

John Guest Speedfit Limited

Horton Road, West Drayton, Middlesex UB7 8JL, England.
Tel: +44 (0) 1895 449233 Fax: +44 (0) 1895 420321
www.jgspeedfit.com
Technical Help Desk: +44 (0) 1895 425333



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, installed, 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.

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

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

The company has a policy of continuous research and development and reserves the right to amend without notice the specification and design of all products illustrated in this catalogue. John Guest Speedfit reserve the right to change the colour and shape of products. Photographs are for illustration purposes only.

Subject to our Terms and Conditions of Sale available on request.

 John Guest[®] and Speedfit[®] are trademarks of John Guest International Limited © Copyright 2015.

Your Local Agent

Z2105/322/0415

JG Speedfit®

**THE PUSH-FIT SOLUTION FOR
PLUMBING & HEATING SYSTEMS**

Speedfit Fittings are suitable for use with copper pipe.



Includes this new addition:

 **Layflat Pipe**
Installing pipe just got a lot easier.

Product Guide
April 2015

John Guest[®] *Worldwide Connections*

The John Guest Group has a long established reputation as a world leading manufacturer of push-fit fittings, tube and other fluid control products. A reputation built on producing consistently high quality products with an ongoing commitment to value engineering and product development.



Quality Manufacture

A commitment to quality is at the heart of the John Guest Philosophy.

The strictest control is maintained by virtue of the fact that design and manufacture is carried out in modern purpose built manufacturing centres in West London and at Maidenhead in Berkshire.

Maintaining control over the whole process from initial tool design and tool making through to final assembly and testing ensuring that only products of the highest quality are produced.

The company believe it is this commitment to quality that has led to it receiving prestigious awards from many of the world's leading testing and approvals organisations.

John Guest is a preferred supplier to many international companies.



BS7291
KM39767



kiwa

Speedfit PEX Fittings and Barrier Pipe.
K24076, K24077 and K24078.



**British Gas
Service**



*The code of practice for the installation,
commissioning & servicing of gas fires and wall heaters*

GUARANTEE








As a result of long term test programmes and rigorous quality standards, John Guest Speedfit Limited offer a 25 year guarantee against the defects in materials or manufacturing of 'PEM', 'PSE' and 'SFM' Range Plumbing Fittings and Speedfit Barrier Pipe manufactured by John Guest.

John Guest Underfloor Heating Products, Brass Manifolds and Radiator Valves, which should be installed and maintained in accordance with our recommendations, carry a 2 year guarantee from date of delivery against defects in materials and manufacture.

John Guest Plumbing and Heating Products are for use with normal UK domestic plumbing and heating systems and supplied in accordance with our Conditions of Sale.



Contents

How Speedfit Works	<i>Page 3</i>	
Market Scope	<i>Page 4</i>	
The Push-fit Solution	<i>Page 5</i>	
Plumbing Fittings	<i>Pages 6 & 7</i>	
Valves and Brass Fittings	<i>Pages 7 & 8</i>	
Pipe and Accessories	<i>Page 9</i>	
Technical Checklist	<i>Page 10</i>	

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.

