



Plumbing and Heating
For Continental Europe

The brass push-fit solution **with more bite**

Plumbing and heating overview brochure



AN RWC BRAND
RWC

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Solutions to Shape the world™

RWC and its family of brands help customers **deliver, control, optimise and solve** in innovative, reliable and simple ways every day.



Reasons to install The brass push-fit solution with more bite

SharkBite brass push-fit fittings are tough.

SharkBite fittings quickly and securely connect pipes and appliances together. Withstanding high temperature and pressure, the push-fit fittings are ideal for hot and cold water and central heating systems. Made from extra tough material, they are also suitable for connecting copper pipes to boilers (excluding gas applications), as well as recirculating systems.

SharkBite's slimline design looks good in front of the wall and is easily detectable when installed behind the wall.

Using a simple and instant push action, SharkBite is safer and cleaner to install than traditional methods as there is no need for tools, soldering, crimping, clamps or glue. SharkBite is also compatible with copper or JG Speedfit PEX Barrier pipe.



Healthy and save living

Made of lead-free and non-toxic 4MS compliant DZR brass.



Fast installation

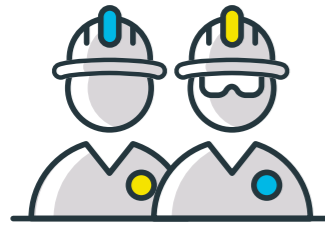
40% faster to install than traditional methods. Also easy to demount if necessary.



Working together

With a strong brand reputation and a high-quality range of fitting solutions, SharkBite is the perfect partner for your next project.

Whether you are an installer, homeowner or self-builder, you can be confident we have the expertise to design the best durable and sustainable fittings for your installation.



Installers

We know that a good reputation is crucial to your business. With SharkBite your reputation is in safe hands, as all of our products are manufactured to the highest standards using the latest technologies. We will be available throughout your project to provide you all the technical back up you could need – onsite or over the phone.



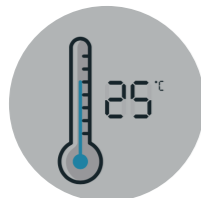
Homeowners & Self Builders

Using the latest push-fit technology, SharkBite is fast and easy to install. You do not need hot works or expensive electrical tools to install the fittings yourself.



Instant push-fit connection

Which are easy to fit, especially in tight spaces when maneuvering tools is difficult



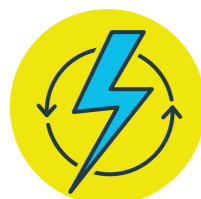
Durable solution

With high pressure and temperature rating. KIWA Class III approved EDPM O-Ring withstanding high temperatures



No tools or hot works

Safe and simple to install using no tools, hot works, crimping, clamps or glue



Electrically continuous

Without the need for extra earth bonding due to the Stainless steel grab ring which firmly and securely grips copper pipe



Why customers choose SharkBite

SharkBite has been sold for many years and is known around the globe. Here are some reasons why customers selected our fittings for their project:

I own rental property and these couplings are the very best invention ever

SharkBite fixtures allow us to make connections to existing pipe very rapidly

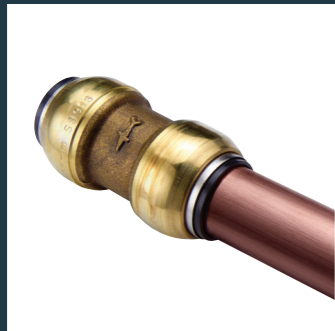
In my opinion SharkBite couplings are one of the best plumbing products ever invented

It's a lot easier than us having to try to get into a tight space and solder

SharkBite fittings have proven themselves to be reliable

One solution for Copper and JG Speedfit PEX Barrier pipe

The SharkBite fitting and valve range has been developed to provide a single solution for copper and innovative JG Speedfit PEX Barrier pipes – for domestic and commercial applications. It has been rigorously tested and approved.



Copper

SharkBite fittings and valves will connect compatibly sized copper pipes that are manufactured in accordance with DIN EN 1057 in sizes from 12mm to 28mm.



