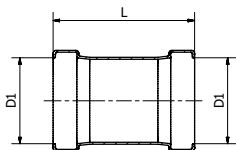
STRAIGHT CONNECTOR

Product Code	Size (D1)	L	Z
404793	DN65	92	4
404794	DN80	106	4
404795	DN100	126	4



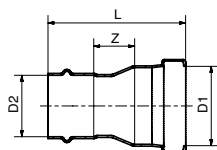
REPAIR COUPLING

Product Code	Size (D1)	L
405121	DN65	110
405122	DN80	125
405123	DN100	144



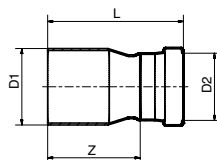
COUPLING - REDUCER

Product Code	Size (D1 x D2)	L	Z
404822	DN65 x DN32	101	30
404823	DN65 x DN40	100	25
404824	DN65 x DN50	100	24
404825	DN80 x DN40	117	40
404826	DN80 x DN50	119	36
404827	DN80 x DN65	119	25
404828	DN100 x DN50	142	43
404829	DN100 x DN65	134	31
404830	DN100 x DN80	135	25



FITTING REDUCER

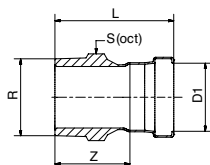
Product Code	Size (D1 x D2)	L	Z
404831	DN65 x DN40	106	75
404832	DN65 x DN50	103	64
404833	DN80 x DN50	122	83
404834	DN80 x DN65	131	87
404835	DN100 x DN50	145	106
404836	DN100 x DN65	139	96
404837	DN100 x DN80	136	86





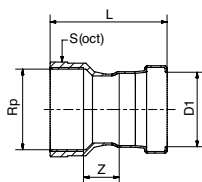
COUPLING - MALE

Product Code	Size (D1 x R)	L	Z	S
404943	DN65 x 2-1/2"	121	78	85
404944	DN80 x 3"	126	78	95
404945	DN100 x 4"	150	91	125



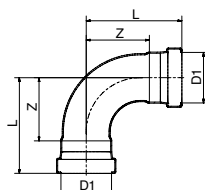
COUPLING - FEMALE

Product Code	Size (D1 x Rp)	L	Z	S
404946	DN65 x 2-1/2"	112	31	85
404947	DN80 x 3"	114	33	95
404948	DN100 x 4"	138	37	125



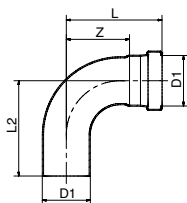
ELBOW - 90 DEG

Product Code	Size (D1 x D2)	L	Z
404796	DN65	126	82
404797	DN80	150	98
404798	DN100	192	132



ELBOW - 90 DEG (MALE / FEMALE)

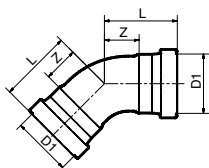
Product Code	Size (D1)	L	Z	L2
404857	DN65 x DN65	132	88	146
404858	DN80 x DN80	150	98	148
404859	DN100 x DN100	192	132	212





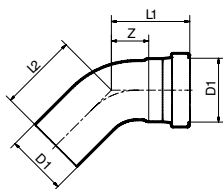
ELBOW - 45 DEG

Product Code	Size (D1)	L	Z
404838	DN65	82	38
404839	DN80	95	45
404840	DN100	118	57



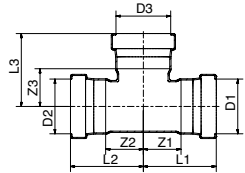
ELBOW - 45 DEG (MALE / FEMALE)

Product Code	Size (D1)	L	Z	L2
404848	DN65 x DN65	82	38	93
404849	DN80 x DN80	95	45	100
404850	DN100 x DN100	117	57	130



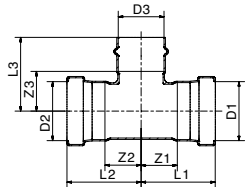
TEE

Product Code	Size (D1 x D2 x D3)	L1	L2	L3	Z1	Z2	Z3
404799	DN65	89	89	104	45	45	46
404800	DN80	101	101	111	50	50	52
404801	DN100	128	128	135	67	67	67