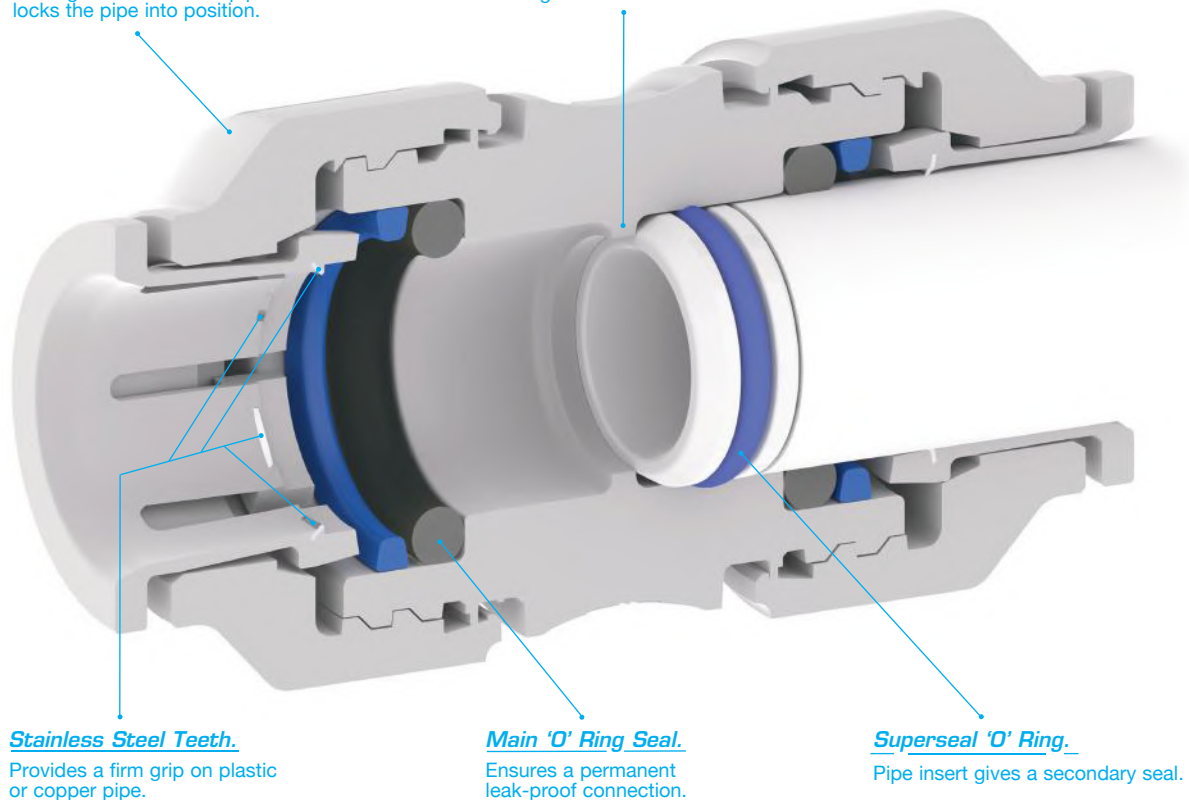
The additional benefit of 'Twist and Lock' is that a twist of a screwcap locks the pipe in position and provides increased compression on the 'O' ring for even greater security. With plastic pipe available in straight lengths or coils, the flexible system will ensure a fast, simple and reliable installation.

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.

Features

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

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 fittings required

MARKET SCOPE

The nature of reliable and fast connections means that a wide variety of markets have adopted Speedfit Technology.



Housebuilding

The speed of connections and long lengths of flexible pipe mean housing plumbing installations can be reduced by up to 40%. Since the early 1990's, hundreds of thousands of new build properties around the world have been installed with a JG Speedfit plumbing system.



Refurbishment

The wide variety of products that JG Speedfit manufactures means that there is always the right solution for every project and application type. Speedfit products have been specifically designed to ensure minimum disruption to existing systems when undertaking additional plumbing works on a property. With no blowtorch requirement, the risk of property fire damage caused by hot works is also removed.



Boats

The ability to connect Speedfit fittings in tight spaces without the need for hot works has made the system a leader within the boat market.



Caravans

Speedfit fittings have been the plumbing system of choice for caravan manufacturers for several years. Pipe elasticity also means that the possibility of bursting under freezing conditions is greatly reduced.



Portable Building / Pods

The speed, ease, and demountability of connections make JG Speedfit the ideal system choice when used in a manufacturing environment.



OEM Design

The speed, ease, and demountability of connections make JG Speedfit the ideal system choice when used in a manufacturing environment.

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 British Board of Agrément and 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.

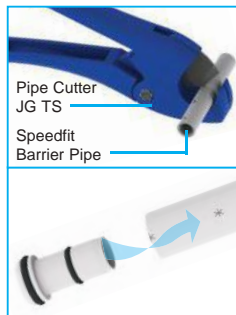
Speedfit should be installed to conform with good plumbing practice.

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

MAKING A GOOD CONNECTION

PREPARE THE PIPE

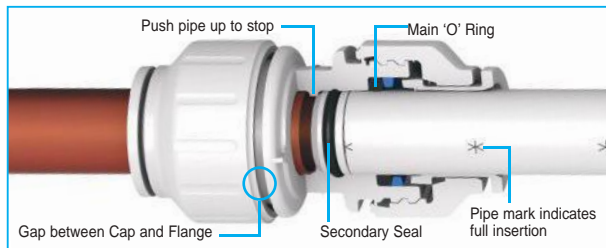
Fittings and pipe should be kept clean bagged and undamaged before use.



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.

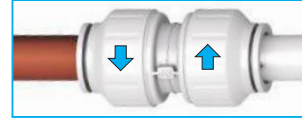


If you are not using collet clips, ensure that the screwcaps are in the locked position.

