Speedfit®

THE PUSH-FIT SOLUTION FOR PLUMBING AND HEATING SYSTEMS

JG Speedfit is a push-fit system suitable for the plumbing of domestic hot and cold water services and central heating applications, including pressurised and combi systems.

The System is approved by the Water Regulations Advisory Scheme. Speedfit 'PEM' fittings and PEX and Polybutylene Barrier Pipe are Kitemarked to BS7291 Parts 1, 2 and 3 Class S Licence No KM39767.

Performance specifications are well within those required for most central heating and water supply systems including:

- Mains fed and indirect cold water systems
- Vented and unvented hot water systems
- Vented central heating systems
- Sealed central heating systems provided temperatures and pressures comply with BS7291 Parts 1, 2 and 3 Class S
- Underfloor heating

Extensive tests have shown that Speedfit products will withstand temperatures and pressures well in excess of normal working conditions.

Speedfit should be installed to conform with good plumbing practice.

Speedfit should not be used for gas, fuel oil or compressed air applications.

Speedfit Support

Speedfit Support's national team of technical engineers is available to help you get the best from your Speedfit System, be it assistance or advice.

Their service includes a free underfloor heating estimate, onsite installation advice, a technical helpline and a free CAD design service.

Technical Help Desk: 01895 425333
8am to 5pm Monday through Friday



Instant Estimate



Free Design with Quote



Support On Your Doorstep



Technical Helpline



Install Videos & Guides

SPECIAL APPLICATIONS

Boats. The flexibility of the Speedfit System ensures it can be cabled easily around the interior and hidden from view.

Caravans. Speedfit is ideal for caravan installations due to its flexibility and its resistance to corrosion and freezing.

Exhibitions. The unique ability of the Speedfit System to be easily demounted and reused, together with its flexibility, makes Speedfit ideal for this application.

Agricultural and Horticultural. Speedfit has many applications in agricultural and horticultural environments.

Portable Buildings (site cabins, toilets). As with caravans, Speedfit is well suited to this application.

WORKING TEMPERATURES AND PRESSURES

Application	Usual working temperature, °C	Maximum working temperature, °C	Maximum working pressure, bar
Cold Water (indirect and direct mains)	20	20	12
Central Heating	82	105, short term malfunction at 114	3
Hot Water (including unvented cylinders)	65	95	6

Speedfit fittings suitable for central heating systems can withstand temperatures up to 114°C intermittently for short periods.

Speedfit fittings shown as not suitable for central heating systems are used primarily on the domestic hot and cold water system accepting temperatures of up to 65°C.

HANDLING FITTINGS AND PIPE

Ensure fittings and pipe are kept clean at all times by keeping them in bags and boxes provided.
Do not empty Speedfit Products onto the floor area.
Ensure internal 'O' Ring seals are kept free from dirt and debris.

PRODUCT SELECTION AND INSTALLATION

John Guest fittings and related products are specifically designed and manufactured by John Guest to the Technical Specifications set out in the John Guest Product Catalogues.

All John Guest fittings and related products should be selected, used and maintained in accordance with these Technical Specifications.

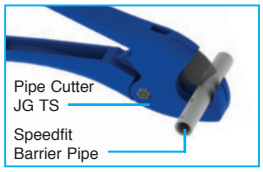
It is the customer's / user's responsibility to ensure that John Guest fittings and related products are suitable for their intended applications, are properly installed and maintained and are used in accordance with the Technical Specifications. It is also the customer's / user's responsibility to provide it's own customers with any relevant technical information about John Guest products it supplies them.

John Guest produce a Push-fit system of pipe and fittings for compressed air situations. See separate literature for details.

MAKING A GOOD CONNECTION

PREPARE THE PIPE

Fittings and pipe should be kept clean bagged and undamaged before use.