JG Speedfit Pex Barrier

JG Speedfit cross linked Polyethylene (PEX) Barrier pipe can be joined with SharkBite fittings and pipe liners for every connection. Available in 2 sizes, 12mm and 15mm, in a range of straight lengths or coils. Inserts are required when installing with PEX barrier pipe.

JG Speedfit PEX Barrier pipe has superior flexibility making the system very easy to handle and simple to install.

The pipe is made of 5 layers, the centre of which is a coloured Oxygen barrier which prevents the ingress of air into the system, reducing the effect of corrosion on metal components.

How to make a copper connection



Step 1: Cut & deburr

Cut the pipe square and deburr



Step 2: Mark

Mark insertion depth using the depth marker on the demount clip or using a tape measure



Step 3: Push & twist

Push pipe into fitting up to the depth mark with a small twist – DONE

Easy removal



Disconnecting clips

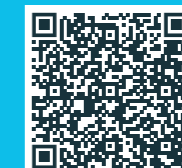
Demount (12 to 28mm), by using the SharkBite disconnecting clip (snap clip onto pipe, push against the release collar & pull pipe at the same time)



Disconnecting tongs

Demount (12 to 28mm), by using SharkBite disconnecting tongs (push tongs over pipe, squeeze tongs together and pull pipe at same time, using the thumb as a lever)

Watch our online how-to SharkBite videos here:



How to make a Speedfit connection

4 simple steps



Step 1: Cut

Cut the pipe square. Recommend using JG pipe cutter JG-TS



Step 2: Mark

Mark insertion depth using the depth marker on the demount clip or using a tape measure



Step 3: Insert

Place Speedfit TSM insert inside pipe, ensure fully inserted



Step 4: Push & twist

Push pipe into fitting up to the depth mark with a small twist – DONE

Easy removal



Disconnecting clips

Demount (12 to 28mm), by using the SharkBite disconnecting clip (snap clip onto pipe, push against the release collar & pull pipe at the same time)



Disconnecting tongs

Demount (12 to 28mm), by using SharkBite disconnecting tongs (push tongs over pipe, squeeze tongs together and pull pipe at same time, using the thumb as a lever)

Watch our online how-to SharkBite videos here:



Slip feature function

The 'slip feature' function is designed to permit easy repairs and extensions to be made on wet or dry systems in seconds. Slip couplings and our unique slip tees that are manufactured with one end of the fitting with the 'slip feature' as standard.

Identify the area for repair or additional pipework

Identify the section to be removed for repair using a slip coupling or if you are adding additional pipework to an existing pipe, use a slip tee.

Mark the section to be removed, dependent upon the pipe size as shown below:

15mm pipe – repairable section 34mm

22mm pipe – repairable section 40mm

Note: It is important the correct size section is removed as detailed above. Any smaller section will not provide sufficient space to engage the second pipe and may partially block the flow of the branch on a tee. Larger removed sections would create short pipe engagement.

Cut

Cut out the section using a proprietary pipe cutter and deburr the pipe. Ensure that the pipe is free from burrs, scratches and debris. Mark the pipe insertion depths (see insertion depths section) on both pipes.

Push

Align pipe 1 with the bore of the slip end of the fitting and insert fully until the stop end of the fitting is clear of pipe 2.

Note: At this point the bore of the branch is completely blocked.