Pull to check it is secure. It is good practice to test the system prior to

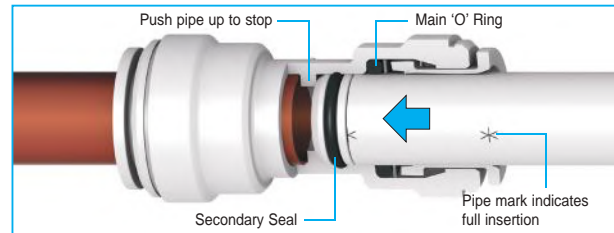
leaving the site or before use. Our recommended test procedure is shown in our Technical Checklist.

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.

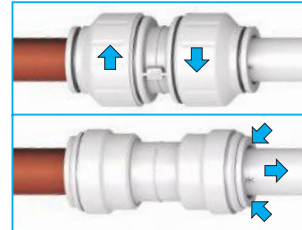
Push Pipe up to Pipe Stop. If the Speedfit Pipe has been cut correctly the insertion mark on the pipe will be level with the collet head.



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

TO DISCONNECT

Ensure that the system is depressurised.

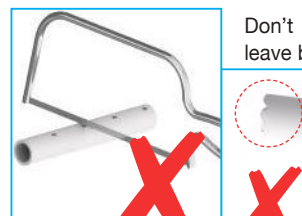


The screwcap on Twist and Lock Fittings will need to be turned back to the unlocked position.

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

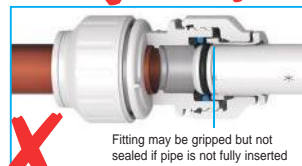
can be removed. The fitting can be used again without the need for replacement parts.

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



Fitting may be gripped but not sealed if pipe is not fully inserted



Pipe mark not level with collet head - indicating pipe not pushed fully home

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.

PLUMBING FITTINGS



EQUAL STRAIGHT CONNECTOR



PART No.	SIZE MM	BAG QTY	SMALL BOX	LARGE BOX
PEM0410W	10	10	150	
PEM0415W	15	10	60	400
PEM0422W	22	5	30	200
PEM0428W	28	2	10	

Suitable for central heating systems.

REDUCING STRAIGHT COUPLER



PART No.	SIZE MM	BAG QTY	BOX QTY
PEM201510W	15 x 10	10	80
PEM202215W	22 x 15	5	40

Suitable for central heating systems.

EQUAL ELBOW



PART No.	SIZE MM	BAG QTY	SMALL BOX	LARGE BOX
PEM0310W	10	10	150	1000
PEM0315W	15	10	50	400
PEM0322W	22	5	25	150
PEM0328W	28	2	10	

Suitable for central heating systems.

STEM ELBOW



PART No.	PIPE MM	STEM MM	BAG QTY	SMALL BOX	LARGE BOX
PEM221010W	10	10	10	200	
PEM221015W	10	15	10	150	
PEM221515W	15	15	10	80	500
PEM222222W	22	22	5	30	

Provides a swivel type connection.

Suitable for central heating systems.

Please note a Collet Cover cannot be used on a Speedfit end assembled with the stem of a 22mm Stem Elbow.

EQUAL TEE



PART No.	SIZE MM	BAG QTY	SMALL BOX	LARGE BOX
PEM0210W	10	10	100	
PEM0215W	15	5	40	250
PEM0222W	22	5	15	100
PEM0228W	28	2	8	

Suitable for central heating systems.

REDUCING TEE



PART No.	SIZE MM	BAG QTY	SMALL BOX	LARGE BOX
PEM3015BW	15x10x10	10	60	
PEM3015AW	15x15x10	5	40	
PEM3022CW	15x15x22	5	25	
PEM3022BW	22x15x15	5	25	150
PEM3022DW	22x15x22	5	15	150
PEM302210AW	22x22x10	5	20	
PEM3022AW	22x22x15	5	15	150
PEM3028BW	28x22x22	2	10	
PEM3028DW	28x22x28	2	10	
PEM302810AW	28x28x10	2	10	
PEM302815AW	28x28x15	2	10	
PEM3028AW	28x28x22	2	10	

Sizes listed as follows.



Suitable for central heating systems.

REDUCING ELBOW



PART No.	SIZE MM	BAG QTY	BOX QTY
PEM211510W	15 x 10	10	50
PEM212215W	22 x 15	5	40

Suitable for central heating systems.

