

SELF TAPPING FERRULE STRAPS



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# TAPPING SYSTEMS

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Self Tapping Ferrule Straps for PE, PVC and fibre cement mains pipes incorporate an integral ferrule with a self-contained cutter, eliminating the need for drilling machines. Straps are made from gunmetal or plastic making the product durable and corrosion resistant. The strap also uses a specially designed cutter, which tests show greatly reduces the risk of bursting a PVC main or creating a swarf blockage whilst cutting. **Newly launched, the plastic saddle and strap provides a lightweight and lead free alternative to the traditional ferrule strap.**



### FUNCTIONS

Allows the connection of a service pipe to a mains pipe, dry or underpressure.

### ADVANTAGES

- Quick and simple to install**  
 Quick, permanent, leak free connection provided by a tried and tested design.
- Extensive range**  
 A range has been developed which enables the user to make connections to almost any type of mains and service pipe, either underpressure or dry.
- Robust and long lasting**  
 Years of service in even the most aggressive soil and water conditions.
- Reliable and leak free**  
 Specifically designed to operate at pressures up to 16 bar (240 psi) subject to the ratings of the pipe.
- No special equipment needed**  
 The fitting has an integral cutter and requires only a spanner and standard ferrule key to install and carry out the drilling operation.

### APPLICATIONS



House connection

### USES

- Making service connections to mains pipes**
  - Self tapping ferrule straps allow service connections to mains pipes made from PE, PVC or Asbestos Cement.
  - They fit dimensions from 32mm - 315mm.
  - They have an integral cutter eliminating the need for drilling machines.
  - New plastic self-tapping ferrule strap for PE and PVC pipes 63-125mm. Lightweight for easy installation and lead free to protect the environment.

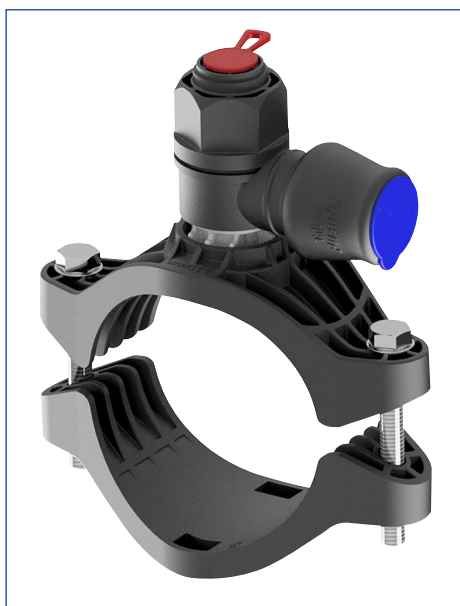


## CHARACTERISTICS

- Main stem** with a 360° swivel outlet at 90° with control of water flow via a threaded inner plug.
- For use underground** and to handle potable water at pressures up to 16 bar (240 psi) without leakage.
- Mains pipe connection** - connects and taps into PVC, PE and asbestos cement pipes.
- Integral cutter** - The integral cutter is designed to greatly reduce the risk of fracturing PVC pipe during the drilling procedure. Its design also reduces the chance of swarf blockage whilst tapping by retaining the polyethylene/PVC slug. The cutter also provides a shut off facility once the tapping has been made.
- Range of different outlets** for the connections of service pipes: pushfit or compression for PE pipe, or threaded outlet.
- No special equipment or controlled conditions needed** The fitting has an integral cutter and requires only a spanner and standard ferrule key to install and

carry out the drilling operation, dry or underpressure and in wet and congested trench conditions making it a viable alternative to electrofusion.

- Plastic strap** lightweight to make transport and installation easy. Lead free so that no lead is put into the ground where it is installed. Robust design to give equal performance to gunmetal straps.



