

## Conex Push-Fit Range

	DESCRIPTION	ITEM	SIZE	PACK QTY
	Straight Coupling	E270 004000000	1/2"	10
		E270 006000000	3/4"	5
	Elbow	E090 004000000	1/2"	10
		E090 006000000	3/4"	5
	Equal Tee	E130 004004004	1/2"	10
		E130 006006006	3/4"	5
	Reduced Branch Tee	E130R006004006	3/4 x 3/4 x 1/2"	5
	Reduced End Tee	E130R006006004	3/4 x 1/2 x 3/4"	5
	Reduced Branch Tee & End Tee	E130R006004004	3/4 x 1/2 x 1/2"	5
	Fitting Reducer	E243 006004000	3/4 x 1/2"	5
	BSP Male Coupling	E243G004004000	1/2"	10
		E243G006006000	3/4"	5
	BSP Female Coupling	E270G004004000	1/2"	10
		E270G006006000	3/4"	5
	Stop End	E301 004000000	1/2"	10
		E301 006000000	3/4"	5
	BSP Backplate Elbow	E472G004004000	1/2"	10
	BSP Bent Tap Connector	E002G004004000	1/2"	10
	BSP Straight Tap Connector	E240G004004000	1/2"	10
		E240G006006000	3/4"	5
	Release Tool	E850 006004000	1/2",3/4"	1

# Installation Guide

PREPERATION

1



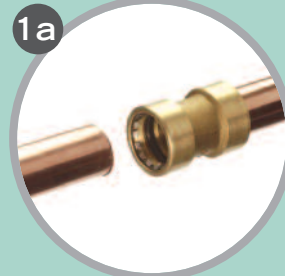
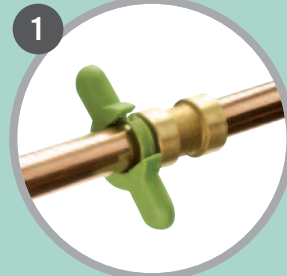
INSTALLATION

2



DEMOUNTING

3



## Tube preparation

1. Ensure the fitting is the correct size for the tube. Cut the tube end square ensuring the end is round and free from damage.
2. To prevent damage to the o-ring, remove all burrs around the inside and outside diameter of the tube with a deburring tool.
3. Using a marker, mark the length of the tube required to make the joint. Do not score the tube.

## Installing Fitting

4. When joining PE-X tube insert a pipe liner into the end of the pipe to support, help re-round and aid installation.
5. Align the fitting and tube up and fully drive through the grip ring up to the tube stop. A slight twisting action can aid installation. Additional WRAS approved lubrication to the tube will assist in difficult situations.
6. To ensure the tube is fully secure, gently pull the tube away from the fitting.

## Demounting

Conex Push-Fit fittings are re-useable and allow for system alterations. To prevent damage to the fittings while demounting, a release tool is available.

1. When correctly located on the tube, the curved projection of the tool self-aligns the release ring of the fitting. Push the release tool against the fitting end. Whilst maintaining force with the tool, either pull the tube out of the fittings or pull the fitting away from the tube.

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# Conex

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# Conex Push-Fit

New Flame Free Push-Fit Fitting



## Benefits

### Overview

- Simply push the copper tube into the fitting for an instant and watertight connection.
- Suitable for heating and plumbing applications.
- For hot and cold water services including mains.
- Can be used with Copper tube and PE-X plastic pipe.
- Stainless Steel Grab Ring.
- EPDM O-ring.
- DZR corrosive resistant body. (Dezincification)