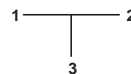
STEM TEE



PART No.	SIZE MM	BAG QTY	BOX QTY
PEM532210W	22x22x10	5	30
PEM532215W	22x22x15	5	25

Suitable for central heating systems.

Sizes listed as follows.



FEMALE COUPLER - TAP CONNECTOR



PART No.	SIZE MM X BSP	BAG QTY	SMALL BOX	LARGE BOX
PSE3210W	10 x 1/2"	10	150	
PSE3201W	15 x 1/2"	10	100	600
PSE3203W	15 x 3/4"	5	70	
PSE3202W	22 x 3/4"	5	50	400

Requires hand tightening only.

Suitable for central heating systems.

Note: Plastic threads are not as strong as metal threads. For torque figures see Technical Checklist.

STRAIGHT TAP CONNECTOR



PART No.	SIZE MM X BSP	BAG QTY	BOX QTY
PEMSTC1014	10 x 1/2"	10	150
PEMSTC1514	15 x 1/2"	5	50
PEMSTC1516	15 x 3/4"	5	50
PEMSTC2216	22 x 3/4"	5	40

Suitable for central heating systems.

With brass swivel nut and sealing washer. For torque figures see Technical Checklist.

BENT TAP CONNECTOR



PART No.	SIZE MM X BSP	BAG QTY	BOX QTY
PEMBTC1014	10 x 1/2"	10	150
PEMBTC1514	15 x 1/2"	5	50

Suitable for central heating systems.

With brass swivel nut and sealing washer. For torque figures see Technical Checklist.

STOP END



PART No.	SIZE MM	BAG QTY	SMALL BOX	LARGE BOX
PSE4610W	10	10	300	
PSE4615W	15	10	200	1000
PSE4622W	22	5	80	500
PSE4628W	28	5	50	

Suitable for central heating systems.

REDUCER



PART No.	SIZE MM	BAG QTY	SMALL BOX	LARGE BOX
PEM061510W	15 x 10	10	150	1000
PEM062215W	22 x 15	10	70	
PEM062815W	28 x 15	5	40	
PEM062822W	28 x 22	5	30	

Suitable for central heating systems.

TANK CONNECTOR



Requires hand tightening only.
Maximum wall thickness of tank = 4mm.

PART No.	SIZE MM	BAG QTY	Box QTY
CM0715S	15	10	60
CM0722S	22	5	20
CM0728S	28	1	10

Suitable for cold water tanks only.

PLUG



PART No.	SIZE MM	BAG QTY	Box QTY
PL10	10	10	500
PL15	15	10	250
PL22	22	10	100
PL28	28	10	50

Suitable for central heating systems.

PIPE REPAIR KIT



PART No.	SIZE MM	BAG QTY	Box QTY
15RKP	15	1	80
22RKP	22	1	50

Suitable for central heating systems.

Provides a simple way of repair on a rigid pipe run.

Remove a damaged section of pipe and replace with a repair kit

SLIP TEE CONNECTOR



PART No.	SIZE MM	BAG QTY	Box QTY
15TKP	15	1	80
22TKP	22	1	40

Suitable for central heating systems.

Provides a simple way to break into an existing pipe run

PLASTIC BACK PLATE ELBOW



PART No.	SIZE MM X BSP	BAG QTY	Box QTY
15PWB	15 x 1/2"	1	25

Hot and cold water only, 65°C maximum.
Protect from sunlight and frost.

WING BACK ELBOW



PART No.	SIZE MM X BSPT	BAG QTY	Box QTY
UGPWB1514	15 x 1/2"	1	150

Cold water only

4 PORT RAIL MANIFOLD



PART No.	SIZE MM	BAG QTY	Box QTY
SFM522210E	22 x 10	1	10
SFM522215E	22 x 15	1	10

Suitable for central heating systems.

VALVES

1/4 Turn Valves. 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".

1/4 Turn Valves are indicated by this marker '•'

STOP VALVE



PART No.	SIZE MM	BAG QTY	Box QTY
15STV	15	1	15
22STV	22	1	15

Not suitable for central heating systems.
Hot and Cold water only, 65°C maximum.

APPLIANCE TAP •



PART No.	SIZE MM X BSP	BAG QTY	Box QTY
15APT	15 x 3/4"	5	40

Not suitable for central heating systems.
For maximum torque figures on plastic thread, please see Technical Checklist.