### PLASTIC STRAP

- Easy handling as lightweight
- No lead put into the ground.
- Robust performance.
- Fast availability

## APPROVALS

- Full WRAS approval



## OPTIONS/VARIANTS

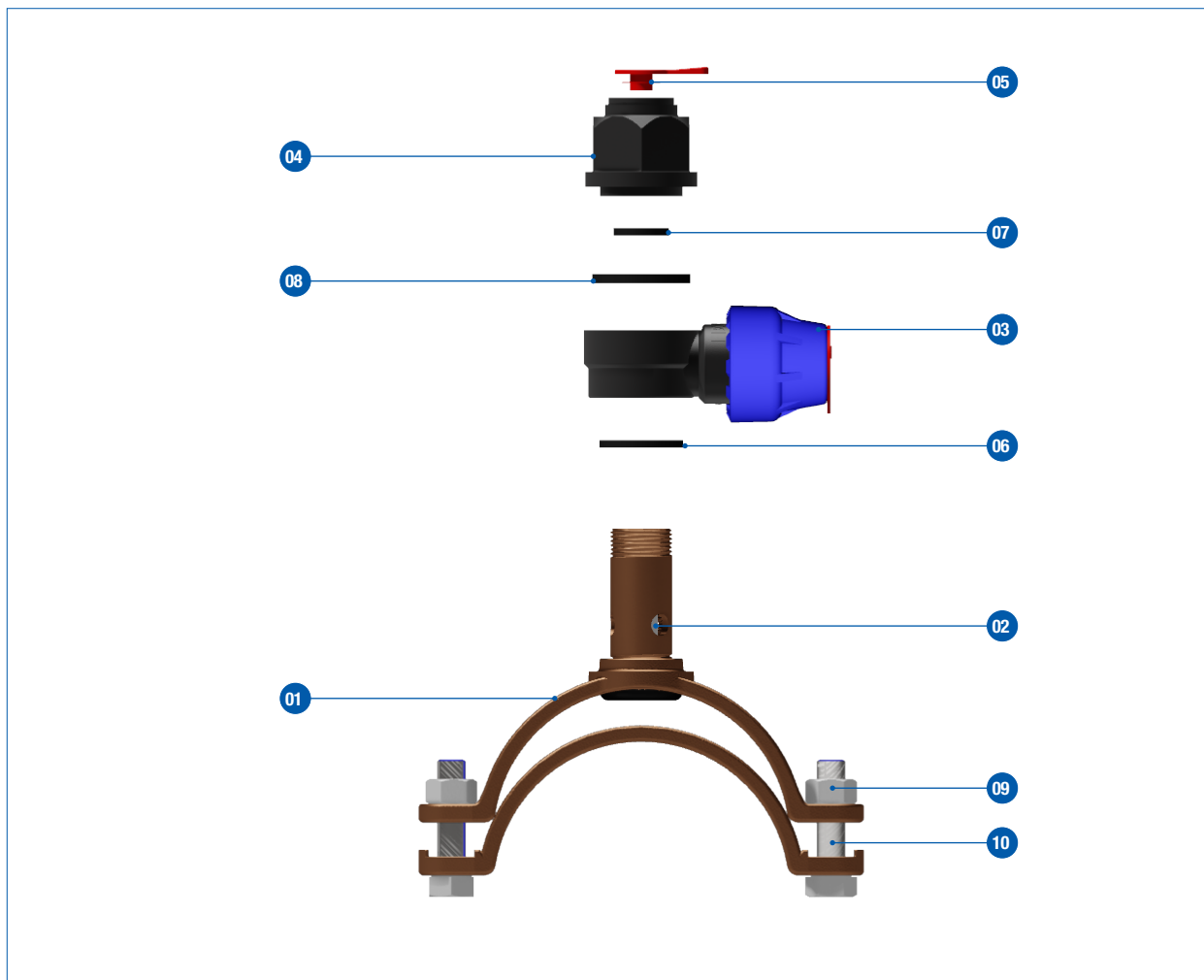
- Available in a range of different sizes to suit mains pipes in PE.
- Available with a range of outlet types and sizes.
- Available with gunmetal or plastic straps.