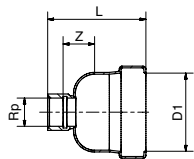
REDUCING TEE

Product Code	Size (D1 x D2 x D3)	L1	L2	L3	Z1	Z2	Z3
404802	DN65 x DN65 x DN50	84	84	90w	40	40	44
404803	DN80 x DN80 x DN50	90	90	96	39	39	50
404804	DN80 x DN80 x DN65	93	93	108	42	42	52
404805	DN100 x DN100 x DN50	105	105	108	44	44	63
404806	DN100 x DN100 x DN65	105	105	123	44	44	66
404807	DN100 x DN100 x DN80	112	112	124	51	51	66



END CAP

Product Code	Size (D1)	L	Z	Rp
404841	DN65	86	21	3/4
404842	DN80	98	28	3/4
404843	DN100	115	39	3/4

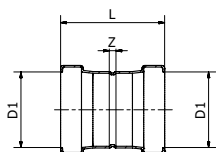


Please note you will need a 20mm Threaded plug to cap off the end.



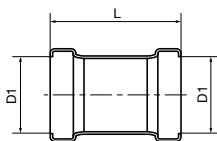
STRAIGHT CONNECTOR

Product Code	Size D1	L	Z
404867	DN65	92	4
404868	DN80	106	4
404869	DN100	126	4



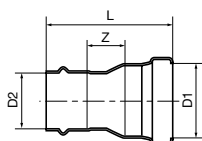
REPAIR COUPLING

Product Code	Size D1	L
405130	DN65	110
405131	DN80	125
405132	DN100	144



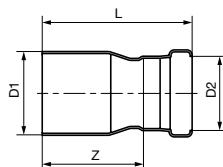
COUPLING - REDUCER

Product Code	Size (D1 x D2)	L1	Z
404888	DN65 x DN32	101	30
404889	DN65 x DN40	100	25
404890	DN65 x DN50	100	24
404891	DN80 x DN40	117	40
404892	DN80 x DN50	119	36
404893	DN80 x DN65	119	25
404894	DN100 x DN50	142	49
404895	DN100 x DN65	134	31
404896	DN100 x DN80	135	25



FITTING REDUCER

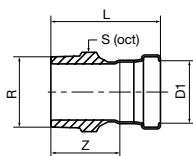
Product Code	Size (D1 x D2)	L	Z
404897	DN65 x DN40	106	75
404898	DN65 x DN50	103	66
404899	DN80 x DN50	122	89
404900	DN80 x DN65	131	87
404901	DN100 x DN50	145	112
404902	DN100 x DN65	139	96
404903	DN100 x DN80	136	86





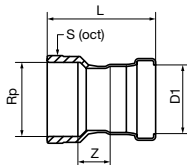
COUPLING - MALE

Product Code	Size (D1 x R)	L	Z	S
405124	DN65 x 2-1/2"	121	78	85
405125	DN80 x 3"	126	78	95
405126	DN100 x 4"	150	91	125



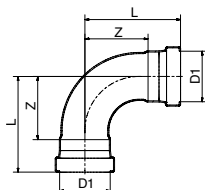
COUPLING - FEMALE

Product Code	Size (D1 x Rp)	L	Z	S
405127	DN65 x 2-1/2"	112	31	85
405128	DN80 x 3"	114	33	95
405129	DN100 x 4"	138	37	125



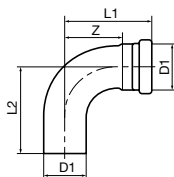
ELBOW - 90 DEG

Product Code	Size (D1 x D2)	L	Z
404870	DN65 x DN65	126	82
404871	DN80 x DN80	150	98
404872	DN100 x DN100	192	132



ELBOW - 90 DEG (MALE / FEMALE)

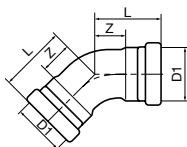
Product Code	Size (D1)	L	Z	L2
404923	DN65 x DN65	132	88	146
404924	DN80 x DN80	150	98	148
404925	DN100 x DN100	192	132	212