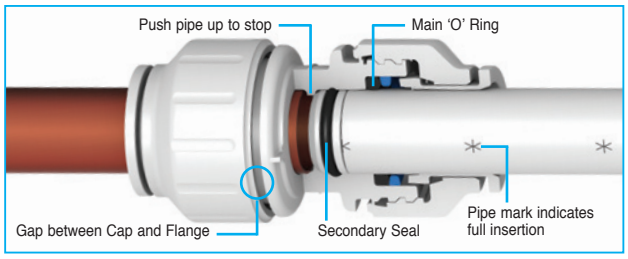


Ensure the pipe is free of score marks. Cut the pipe square. When using Speedfit Barrier Pipe cut along an insertion mark. We recommend the use of JG Pipe Cutters.



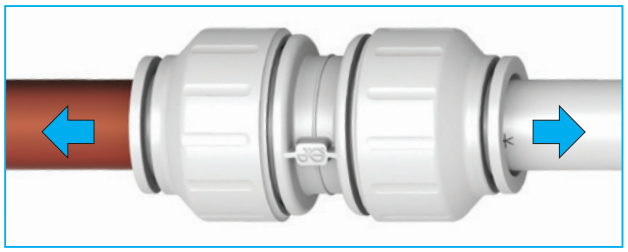
To prevent damage to the 'O' ring remove all burrs and sharp edges. When connecting Speedfit Pipe use a Superseal Pipe Insert or a Standard Speedfit Pipe Insert. A twisting motion will aid insertion. The insert should only be used with Speedfit Pipe.

TWIST AND LOCK FITTINGS



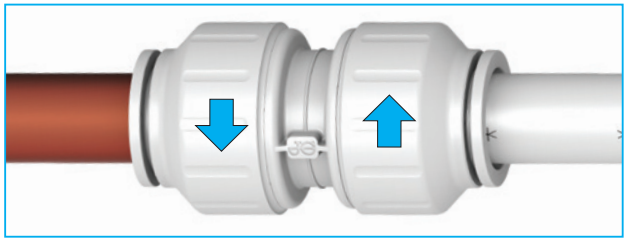
The fitting should be in the 'unlocked' position, this is shown with a small gap between the screwcap and the body flange.

Push the pipe fully into the fitting, up to the pipe stop. If the Speedfit Pipe has been cut correctly the insertion mark on the pipe will be level with the collet head. The 'O' ring on the Superseal Pipe Insert provides a secondary seal against the bore of the fitting. A good connection has been made.



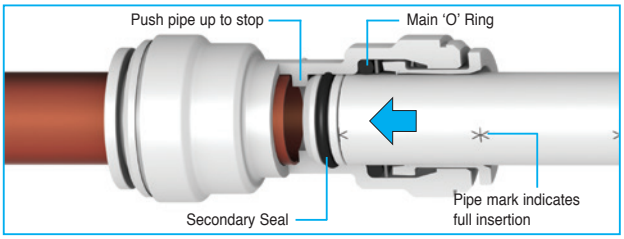
If you are not using collet clips, ensure that the screwcaps are in the locked position. Pull to check it is secure. It is good practice to test the system prior to leaving the site or before use. Our recommended test procedure is shown in our Technical Checklist.

ADDED BENEFIT OF TWIST AND LOCK



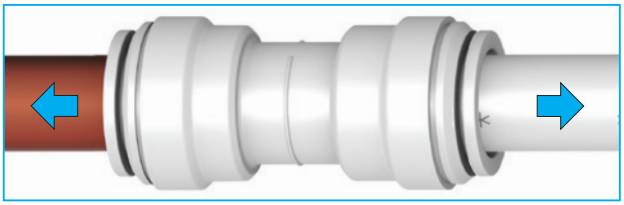
Twist the screwcap until it touches the body flange. This increases the 'O' ring seal around the pipe and locks the pipe into position.

STANDARD SPEEDFIT FITTINGS



Standard Speedfit connections are made in the same way as Twist and Lock.

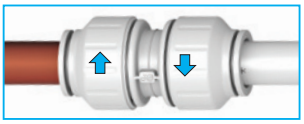
Push Pipe up to Pipe Stop. If the Speedfit Pipe has been cut correctly the insertion mark on the pipe will be level with the collet head.



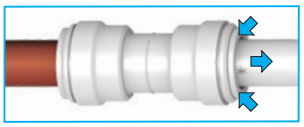
Pull to check connection is secure and test the system. Our recommended test procedure is shown in our Technical Checklist on page 31.