## TECHNICAL DATA

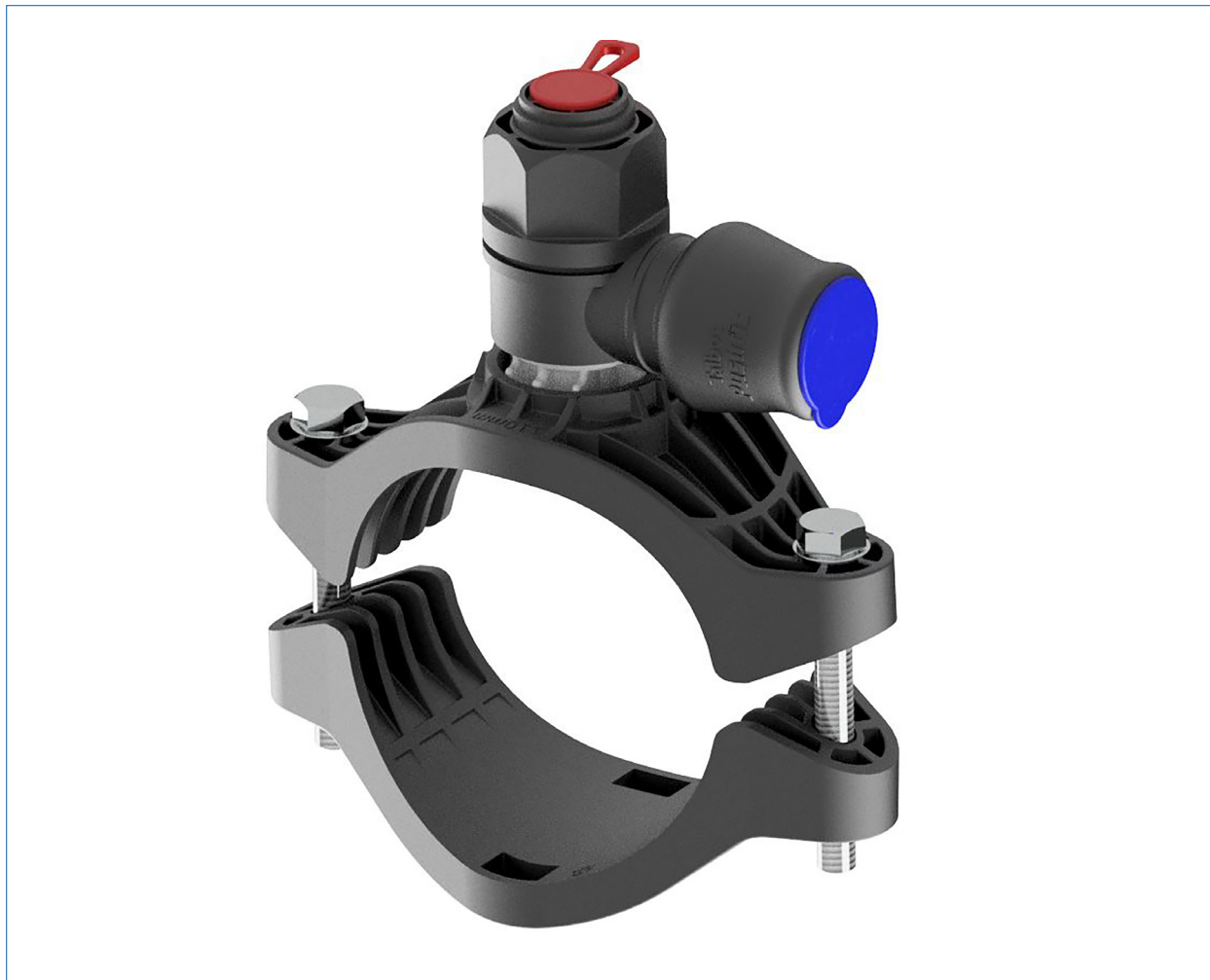
- Nominal Diameter (DN):** 32mm-315mm.
- Outlet sizes:** 20 / 25 / 32mm pushfit or compression, 1/2" / 3/4" / 1" BSP female.
- Nominal Pressure (PN):** Working 16 bar, test 24 bar.
- Medium Temperature:** Up to 23°C.
- Material (Metal):** Gunmetal to BS EN 1982:2008 Grade CC491K.
- Material (Plastic):** Polypropylene / Acetal
- Seals:** EPDM



# MATERIALS AND DIMENSIONS



Item	Description	Quantity	Material	Standard	Alternative Material	Standard
1	Strap and stem	1	Gunmetal CC491K	EN 1982	Polypropylene (PP)	-
2	Cutter	1	Aluminium bronze (for plastic pipes)	-	Stainless Steel (for asbestos cement pipes)	-
3	Banjo and connector	1	Acetal	-	Gunmetal CC491K	EN 1982
4	Top Cap	1	Acetal	-	Gunmetal CC491K	EN 1982
5	Plug	1	Acetal	-	-	-
6	Washer	1	EPDM	BS EN 681-1	BS EN 681-1	-
7	Washer	1	EPDM	BS EN 681-1	-	-
8	Washer	1	EPDM	BS EN 681-1	-	-
9	M10/M12 Full nut	2	Stainless Steel A4	-	-	-
10	M10/M12	2	Stainless Steel A2	-	-	-