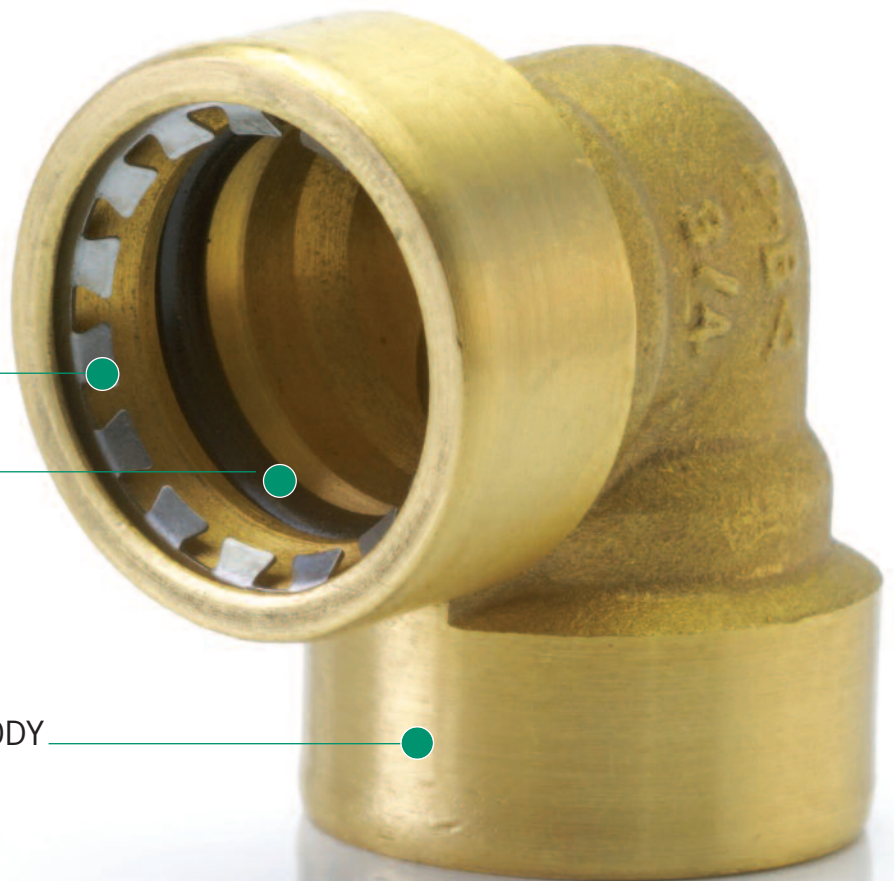
### Benefits

- Push-Fit simplicity for a speedy connection.
- A slimline metal system for a professional finish.
- Can be disconnected with release tool.
- No need to invest in expensive tools.
- Suitable for painting.
- Flame free – avoids damage to fixtures and fittings.
- Fast connection, completed in 4 seconds.
- Can be installed even when pipeline is wet or live.
- Withstands high pressure – up to 16 Bar working pressure at 30°C.

STAINLESS  
STEEL GRAB RING

EPDM O-RING

DZR CORROSION RESISTANT BODY





# Technical Information

## Introduction

The new Conex Push-Fit fitting system from IBP Conex has been designed for use with half-hard copper tube and cross linked polyethylene (PE-X) pipe.

Conex Push-Fit is manufactured from a copper body and incorporates an EPDM o-ring and grip ring. Its unique design offers a leak-proof, tamper resistant yet demountable connection, capable of operating at a working pressure of 16 bar at 30°C.

The push-fit concept eliminates the need for flames or flux on site, thus avoiding numerous health and safety issues, and saving substantial time during installation.

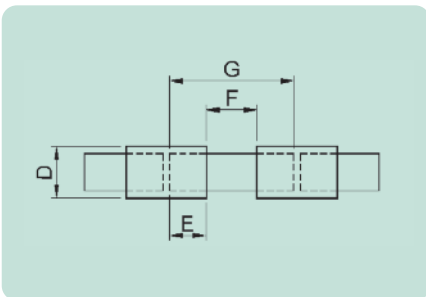
## Pipe Compatibility

**Copper:** Conex Push-Fit is suitable for use with copper tube to IS/ EN 1057.

**PE-X:** Conex Push-Fit is suitable for use with PE-X pipe to EN 15875 with an liner recommended by the pipe manufacture.

## Minimum distance between Conex Push-Fit fittings

This distance is based upon the possible requirement to dismantle the joint at some time during the lifespan of the plumbing system. Consequently, sufficient space must be allowed to enable the release tool to be attached to the pipe, plus room to undertake the removal procedure.



Pipe Size	D	E	F	G
1/2"	24	18	20	56
3/4"	32	22	20	64

D - Fitting OD  
E - Socket depth  
F - Clearance between fitting ends  
G - Minimum length of tube

Note: dimension F is calculated to ensure access for release tool. It may be reduced but demountability is likely to be impaired.

## Re-using the Fitting

Before re-using, ensure the fitting is not damaged. It is advised before re-using the tube, it be trimmed back to a fresh tube section.