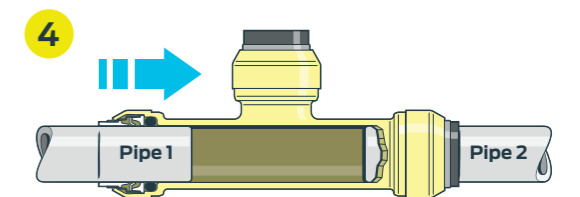
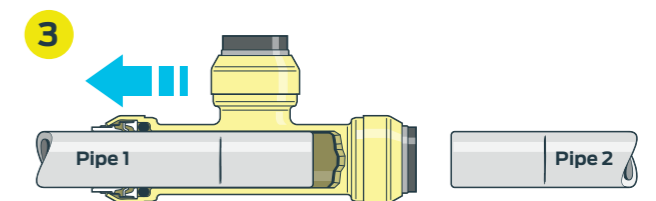
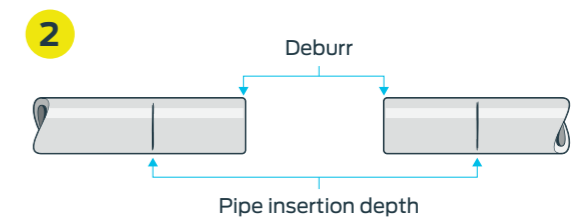
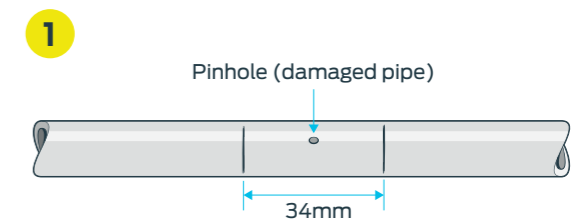
Withdraw pipe 1 allowing pipe 2 to engage up to the insertion mark. Do not withdraw pipe 1 further than the depth insertion mark.

Note: The pipe is now clear of the branch.

Done

You have now completed a repair or added additional pipework into an existing system in minutes.

Diagram shows the repairable section to a 15mm pipe



Applications & approvals

SharkBite is ideal for both domestic and commercial applications in accordance with the specification including:

- Potable water applications
- Vented and unvented hot water systems
- Hot and cold-water services
- Heating and chilled water applications
- Pressurised, vented and sealed central heating systems
- Recirculating hot water systems with copper pipe

Guarantee



Approvals

The SharkBite range has been designed to exceed all approval requirements and has been certified by the following approval bodies:



*For copper pipe 12-28mm



*For copper pipe 12-28mm & JG Speedfit PEX Barrierpipe 12 and 15mm



*For copper pipe 12-28mm & JG Speedfit PEX Barrierpipe 12 and 15mm

SharkBite design

The SharkBite logo represents genuine, high quality plumbing fittings that redefine the meaning of high performance and efficiency in the plumbing industry.

SharkBite fittings provide a fast, secure and heat-free pipework connection solution that will reduce installation times and the requirement to return to an installation in the future. Their slim-line design provides an aesthetically pleasing appearance when surface mounted. It also makes the fittings ideal for installation in tight spaces and easier to insulate, if required.

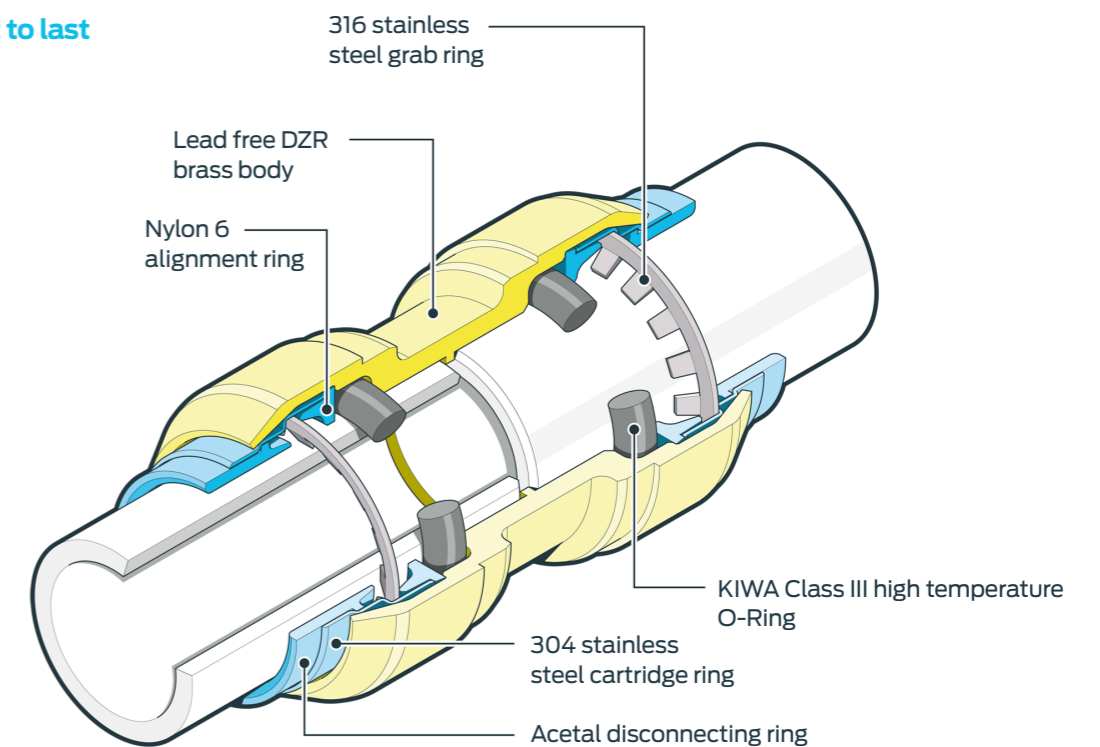
The fitting bodies are manufactured from robust lead free DZR brass. The toothed grab ring is manufactured from 316 Stainless Steel which provides the firm bite that ensures the strongest of joints is made.