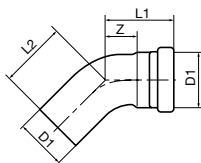
ELBOW - 45 DEG

Product Code	Size (D1)	L	Z
404904	DN65 x DN65	82	38
404905	DN80 x DN80	95	45
404906	DN100 x DN100	118	57



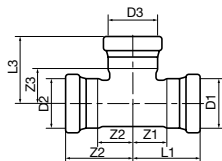
ELBOW - 45 DEG (MALE / FEMALE)

Product Code	Size (D1)	L1	Z	L2
404914	DN65 x DN65	82	38	93
404915	DN80 x DN80	95	45	100
404916	DN100 x DN100	117	57	130



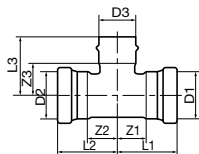
TEE

Product Code	Size (D1 x D2 x D3)	L1	L2	L3	Z1	Z2	Z3
404873	DN65	89	89	104	45	45	46
404874	DN80	101	101	111	50	50	52
404875	DN100	128	128	135	67	67	67



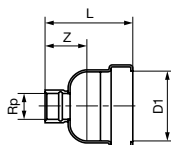
REDUCING TEE

Product Code	Size (D1 x D2 x D3)	L1	L2	L3	Z1	Z2	Z3
404876	DN65 x DN65 x DN50	84	84	90	40	40	44
404877	DN80 x DN80 x DN50	90	90	96	39	39	50
404878	DN80 x DN80 x DN65	90	90	96	39	39	50
404879	DN100 x DN100 x DN50	105	105	108	44	44	63
404880	DN100 x DN100 x DN65	105	105	123	44	44	66
404881	DN100 x DN100 x DN80	112	112	124	51	51	66



END CAP

Product Code	Size (D1)	L	Z	Rp
404907	DN65	86	21	1/2
404908	DN80	98	28	1/2
404909	DN100	115	39	1/2



Please note you will need a 20mm Threaded plug to cap off the end cap.

> Installation Requirments <





Design Considerations

Pipework support

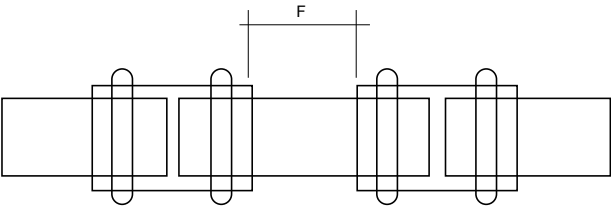
All pipework should be supported by the use of appropriate clips, brackets or supports. Please refer to requirements listed in AS/NZS 3500 for specific details in relation to the particular application.

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
65mm	15
80mm	15
100mm	15

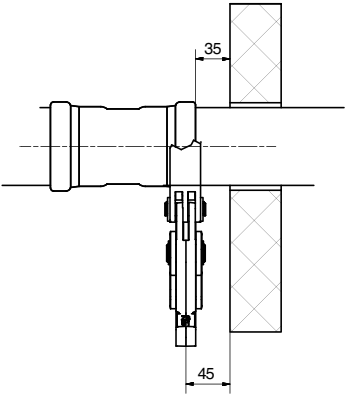
F – Clearance Between Fitting Ends



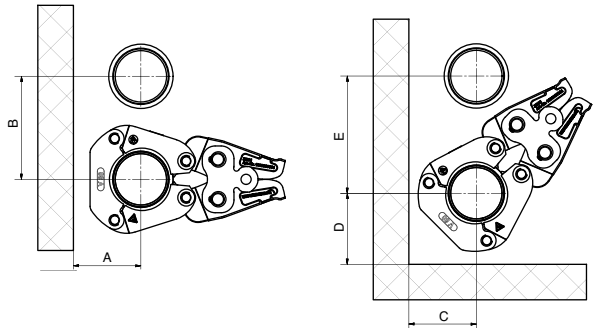
Minimum clearance requirements

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

Tube Size	Minimum Clearance (mm)	
	Romax Compact	Romax 3000/4000
15-25mm	35	45
32-50mm	-	45
65-100mm	-	45



Tube Size	Minimum Clearance (mm)				
	A	B	C	D	E
65mm	90	130	90	90	150
80mm	95	145	95	100	165
100mm	110	165	110	115	190



Pipework protection

Copper has a high resistance against corrosion. However, in some cases external protection may be necessary against corrosive conditions. Refer to AS/NZS3500 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
65mm	15
80mm	15
100mm	15

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 AS 1432.