EBCO Female Threaded Outlet



EBCO Pushfit Outlet for PE Pipe



EBCO Female Threaded Outlet



EBCO Pushfit Outlet for PE Pipe

NOMINAL PIPE BORE	PIPE MATERIAL		OUTLET					
	PE/PVC	ASBESTOS CEMENT	MDPE (PUSH FIT / COMPRESSION)			BSP FEMALE		
			20mm (¾")	25mm (¾")	32mm (1")	½"	¾"	1"
<b>METRIC</b>								
32mm	G		G	G		G	G	
50mm	G		G	G		G	G	
63mm	G/P		G	G/P	G/P	G	G/P	
90mm	G/P		G	G/P	G/P	G	G/P	G
110mm	G/P		G	G/P	G/P	G	G/P	G
125mm	G/P		G	G/P	G/P		G/P	G
160mm	G		G	G	G	G	G	G
180mm	G		G	G	G	G	G	G
200mm	G			G	G	G	G	G
225mm	G		G	G	G		G	G
250mm	G			G	G	G	G	G
315mm	G			G	G	G	G	G
<b>IMPERIAL</b>								
1"	G		G	G		G	G	
1½"	G		G	G		G	G	
2"	G	G	G	G	G	G	G	
3"	G	G	G	G	G	G	G	G
4"	G	G	G	G	G	G	G	G
6"	G	G	G	G	G	G	G	G
8"	G	G	G	G	G	G	G	G
10"	G		G	G	G			G
12"	G				G			

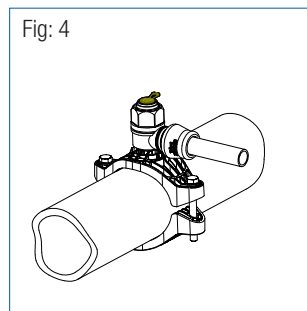
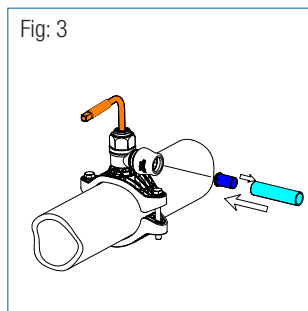
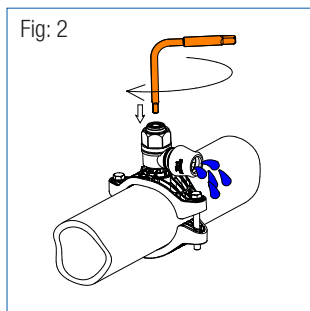
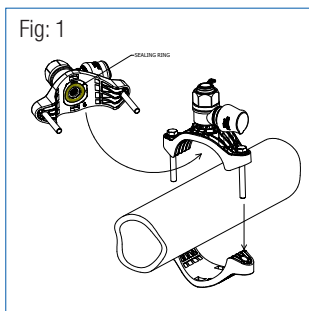
G= Gunmetal Strap.  
P= Plastic Strap

## STFS INSTALLATION

The design of ATPLAS self tapping ferrule straps make them very simple to use. For easy, trouble free installation the steps detailed below should be followed:

After selecting the correctly sized strap for the main, check that the cutter is retracted up into the stem and does not protrude through the bottom of the strap.

- └ Fit the top half of the strap on the main ensuring that the sealing ring is correctly positioned between the main and the underside of the strap boss (see Fig. 1).
- └ Locate the bottom half of the strap below the top half and, using the two nuts and bolts provided, bolt the two halves together and tighten evenly. Make sure that the strap sits squarely on the main and then tighten each nut a further two and a half turns for gunmetal straps (for plastic straps see IOM), a torque setting of approximately 13.6 Nm (10 lb/ft).
- └ Remove the plastic top plug and using the ferrule key, screw down the self tapping cutter/plug until it 'bottoms' on the seat (see Fig. 2). Do not over-tighten, a torque of no more than 10 Nm, 7.4 lb/ft is needed.
- └ Wind the cutter/plug back to allow a small amount of water to go to waste to flush out any debris.
- └ Wind the cutter/plug back down onto its seat to seal off the connection (do not overtighten).
- └ Connect the service pipe to the banjo (see Fig.3 and below for instructions).
- └ Ensure the top cap is tightened down on to the banjo (hand tight plus a ½ turn, 15 Nm - 11 lb/ft) then wind the cutter/plug back to seal in the top cap (do not overtighten, a torque of no more than 6 Nm, 4.4 lb/ft is needed).
- └ Replace the plastic top plug.