The cartridge ring is manufactured from 304 stainless steel to provide guaranteed electrical continuity. The KIWA Class III high temperature O-Ring provides a long lasting and watertight seal and can be used with recirculating hot water systems.

Features:

- 12mm – 28mm fittings rated to 10 bar at 120°C when using copper pipe
- All fittings' bodies are also date marked to ensure full traceability.

Engineering built to last



Lead-free DZR brass fittings

Coupling



Part number	Size mm	Bag qty
SBE0112	12	1
SBE0112-Z	12	10
SBE0115	15	1
SBE0115-Z	15	10
SBE0118	18	1
SBE0118-Z	18	10
SBE0122	22	1
SBE0122-Z	22	10
SBE0128	28	1
SBE0128-Z	28	5

Reducing Coupling



Part number	Size mm	Bag qty
*SBE012215	22 x 15	1
*SBE012215-Z	22 x 15	5

*not available in all countries.

Slip Coupling



Part number	Size mm	Bag qty
SBE0115S	15	1
SBE0115S-Z	15	10
SBE0118S	18	1
SBE0118S-Z	18	10
SBE0122S	22	1
SBE0122S-Z	22	10

Equal Tee



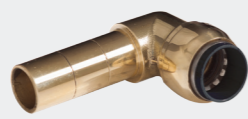
Part number	Size mm	Bag qty
SBE0312	12 x 12 x 12	1
SBE0312-Z	12 x 12 x 12	10
SBE0315	15 x 15 x 15	1
SBE0315-Z	15 x 15 x 15	10
SBE0318	18 x 18 x 18	1
SBE0318-Z	18 x 18 x 18	10
SBE0322	22 x 22 x 22	1
SBE0322-Z	22 x 22 x 22	10
SBE0328	28 x 28 x 28	1
SBE0328-Z	28 x 28 x 28	5

90° Elbow



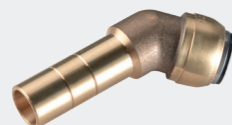
Part number	Size mm	Bag qty
SBE0212	12	1
SBE0212-Z	12	10
SBE0215	15	1
SBE0215-Z	15	10
SBE0218	18	1
SBE0218-Z	18	10
SBE0222	22	1
SBE0222-Z	22	10
SBE0228	28	1
SBE0228-Z	28	5

90° Street Elbow



Part number	Size mm	Bag qty
SBE0215ST	15	1
SBE0215ST-Z	15	5
SBE0222ST	22	1
SBE0222ST-Z	22	5

45° Street Elbow



Part number	Size mm	Bag qty
*SBE0515ST	15	1
*SBE0515ST-Z	15	5
*SBE0522ST	22	1
*SBE0522ST-Z	22	5

*not available in all countries.