Brazing near >B< Press fittings

Caution – Brazing or soldering near to >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 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
65mm	1600
80mm	2000
100mm	2500

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 pressurizing 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

>The Tools<





The following tools are the only tools approved for use on Conex Bänninger >B< Press fittings:

- Romax compact (Rothenberger)
- Romax 3000 (Rothenberger)
- Romax Compact TT (Rothenberger)
- Romax 4000 (Rothenberger)
- Picco (Viega)
- PT3-AH & 4B (Viega)

Recommended Tools

Rothenberger press tools and jaws have been specifically engineered for >B< Press

With strict Australian piping tolerances it is imperative that your tool works in unison with your press fittings, therefore it is recommended to use Rothenberger press tools when installing >B< Press for the best press solution.

Romax Compact TT



Application sizes: 15-32mm >B< Press Fittings

Ergonomically designed and better weight distribution compared to the 3000 – reducing fatigue during extended use.

- Compact, lightweight, twin cylinder design – optimised for one hand operation.
- CFT® - Technology for constant axial 19kN shearing force.
- Safety latch to ensure jaw cannot come out during operation.
- Easy to use LED status indication – flashing red when battery charge is low and will lock the machine, remains ON when tool has reached 40,000 cycles of use and requires servicing.
- Simple & safe operation design – hold start button – tool automatically stops once press cycle is complete.
- Safety yellow button – press to release pressure and stop press cycle.
- Convenient 40,000 cycle interval between service requirements.
- Head positioning up to 270° rotation – easy fitting in difficult locations.
- Li-Ion battery technology – long lasting operation between charges.
- Patented AIR COOLED charging technology

Romax Compact TT Tool Kits



>B< Press Romax Compact TT Tool Kits

Code	Description
8078100	R/Berg Compact TT Tool Only
8078101	R/Berg Compact TT B-Press Tool Kit 15-20
7701181	R/Berg Compact B-Press Jaw Set 15-25mm

Specifications

Battery Voltage – 18 V

Battery capacity – 2Ah and 4 Ah

Max Piston Force – 19kN

Pressing time – 3 seconds

Dimensions (LxWxH) – 8cm
x 14.3cm x 33.6cm

Weight (Less Jaws) – 2.5kg

Working Range:

Copper System 15 - 32mm

Typical A-rate noise
level – 71dB(A)

Battery re-charge time
periods – 2Ah = 40 minutes,
4Ah = 80 minutes

Rothenberger Romax®

4000 model



Applications sizes: 15 – 100mm >B< Press Fittings

Ergonomically designed and better weight distribution compared to the 3000 – reducing fatigue during extended use.

- Wide application range.
- Fast pressing – automatic cycle complete in 4 seconds.
- Easy to use LED status indication – flashing red when battery charge is low and will lock the machine, remains ON when tool has reached 40,000 cycles of use and requires servicing.
- Bright white - light LED's to illuminate work space during pressing cycle.
- Simple and safe operation design – hold start button – tool automatically stops once press cycle is complete.
- Safety yellow button – press to release pressure and stop press cycle.
- Long 40,000 cycle interval between service requirements.
- Head positioning up to 270° rotation – easy fitting in difficult locations.
- Li-Ion battery technology – long lasting operation between charges.