APPLIANCE TEE •



PART No.	SIZE MM X BSP	BAG QTY	Box QTY
15APT2	15 x 3/4"	5	30

Not suitable for central heating systems.
Hot and Cold water only, 65°C maximum.

EMERGENCY SHUT OFF TAP •



PART No.	SIZE MM	BAG QTY	Box QTY
15 ESOT	15	5	40

Not suitable for central heating systems.
Hot and Cold water only, 65°C maximum.

ANGLE STOP VALVE •



PART No.	SIZE MM X INCH	PACK QTY	Box QTY
ASV3	15 x 1/4"	1	30
ASV4	15 x 3/8"	1	25

Not suitable for central heating systems. Hot and Cold water only, 65°C maximum. Provides an inline connection with shut off and check valve protection for the easy installation of water coolers, filtration equipment and vending machines.

DOUBLE CHECK VALVE



PART No.	SIZE MM	BAG QTY	Box QTY
15DCV	15	5	50

Not suitable for central heating systems. Hot and Cold water only, 65°C maximum.

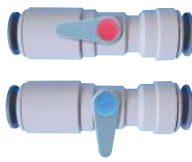
PLASTIC SERVICE VALVE •



PART No.	SIZE MM	BAG QTY	Box QTY
15SV	15	5	50
22SV	22	5	25

Not suitable for central heating systems. Hot and Cold water only, 65°C maximum.

PLASTIC BALL VALVE



PART No.	SIZE MM	PACK QTY	BOX QTY
15SV-H	15	1	40
22SV-H	22	1	20

Not suitable for central heating systems. Each valve has red and blue indices.

PLASTIC SERVICE VALVE WITH TAP CONNECTOR



PART No.	SIZE MM X BSP	BAG QTY	BOX QTY
15SVSTC	15 x 1/2"	5	50
15SVSTC-W	15 x 1/2"	5	50

Not suitable for central heating systems.
Hot and Cold water only, 65°C maximum.

PLASTIC ANGLE SERVICE VALVE WITH TAP CONNECTOR



PART No.	SIZE MM X BSP	BAG QTY	BOX QTY
15SVBTC	15 x 1/2"	5	50
15SVBTC-W	15 x 1/2"	5	50

Not suitable for central heating systems.
Hot and Cold water only, 65°C maximum.

BRASS MANIFOLD



Blanking plug supplied with each manifold.
Each manifold supplied with reversible red and blue discs.

PART No.	DESCRIPTION	SIZE BSP X MM	PACK QTY	BOX QTY
JGMAN2	2 Port	3/4" x 15	1	30
JGMAN3	3 Port	3/4" x 15	1	25
JGMAN4	4 Port	3/4" x 15	1	20

Not Suitable for central heating systems.

BRASS STOP VALVE



PART No.	SIZE MM X BSP	BAG QTY	BOX QTY
15BSC	15	1	10

Only suitable for central heating systems.
Manufactured in DZR Brass.

BRAIDED AND PVC FLEXI HOSES



A full range of metal and braided flexi-hoses are available with Speedfit push-fit technology. Please visit www.jgspeedfit.com for more range information.

BRASS FITTINGS



BRASS MALE COUPLER



PART No.	SIZE MM X BSPT	BAG QTY	BOX QTY
MW011504N	15mm x 1/2" BSPT	5	100
MW012206N	22mm x 3/4" BSPT	5	50
MW012808N	28mm x 1 BSPT	5	20

PART No.	SIZE MM X BSP	BAG QTY	BOX QTY
10MC (1/2)	10mm x 1/2" BSP	5	100
15MC (1/2)	15mm x 1/2" BSP	5	100
22MC (3/4)	22mm x 3/4" BSP	5	50
MW012818N	28mm x 1 BSP	5	20

Suitable for central heating systems.
Manufactured in DZR Brass.

BRASS FEMALE COUPLER



PART No.	SIZE MM X BSP	BAG QTY	BOX QTY
MW451514N	15 x 1/2	5	50
MW452216N	22 x 3/4"	5	50

Suitable for central heating systems.
Manufactured in DZR Brass.

BRASS FEMALE STEM ADAPTOR



PART No.	SIZE MM X BSP	BAG QTY	BOX QTY
MW501514N	15 x 1/2"	5	50
MW502216N	22 x 3/4"	5	50

Converts Speedfit to female thread

Suitable for central heating systems.
Manufactured in DZR Brass.