Tests support that fittings can be demounted and re-used up to 20 times providing no damage has been caused to the o-ring or grab ring.

Do not attempt to dismantle the joint prior to applying the force with the release tool.

## Quality

Conex Push-Fit as with all IBP products, has undergone extensive testing. All Conex Push-Fit products are manufactured in accordance with accredited EN ISO 9001 Quality Management Procedures.

Each fitting is permanently marked with the trademark >B< as well as the size. Clear identification of the fitting is therefore possible even after years of use.

## Application

Conex Push-Fit can be used for drinking water, plus cold and hot sanitary and domestic heating installations. It is for use with water only, and must not be used on any gas installations.



## Earth continuity

Conex Push-Fit maintains earth continuity and requires no flames or flux. Building Regulations currently recommend that the water supply tubes are not used to earth out new installations. In existing installations where the tube is used as an earth, the contact should be correctly re-established by installing a separate earth connection. If earth continuity is required the fitting should be bridged with a continuity strap.

## Soldering/Brazing

Conex Push-Fit is a push-fit system that requires no flames or flux. External heat sources should not be applied when installing a Conex Push-Fit product, including street and stem elbows or socket reducers.

## Test Certification

Conex Push-Fit fittings are approved by the Irish Agreement Board, certificate number 08/0323.



## Burying in Concrete

Any copper, or copper alloy fitting OR copper tube that is being buried in concrete, screed, or similar material should be protected by use of a non permeable barrier (such as Denso Tape) that completely covers all exposed metallic parts.

## Angularity

Conex Push-Fit's unique design offers 360° rotation, and  $\pm 2^\circ$  angularity, thus further easing the installation process.

## Liners and Ovality

When joining plastic pipes, liners must be used. PE-X pipe can become oval when stored. Inserting the appropriate liner as recommended by the tube manufacturer, should re-round the pipe sufficiently to allow installation to be successful. If the pipe is extremely oval it is recommended that new pipe is used, or appropriate re-rounding tools are used before the pipe liner is inserted.

## EPDM (Ethylene Propylene Diene Monomer) O-ring Compatibility

EPDM is compatible with drinking water, plus other hot and cold heating and sanitary applications within the working pressure and temperature limitation of the material.

## Lifespan

Accelerated life tests to BS5760 show that the O-ring and other components within a Conex Push-Fit fitting have a life expectancy greater than 50 years.

## Glycol Compatibility

Conex Push-Fit can be used with a 25% Glycol : 75% Water solution.

## Chlorination

Chlorinating the line in accordance with BS6700:1997 will have no detrimental effect upon the fittings. If the concentration of the chlorination solution exceeds 50mg/l (50 p.p.m), damage to the pipeline could occur.

## Temperature and Pressure Ratings

Operating Temperature °C	Maximum Operating pressure (MOP) bar
Up to 30	16
65	10
95	6

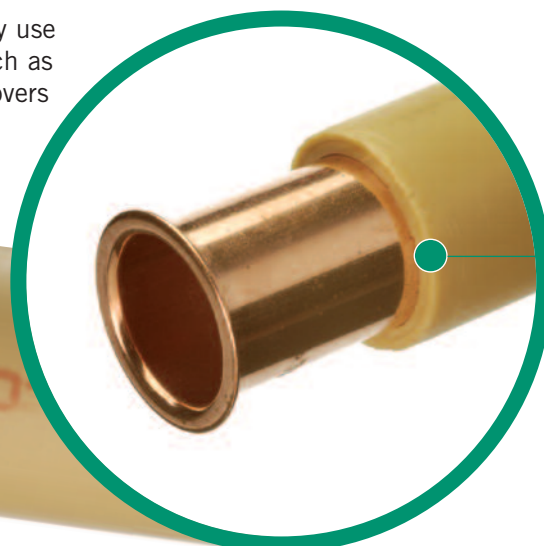
To allow for system malfunctions, fittings are capable of temporary excursions up to a temperature of 110°C at a pressure of 6 bar.

## For Joints and Plastic Pipes

The operating temperatures and maximum operating pressures for the assembled joints shall be determined by the plastic pipe material properties, details of which are available from the plastic pipe supplier.

## IBP Conex

IBP Conex provide a wide range of plumbing fittings including Conex Compression, Conex Triflow Solder Ring and Conex >B< Press.



LINERS WITH CROSS LINKED POLYETHYLENE (PE-X)