Female Connector (parallel thread)



Part number	Size mm	Bag qty
SBE111510F	15 x 3/8"	1
SBE111510F-Z	15 x 3/8"	5
SBE111515F	15 x 1/2"	1
SBE111515F-Z	15 x 1/2"	5
SBE111815F	18 x 1/2"	1
SBE111815F-Z	18 x 1/2"	5
SBE112215F	22 x 1/2"	1
SBE112215F-Z	22 x 1/2"	5
SBE112220F	22 x 3/4"	1
SBE112220F-Z	22 x 3/4"	5
SBE112825F	28 x 1"	1
SBE112825F-Z	28 x 1"	5

90° Male Elbow



Part number	Size mm	Bag qty
SBE121515M	15 x 1/2"	1
SBE121515M-Z	15 x 1/2"	5
SBE121820M	18 x 3/4"	1
SBE121820M-Z	18 x 3/4"	5

90° Female Elbow



Part number	Size mm	Bag qty
SBE121515F	15 x 1/2"	1
SBE121515F-Z	15 x 1/2"	5
SBE121820F	18 x 3/4"	1
SBE121820F-Z	18 x 3/4"	5

90° Elbow with Back Plate



Part number	Size mm	Bag qty
SBE121515FBP	15 x 1/2"	1
SBE121515FBP-Z	15 x 1/2"	5

Male Connector (tapered thread)



Part number	Size mm	Bag qty
SBE111215M	12 x 1/2"	1
SBE111215M-Z	12 x 1/2"	5
SBE111510M	15 x 3/8"	1
SBE111510M-Z	15 x 3/8"	5
SBE111515M	15 x 1/2"	1
SBE111515M-Z	15 x 1/2"	5
SBE111815M	18 x 1/2"	1
SBE111815M-Z	18 x 1/2"	5
SBE112215M	22 x 1/2"	1
SBE112215M-Z	22 x 1/2"	5
SBE112220M	22 x 3/4"	1
SBE112220M-Z	22 x 3/4"	5
SBE112825M	28 x 1"	1
SBE112825M-Z	28 x 1"	5

Reduced Branch Tee



Part number	Size mm	Bag qty
SBE03151215	15 x 12 x 15	1
SBE03151215-Z	15 x 12 x 15	10
SBE03221522	22 x 15 x 22	1
SBE03221522-Z	22 x 15 x 22	10

Female Branch Tee



Part number	Size mm	Bag qty
SBE031515F15	15 x 1/2" x 15	1
SBE031515F15-Z	15 x 1/2" x 15	5

Straight Reducing Tails



Part number	Size mm	Bag qty
SBE211512	15 x 12	1
SBE211512-Z	15 x 12	10
SBE211815	18 x 15	1
SBE211815-Z	18 x 15	10
*SBE212215	22 x 15	1
*SBE212215-Z	22 x 15	10
SBE212218	22 x 18	1
SBE212218-Z	22 x 18	10

*not available in all countries.

Slip Tee



Part number	Size mm	Bag qty
*SBE0315S	15 x 15 x 15	1
*SBE0315S-Z	15 x 15 x 15	5
*SBE0322S	22 x 22 x 22	1
*SBE0322S-Z	22 x 22 x 22	5

*not available in all countries.

1/4 Turn Valves are indicated by this marker

These valves have been designed to allow temporary servicing of downstream equipment and must only be used in the fully open or fully closed position.

DO NOT use these valves:

- In a partially open position to control flow.
- To provide a permanent termination.
- Without tubing assembled or plugged (or threaded connections sealed).
- As a tap or "faucet".