## SERVICE PIPE INSTALLATION

### TALBOT PUSHFIT FOR PE ASSEMBLY INSTRUCTIONS

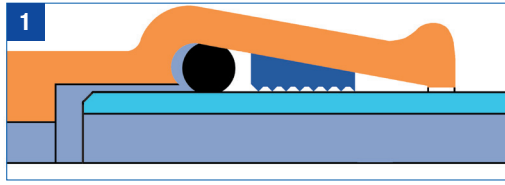
#### Pushfit Assembly Instructions

	1a. For metric British standard pipe only, push the correct liner fully into the pipe.
	1b. For imperial BS, DIN and ISO pipe only. Bevel the pipe. No liner is required.
	2. Push the pipe fully into the fitting with a slight twist.
	3. Ensure that the pipe passes two points of resistance and is fully seated.

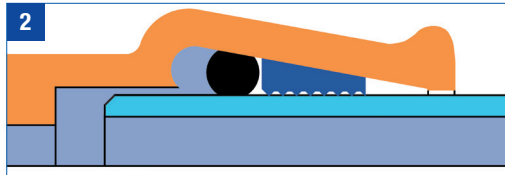
#### Pushfit Dismantling Instructions

	1. Slide extractors home and withdraw the pipe.
	2. Extract the grip ring with a screwdriver. Do not re-use the grip ring.
	3. Extract and inspect the 'O' ring - replace it if damaged.
	4. Insert a new grip ring by forming a figure '6' and pressing it in.
	5. Ensure the grip ring is inserted the correct way round.

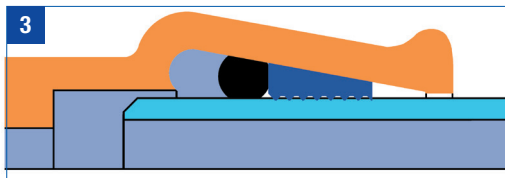
## HOW TALBOT PUSHFIT WORKS:



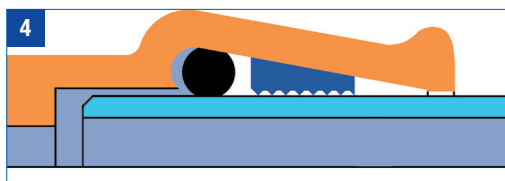
After insertion of the pipe, with the components at rest, the O-ring provides the water seal and the grip ring is ready to resist any pull out.



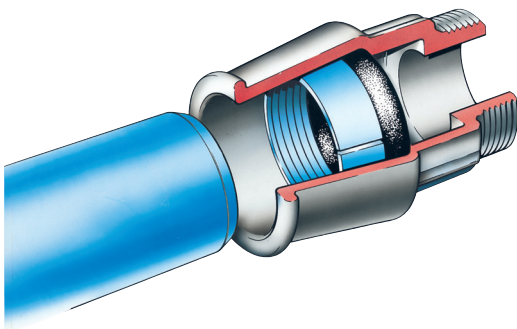
Water pressure forces the O-ring against the grip ring, pushing both components down the taper of the fitting creating an excellent pressure seal on the pipe.



As the water pressure rises the O-ring is forced further down the tapered body towards the grip ring, increasing the sealing pressure against the pipe and body.



In negative pressure conditions the O-ring remains in its original seating position and provides an effective vacuum seal.