Romax 4000 Tool Kits



>B< Press Romax 4000 Tool Kits	
Code	Description
7701304	R/Berg 4000 Tool Only 18v
7701000	R/Berg 4000 B-Press Tool Kit 15-50
7701206	R/Berg 3000/4000 B-Press Jaw Set 65-100

Specifications	
Battery voltage – 18 v	Working range:
Battery Capacity – 2Ah and 4Ah	Copper System 15 - 100mm
Rated power consumption – 540 Watts	Typical A-rate noise level – 71dB(A)
Max piston force – 32kN	Battery re-charge time periods
Pressing time – 4 secs (nominal)	2Ah = 40 minutes, 4Ah = 80 minutes
Dimensions (LxWxH) – 447x125x75mm	
Weight (less jaws) – 3.54 kg	

Rothenberger XL Press Jaws & Actuator

For Romax® Press Tools



To press >B< Press XL fittings an actuator and appropriately sized jaw are required.

To complete a press the jaw is opened and located on the fitting bead. The actuator is connected to the tool, ensuring the locking pin is fully engaged. With the actuator fitted in the press tool open the actuator and locate the actuator into the aperture of the pressing ring. To perform the press hold the trigger of the tool until the press cycle of the tool is automatically completed.

XL Press Jaws

For Romax® Press Tools

- Made of forged, highly resilient special steel
- Compact design
- Long-term corrosion protection
- Optimised for minimal space requirements



Actuator

For Romax® Press Tools

- Precision-manufactured contours for optimum and reliable pressings
- Made of forged, highly resilient special steel
- Long-term corrosion protection



Critical Operating Instructions - Tool & Jaw

Only operate the Rothenberger Press Tool and Jaws as per instructions in your 'User Operating Manual, Instructions for Use'. Proper usage includes compliance with the operating manual, inspection and servicing conditions and adherence to all relevant safety regulations. The equipment must only be used by qualified trades persons that have a trained understanding on how to use the Press Tool & Jaw System properly. Failure to do so will lead to safety risk, poor workmanship, and incorrect use of the Press & Jaw that is not covered under warranty. Only use Rothenberger Press Tools & Jaws with compatible Press Fittings that have been tested and approved by Rothenberger and associated Fitting & Pipe manufacturers (>B< Press, Auspex, Duopex).

- Always start with a safety check, reminding yourself of the yellow emergency stop button to deactivate a press cycle
- Charge battery fully before first use for optimal number of 'presses per charge'
- LED flashes red to indicate when you have a flat battery
- Insert battery correctly until it clicks into place and LED light flashes briefly to indicate contact made
- Insert Press Jaw & close bolt down correctly. Only use the correct Jaw to Tool to Fitting combination
- Open the Jaw by squeezing from the base of the Jaw NOT the front tip (it can crush your fingers!)
- Half engage the start button for the handy LED lights (only on the larger Romax 3000 tool)
- Fully engage the start button for a full press cycle. Activate the Press Tool & Jaw only on a fitting
- Take the time to ensure the correct pipe preparation – cut pipe square, debur & calibrate pipe edge & mark insertion depth. These pipe prep steps are critical for a correct press and quality workmanship
- Follow all installation instructions supplied by the fitting & pipe manufacturers. Imperfect pipe joints must only be pressed again using a new fitting, DO NOT re-press the same fitting
- During the press cycle, visually check that the Press Jaw fully closes at the end of the press cycle
- After pressing, check the installation with appropriate testing equipment and ensure it is leak proof

Regular Maintenance Instructions

- Tool & Jaw

Tool – Always clean & grease and store in case

Your Rothenberger Tool is one of the lightest and most ergonomic designed tools that delivers the most consistent press force (CFT® - Constant Force Technology) with regular maintenance and service it generates up to 3.2 tonnes of force in your hand, so it requires regular care & maintenance

- Clean & grease the piston ram & drive rolls ALWAYS after every use to maintain performance especially the internal guide rail OR all the 'moving metallic parts'



- Watch heavy water areas. Do not expose power tools to rain or wet conditions. Always store in case
- Ensure the Jaw locking bolt is closed correctly by fully inserting the bolt through the Jaw and rotating the bolt arm down 180 degrees



- Please note, the bolt is only secured when fully inserted and rotated into the downward position

Regular Maintenance Instructions

- Tool & Jaw

- Clean contact points on battery and only store battery in a charged state, plus it's always ready for use



- Do not force the Press Tool – it will do the job better and safer at the rate for which it was designed
- Accidents are caused by poorly maintained Press Tools & Jaws. Take the time to maintain properly