End Stop



Part number	Size mm	Bag qty
SBE0412	12	1
SBE0412-Z	12	10
SBE0415	15	1
SBE0415-Z	15	10
SBE0418	18	1
SBE0418-Z	18	10
SBE0422	22	1
SBE0422-Z	22	10
SBE0428	28	1
SBE0428-Z	28	5

Nickel Plated Quarter Turn Ball Valve



Part number	Size mm	Bag qty
SBE2715	15	1
SBE2715-Z	15	5
SBE2722	22	1
SBE2722-Z	22	5

JG PEX Barrier Pipe

White PEX Barrier Pipe (coils)



Part number	Size mm x m	Pack qty
12BPEX-05C	12 x 5	1
12BPEX-100C	12 x 100	1
15BPEX-05C	15 x 5	1
15BPEX-25C	15 x 25	1
15BPEX-50C	15 x 50	1
15BPEX-100C	15 x 100	1
15BPEX-120C	15 x 120	1
15BPEX-150C	15 x 150	1

Pipe Insert



Part number	Size mm	Bag qty
TSM12N	12	50
TSM15N	15	50

White PEX Barrier Pipe (lengths)



Part number	Size mm x m	Pack qty
15BPEX-20X2L	15 x 2	20
15BPEX-20X3L	15 x 3	20
15BPEX-20X6L	15 x 6	20

Accessories

Disconnecting Clips



Part number	Size mm	Bag qty
SBE2912	12	1
SBE2915	15	1
SBE2918	18	1
SBE2922	22	1
SBE2928	28	1

Disconnecting Tongs



Part number	Size mm	Bag qty
SBE3012	12	1
SBE3015	15	1
SBE3018	18	1
SBE3022	22	1
SBE3028	28	1

Pipe Cutter



Part number	Size mm	Bag qty
JG-TS-UK	12-22	1

Pipe Cutter



Part number	Size mm	Bag qty
JG-TS	12-22	1

Installation trouble shooting

Installation requirements

The SharkBite Push-to-Connect Plumbing System is simple and effective when executed in accordance with the jointing procedures in this manual. However, if sufficient care is not taken, this can result in an ineffective joint. SharkBite fittings are not suitable for use on stainless steel or carbon steel pipe. Installation is subject to the requirements of the applicable regulatory authority.

Installation best practice

- All SharkBite O-Rings are pre-lubricated during manufacture, do not apply additional lubrication.
- Cut the pipe square – use cutting tools with sharp, undamaged cutting blades to ensure a clean, square cut. Do not use a hacksaw when cutting copper pipe and appropriate deburring & gauge tools to ensure the ends are free from burrs.
- Keep it clean – ensure your pipe and fittings are free from building-site contamination such as dirt, sand, sawdust, concrete dust etc.
- To ensure fittings stay clean and the O-Ring is protected from damage, fittings must be kept in their original packaging until immediately prior to installation.
- Push the pipe all the way in – use SharkBite depth indicator as featured on the demounting clip-on copper to ensure the pipe has achieved full insertion.
- If the pipe is difficult to insert or will not engage into the fitting do not force the pipe. Remove and check for obstructions inside the fitting and check for damage to the end of the pipe.
- If Speedfit PEX Barrier pipe is to be refitted to a SharkBite fitting, it is important to trim the pipe before remaking the joint.

- SharkBite fittings are not to be installed back-to-back. Please observe the minimum fittings distance requirements as detailed in this manual.
- If you are soldering/sweating copper pipe solder/sweat all connections first, then make the SharkBite connections – Do NOT solder next to SharkBite connection.
- SharkBite fittings may be used on annealed copper tube, however, achieving a watertight connection may be difficult. Using an alternate connection method may be more suitable.
- Always pressure test with water on completion and before covering the pipe.

Systems using JG Speedfit PEX Barrier Pipe

- Pressure testing should be carried out at 2 bar for 10 minutes followed by 10 bar for 10 minutes.
- For sections of the system, which can be subjected to full mains pressure, apply a minimum pressure of the available mains water pressure.
- For sections of the system downstream of a pressure control valve, apply a pressure equal to the pressure control valve setting.

Always look for the Shark!

Please see our technical manual for further technical details and specifications before installation.



Technical support

At Reliance Worldwide Corporation Ltd we are extremely proud of our heritage and reputation for providing excellent products and customer service levels.

Our highly trained Customer Service Team and Technical Support Team are available and keen to help with product advice, technical enquiries and installation issues; and our Sales Managers are available throughout Europe to discuss product and installation specifications.



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