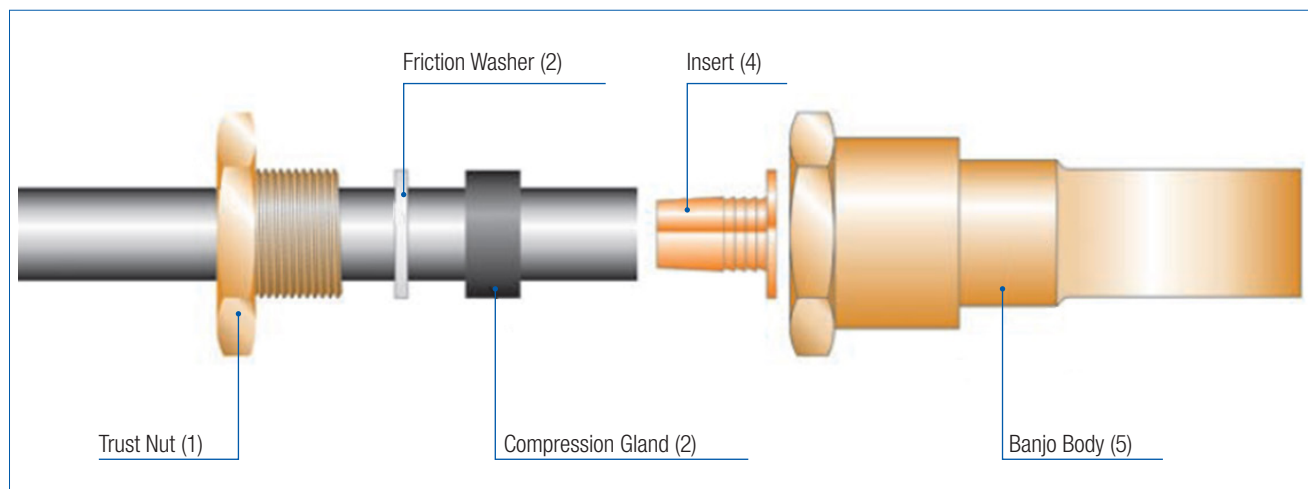
EPDM O-rings provide a watertight seal



Grip rings ensure resistance against pull out



## EBCO-B FOR PE ASSEMBLY INSTRUCTIONS

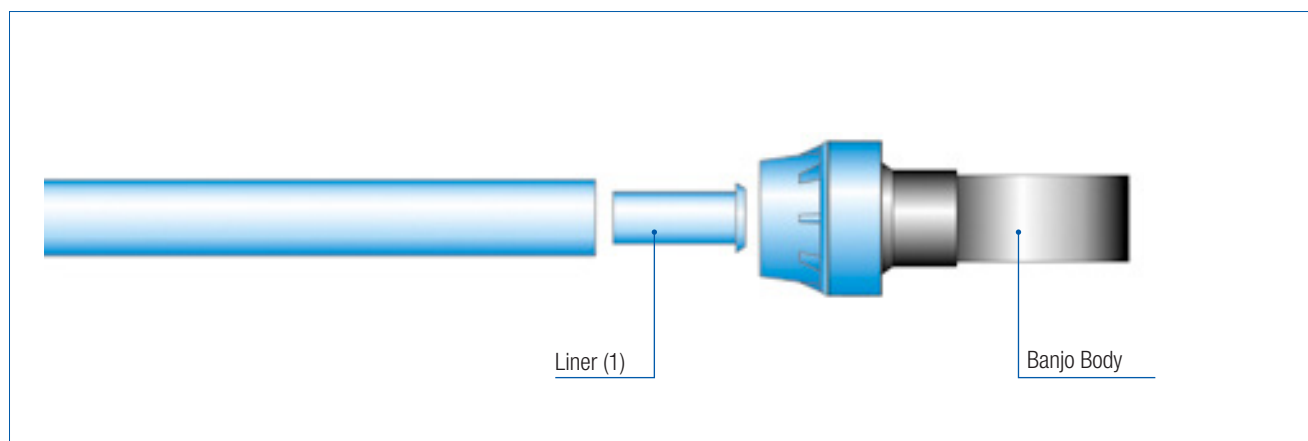


## EBCO THREADED OUTLET ASSEMBLY INSTRUCTIONS

Ensure the metal pipe is male threaded to the correct BSP size and apply sufficient PTFE tape to the male thread to aid the sealing process. Screw the pipe fully into the banjo outlet using a spanner to create a watertight seal. Test and tighten further if necessary.

## EBCO PUSH FIT ASSEMBLY INSTRUCTIONS

Remove the red end cap from the blue cone of the EBCO Push Fit connection and remove the liner (1) and insert it fully into the PE pipe. Once the liner is inserted into the pipe push the pipe fully into the PE end, past two points of resistance, until it is fully seated.



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Note: Specifications may be changed without notification at any time.

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