Jaws – Always clean, apply lubricant spray and store in case

- Jaws must ALWAYS be cleaned after every use. Keep the inside Jaw profile free of any grease & grit



- Jaws must be maintained with liquid lubricant spray. Always store in case

Servicing & Warranty - Tool & Jaw

Rothenberger prides itself on leading edge design, the highest quality, and leading after-sale service support. With ownership of your Rothenberger Tool comes our commitment to support you. We want to help you 'look after your tool', so you don't compromise your reputation. Only have your Press & Jaws inspected and serviced by a qualified Rothenberger Service Centre for high performance & safety.

- Quick Fix™ is the Rothenberger 'After Sales & Service' repair process across Australia & New Zealand
- Comprehensive spare parts are readily available locally to support your Rothenberger Tool & Jaws
- Jaws will also be checked at the annual service interval for any damage, defects and general wear & tear that could affect the press performance or safety

Warranty Coverage

- After 1 year or 10,000 (Compact) 20,000 (Romax 3000/4000) presses the LED lights up red after each press
- A press cycle count will be made as part of your annual Tool & Jaw servicing & report
- If a serial number sticker is damaged the warranty will be null & void
- The warranty does not cover damage caused by incorrect use of the equipment
- Tool 3 years, only with regular 1 year or cycle count servicing (like servicing your car!)
- Battery 12 months, Jaws 12 months

Service & Warranty Process – Quick Fix™

- Return your Rothenberger Press Tool & Jaw Set to your local Branch or call Rothenberger Customer Service (Toll Free) on 1800 186 657
- Your details and serial number of your tool will be logged for a service and pick up quickly arranged
- Expect 3-5 days (parts dependant) for your service and tools returned to you, or your local branch
- Live status updates will be emailed & sent via text message to you and your local branch
- Any additional repair work beyond the normal annual service will be quoted prior to commencement

Specification Statements

COPPER

Water

Connection with press-fit fitting made of copper and/or gunmetal. Fittings shall contain inbuilt technology enabling identification of un-pressed joints with a positive leak path for the range when dry pressure test is performed at 2.2kPa through 300kPa and 100kPa through 500kPa with a water pressure test. The leak path shall be way of a pressing indicator feature (PI) within the specialist sealing EPDM o – ring (black colour), after pressing the joint is to be considered homogenous. The fitting body shall be of a 'B' profile design and made with an approved electro-mechanical press tool and a proprietary 'B' profile jaw to maintain manufactures warranty. Fittings shall carry Watermark Approval

Gas

Connection with press-fit fitting made of copper and/or gunmetal. Fittings shall contain inbuilt technology enabling identification of un-pressed joints with a positive leak path for the range when dry pressure test is performed at 2.2kPa through 300kPa. The leak path shall be way of a pressing indicator feature (PI) within the specialist HNBR o – ring (yellow colour), after pressing the joint is to be considered homogenous. The fitting body shall be of a 'B' profile design and made with an approved electro-mechanical press tool and a proprietary 'B' profile jaw to maintain manufactures warranty. Fittings shall be tested and monitored by DVGW.

High Temperature

Connection with press-fit fitting made of copper and/or gunmetal. Fittings shall contain inbuilt technology enabling identification of un-pressed joints with a positive leak path for the range when dry pressure test is performed at 2.2kPa through 300kPa and 100kPa through 500kPa with a water pressure test. The leak path shall be way of a pressing indicator feature (PI) within the specialist sealing FKM o – ring (red colour), after pressing the joint is to be considered homogenous. The fitting body shall be of a 'B' profile design and made with an approved electro-mechanical press tool and a proprietary 'B' profile jaw to maintain manufactures warranty. Fittings shall carry Watermark Approval

accredited training certificate available at the end of the session. As an additional QA check Conex Banninger are able to accept random project removed press joint samples back to their Australian laboratory for ongoing checks and reporting to the Supervising Engineer. Contact 1800 032566 for technical support or to arrange >B< Press-fit training