TO DISCONNECT

Ensure that the system is depressurised.



The screwcap on Twist and Lock Fittings will need to be turned back to the unlocked position.

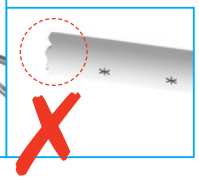


For both Twist and Lock and Standard fittings, push the collet square against the face of the fitting by using fingers or with the help of our collet release tool.With the collet held in position the pipe can be removed. The fitting can be used again without the need for replacement parts.

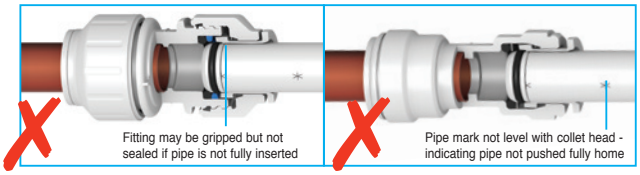
WHAT NOT TO DO



Don't use hacksaws to cut the pipe or leave burrs on the end of the pipe.



Don't use damaged or scored pipe. Score marks can cause leaks passed the 'O' Ring.



Don't forget to push the pipe fully into the fitting, past both the collet (gripper) and the 'O' ring.

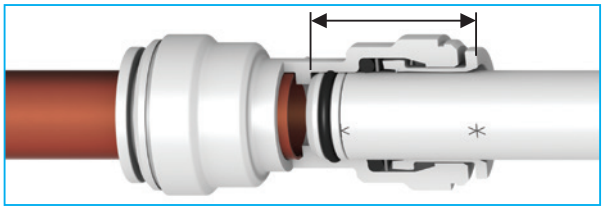
Do not insert fingers into the fitting as the stainless steel teeth may cause injury.

Remember to pressure test the completed installation according to the recommendations in our Technical Checklist.

PIPE STOP DISTANCES

Stops are located at the following distances from the end of the fitting:

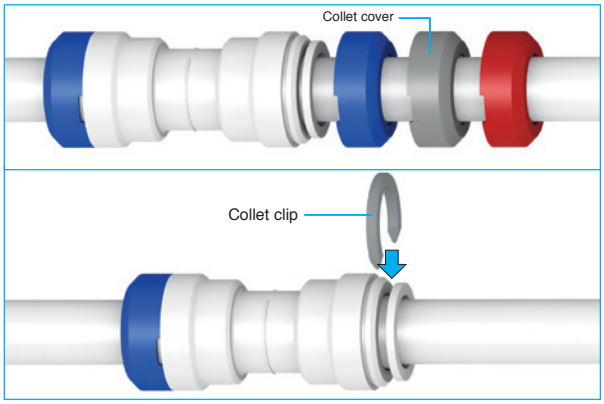
Size	10mm	15mm	22mm	28mm
Stop Distance	20mm	30mm	35mm	44mm



COLLET COVERS AND COLLET CLIPS

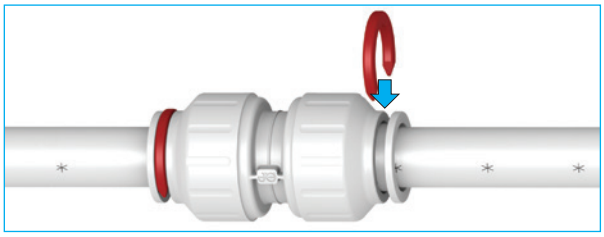
Use a collet cover or collet clip to provide added security against pipe disconnection, e.g. the fitting coming into contact with rigid surfaces and behind dry-lining walls.

Collet covers for use with standard Speedfit fittings, are available in white or in red or blue to allow colour coding of pipes.



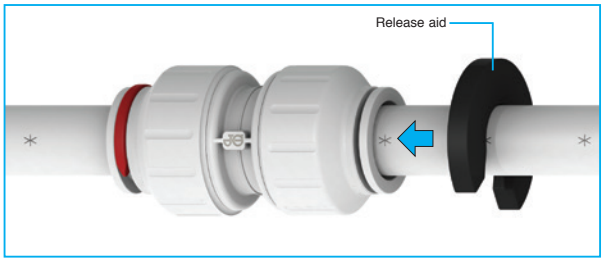
White or grey collet clips are used with standard fittings to prevent accidental pipe disconnection.

Red or Blue collet clips provide colour coding of pipe on Twist and Lock fittings. They are not designed to prevent accidental release and should be fitted when the fitting is in the locked position.



RELEASE AID

The action of pressure in a system could increase the grip of the collet. The release aid allows a firmer grip on the collet whilst removing the pipe.



STOP END

The unique feature of the Speedfit Concept, the ability to disconnect the fitting should you want to, means the Speedfit Stop End not only provides a permanent leakproof seal, but can be readily removed to allow work to restart or to allow an extension to a system. Thus, the fitting is especially useful to allow water to be turned back on, overnight for instance, or if a job has to be interrupted for another reason.



Stop ends are also useful when pressure testing a system before appliances are connected.

STEM ELBOW





Designed to simplify pipe connection in restricted spaces. The Speedfit Stem Elbow provides an instant swivel fitting so pipe can be orientated in any direction.

A special 10mm version gives a neat connection from concealed plumbing to a radiator.

SERVICE VALVES

The Speedfit range of brass chromium plated service valves can be used on both hot and cold water services and central heating. Push-fit connections mean much reduced installation time, especially in confined spaces.





Speedfit x Speedfit
Mechanism twists out of sight

The valves, in 10 to 22mm, have a 1/4 turn open/close mechanism operated by a screwdriver slot or a lever.
The ability of Speedfit products to twist whilst in situ allows the screwdriver slot operating valve to be turned out of sight, helping to avoid unauthorised tampering.

FLEXI HOSES

Manufactured to a quality you would expect from Speedfit, our range of Flexi Hoses has nearly 50 different patterns. A special pattern has been designed to help the installation of monoblocs, each hose in a pair having a different spanner location to ease connection of the threaded end into the monoblocs inlets.





Flexi Hoses are listed on pages 17 and 18.

TAP CONNECTORS

Speedfit manufacturer a wide range of connectors including conventional straight and bent tap connectors.











The range also offers a special and unique Tap Connector that only requires a simple hand tightening to connect up a terminal tap, mixer or a float valve. An integral seal within the fitting avoids the need for further sealant. The connectors are useful when replacing existing brassware or in other confined spaces.

Coupling up to a supply is easy. The pipe is simply pushed home into the Speedfit connection and is instantly secured, without the need for specialist tools.

SPEEDFIT MANIFOLD

Speedfit have introduced an innovative 22mm x 10mm 4 Way Manifold. Departing from the usual manifold design, this new product has 4 in-line 10mm outlets, offering a neater envelope size and therefore a much smaller installation space.

Other benefits include better flow characteristics and a more even distribution of hot water.

The 22mm and 10mm Speedfit Push-fit connections make for a fast and easy installation, even in confined spaces.

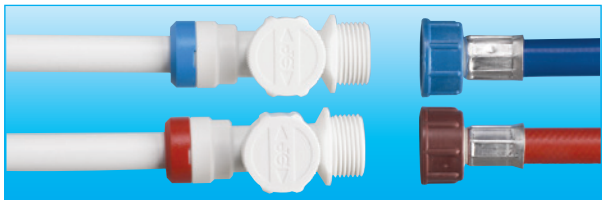
Whilst designed as heating product, the manifold can also be used in a mains pressure hot or cold domestic plumbing system, to feed bathroom or kitchen taps and mixers. This allows for a more efficient installation as every terminal fitting has its own dedicated supply.





APPLIANCE TAPS

The Speedfit Range includes an Appliance Tap for the permanent connection of washing machines and dishwashers, thus enabling complete water isolation to the appliances.



A simple push-fit connection of the supply pipe and a plastic thread on the outlet to marry well with the plastic thread on the hose means the Speedfit Appliance Tap is very easy to install. The large round handle is easy to grip and turn.

SUPERSEAL PIPE INSERT

The Superseal Pipe Insert has been developed to be used with Speedfit Barrier Pipe and Speedfit Fittings to provide an extra line of defence when installing a Speedfit Push-fit System.