> Frequently Asked Questions <

Fittings Frequently Asked Questions

Q. How long has Conex Bänninger been around?

A. Since 1909.

Q. Where are the products manufactured?

A. Europe.

Q. What grades of copper tube do the fittings suit?

**A. Annealed, half hard and hard drawn type
A and B plumbing tube to AS1432.**

Q. Can you rotate a >B< Press fitting once installed?

A. No, once pressed, they cannot be rotated.

Q. Can >B< Press be dismantled and reused?

A. No, this is a permanent installation.

Q. Can the O-rings from water and gas fittings be swapped?

**A. No. The O-ring is integral to the seal of the fitting,
swapping the O-ring increases the risk of damage
and therefore O-rings are not to be interchanged.**

Q. What pipe preparation is required?

**A. Please see 'Installation guidelines' on pages
18-19 and for XL fittings pages 54-55.**

Q. When using with older pipes, how do you prepare the surface?

**A. The surface should be prepared in the same way
as with new pipe. And provided there is no corrosion, the tube
dimensions comply with AS 1432 (type A & B) and the fittings
are installed correctly, there are no warranty issues. Note:
Warranty is limited to faults due to the manufacturing defects of
the fittings – not incorrect installation or installation on faulty
or corroded pipe.**

Q. What are the application limitations, where can't it be used?

**A. It cannot be used where pressures are greater than those
recommended or where corrosive
fluids/gases need to be transmitted.**

Fittings Frequently Asked Questions

- Q. What pressure do you need to test to and for how long to show any leaks?
- A. **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. Final testing of the system should be conducted in accordance with AS/NZS 3500 and/or AS/NZS 5601.**
-

- Q. Can it be used with medical gas?
- A. **No, the fittings are not recommended for use with medical gas.**
-

- Q. Can it be exposed to direct sunlight and heat?
- A. **Yes – please see table on pages 14-17 for limitations due to pressure and temperature.**
-

- Q. Am I able to use a Viega tool to crimp the >B< Press fitting?
- A. **Yes, the approved tools for installation of >B< Press fittings are: Romax compact/compact TT (Rothenberger), Romax 3000/4000 (Rothenberger), Picco (Viega), PT3-AH & 4B (Viega).**
-

- Q. Does the clipping of fittings/jobs differ from a welded copper application?
- A. **No, the same type of clips can be used. See 'pipework support' on page 70.**
-

- Q. Can it be placed in ground with all types of soils?
- A. **Yes but please refer to 'pipework protection' on page 72.**
-

- Q. Can the fittings be used for solar installations?
- A. **>B< Press water fittings are not recommended for solar installations. >B< Press HT fittings are recommended for these installations.**
-

- Q. What is the recommended space between fittings?
- A. **Please see 'distance between fittings' section on pages 70.**
-

Fittings Frequently Asked Questions

Q. Can the fittings be used on compressed air or oil lines?

A. **>B< Press water fittings are recommended for compressed air (oil free) and >B< Press Gas fittings are suitable for all compressed air applications.**

Q. What are benefits >B< Press fittings?

A. **Fast, simple and reliable installation.**

Q. Are there any restrictions in regards to where flanges can be used?

A. **Providing the selection of the sealing gasket considers the same system parameters and application, flanges may be used in all situations that other >B< Press fittings cater for.**

Q. Can you braze (silver soldering) near a >B< Press connection?

A. **See section on brazing near >B< Press fittings on page 72.**

Q. Can >B< Press handle suction or negative pressure?

A. **Yes, >B< Press fittings are tested at a vacuum test pressure of - 80 kPa at ambient temperature.**

Q. Can >B< Press be installed on pipes where the mains line won't shut off.

A. **Yes, the fitting can be used in wet conditions and after pressing will provide a watertight joint.**

Q. Do I need to lubricate the O-ring?

A. **No, the O-ring is prelubricated. Additional lubricants could impact on the life of the O-ring and void the warranty. If the O-ring appears dry a small amount of water can be used to lubricate it.**

Q. Can >B< Press fittings be used on chrome tube?

A. **Yes, provided that the tube complies with AS 1432. However it is recommended to test a piece first as some splitting of the chrome may occur.**

For more information visit
www.conexbanninger.com.au

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