The insert has its own ‘O’ ring which, together with a stem sliding within the inside diameter of the pipe gives a secondary seal against the inside of the fitting.



The Speedfit Connection, when made with the insert, has a number of design features.

Sliding the stem of the insert into the pipe gives greater compression of the main ‘O’ ring on the pipe and greater rigidity of the length of pipe within the fitting, reducing the chance of leaks if a side load is applied.

A connection is easier to make because the head of the insert has been designed for ease of insertion.

Superseal Inserts are listed on page 15.

JG Speedfit®

HOW SPEEDFIT WORKS

The JG Speedfit system uses a simple push-fit action meaning that there is no flux, flames or mess. All fittings have a grip then seal construction, made up of a collet with stainless steel teeth to grip an 'O' ring to provide a permanent leak proof seal.

The additional benefit of 'Twist and Lock' is that a twist of a screwcap locks the pipe in position and provides increased compression on the 'O' ring for even greater security. With plastic pipe available in straight lengths or coils, the flexible system will ensure a fast, simple and reliable installation.

Features

- *Truly demountable without damage to pipe or fitting*
- *Grip and seal connection*
- *Superseal Insert gives secondary seal*
- *Reduced pipe insertion force*
- *Lightweight and easy to handle on site*

Why Speedfit?

- *Installation time reduced by up to 40%*
- *Pipe flexibility permits the cabling of pipe through less accessible areas*
- *No risk of fire or flames from a blowtorch*
- *Easier to work in confined places*
- *A permanent leak-proof connection*
- *Corrosion free*
- *No scale build up*
- *Lower thermal diffusivity maintains safer surface temperature*
- *Pipe elasticity can reduce the possibility of bursting under freezing conditions*
- *Lead free and non toxic*
- *Less noise from water flow and expansion / contraction*
- *Long pipe lengths reduce the number of fittings required*



Speedfit® Technology

WITH YOU EVERYDAY



TELECOM CONNECTIONS

Connecting Ultra Fast Broadband Cables

PLUMBING & HEATING

UK Market Leader in Plastic Plumbing & Heating Systems

PUBS & BARS

Connecting Beer Lines in 95% of Bars in the UK

AUTOMOTIVE

Fuel & Brake Line Connections for Luxury Car Markets

PURE WATER

World Leader in Water Filtration Connection Technology

DRINKS DISPENSE

Wide Range of Connectors for Drinks & Coffee Dispensers

COMPRESSED AIR

Connecting Air & Pneumatic Tubing in Factories



Plastic Innovation

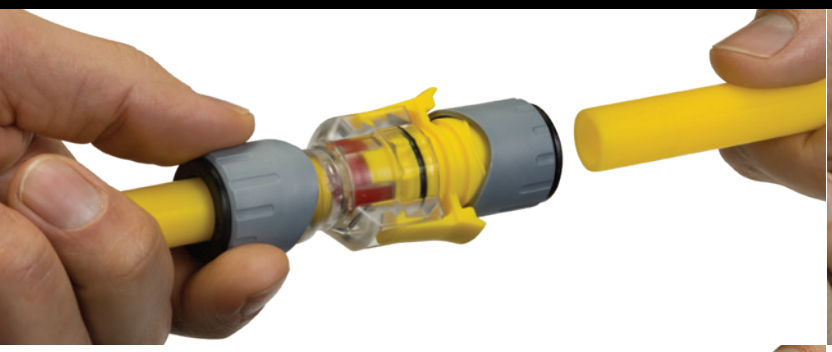
Engineering Excellence

Speedfit® Technology

Speedfit® Technology

Speedfit Technology is built into the DNA of all our push-fit fittings. The distinctive appeal lies within its flexibility of application, high reliability of performance, longevity of service and suitability to a wide variety of industries.

The core technology behind a JG Speedfit plumbing fitting is the same concept incorporated in all John Guest fittings serving the needs of industries as diverse as drinks dispense, pneumatics, compressed air, water purification, drinks vending and telecommunications.





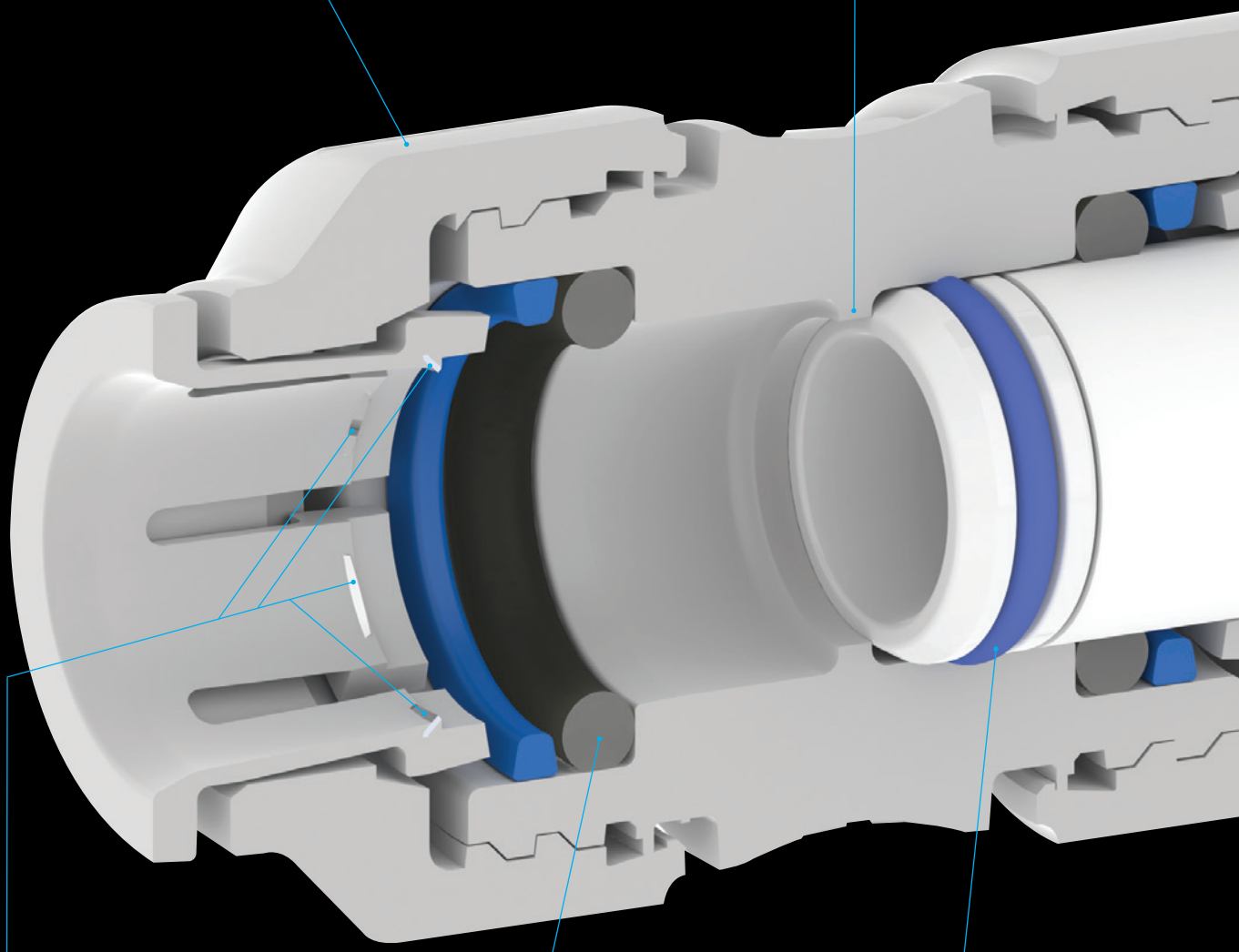






Twist and Lock Cap.
Increases compression on the 'O' ring seal around the pipe and locks the pipe into position.

Pipe Stop.
Push the pipe all the way onto the fitting to ensure full insertion.



Stainless Steel Teeth.
Provides a firm grip on plastic or copper pipe.

Main 'O' Ring Seal.
Ensures a permanent leak-proof connection.

Superseal 'O' Ring.
Pipe insert gives a secondary seal.