BRASS BACK PLATE ELBOW



PART No.	SIZE MM X BSP	BAG QTY	BOX QTY
15WB	15 x 1/2"	1	20
22WB	22 x 3/4"	1	10

PART No.	SIZE MM X BSP	BAG QTY	BOX QTY
15WB2	15 x 1/2"	1	25

Manufactured in DZR Brass.
Suitable for central heating systems.
SHORT VERSION
Manufactured in Brass.
Suitable for central heating systems.

BRASS MALE STEM ADAPTOR



PART No.	SIZE MM X BSPT	BAG QTY	BOX QTY
MW051504N	15 x 1/2"	5	100
MW052206N	22 x 3/4"	5	50
MW052818N	28 x 1" BSP	10	20

Converts Speedfit to male thread

Suitable for central heating systems.
Manufactured in DZR Brass.

JG Speedfit® Blue



A 20 - 32mm range of fittings for MDPE pipe are available for cold water pipe applications. The procedure for connecting and disconnecting the fittings is similar to that for Speedfit fittings, as shown on page 5.

The range includes a variety of fitting types and valves. For more information on this particular range, please visit www.jgspeedfit.com.

PIPE AND ACCESSORIES



Layflat Pipe

Lays Flat - Stays Flat - Ultra Flexible

JG LAYFLAT® POLYBUTYLENE BARRIER PIPE



Coils. The pipe is made from a soft material with little memory ensuring a flexible system. It has an inner barrier to stop the ingress of atmosphere. British Gas accepted for water pipe in vented and sealed central heating systems.

PART No.	SIZE MM X M	PACK QTY	Box QTY
10BPB-50C	10 x 50	1	
10BPB-100C	10 x 100	1	
15BPB-25C	15 x 25	1	8
15BPB-50C	15 x 50	1	6
15BPB-100C	15 x 100	1	4
15BPB-120C	15 x 120	1	4
15BPB-150C	15 x 150	1	3
15BPB-300C	15 x 300	1	
22BPB-25C	22 x 25	1	6
22BPB-50C	22 x 50	1	4

Suitable for central heating systems.

SPEEDFIT PEX BARRIER PIPE



British Gas accepted for water pipe in vented and sealed central heating systems.

PART No.	SIZE MM X M	PACK QTY	Box QTY
10BPEX-25C	10 x 25	1	20
10BPEX-50C	10 x 50	1	10
10BPEX-100C	10 x 100	1	6
15BPEX-25C	15 x 25	1	8
15BPEX-50C	15 x 50	1	5
15BPEX-100C	15 x 100	1	5
15BPEX-120C	15 x 120	1	5
15BPEX-150C	15 x 150	1	4
22BPEX-25C	22 x 25	1	8
22BPEX-50C	22 x 50	1	5

Suitable for central heating systems.

SPEEDFIT PEX BARRIER PIPE



Straight lengths. 15 & 22mm in packs of 20. 28mm in packs of 10.

Minimum order for 6m lengths is 10 packs.

* By special order only.

PART No.	SIZE MM X M	PACK QTY
15BPEX-20x2L	15 x 2	20
15BPEX-20x3L	15 x 3	20
15BPEX-20x6L	15 x 6	20
22BPEX-20x2L	22 x 2	20
22BPEX-20x3L	22 x 3	20
22BPEX-20x6L	22 x 6	20
28BPEX-10x3L	28 x 3	10
* 28BPEX-10x6L	28 x 6	10

Suitable for central heating systems.

PIPE IN PIPE



PART No.	SIZE MM X M	PACK QTY
15PIP-50C-E	15 x 50	1
22PIP-50C-E	22 x 50	1

CONDUIT PIPE



PART No.	SIZE MM X M	PACK QTY
Black 15BLK CON - 25C	15 x 25	1
15BLK CON - 50C	15 x 50	1
22BLK CON - 25C	22 x 25	1
22BLK CON - 50C	22 x 50	1
Red 15RED CON - 50C	15 x 50	1
22RED CON - 50C	22 x 50	1
Blue 15BLU CON - 50C	15 x 50	1
22BLU CON - 50C	22 x 50	1

PIPE INSERT



To be used when connecting Speedfit Pipe to a compression fitting.

PART No.	SIZE MM	BAG QTY	SMALL BOX	LARGE BOX
TSM10N	10	50	1000	20,000
TSM15N	15	50	500	5000
TSM22N	22	25	250	2000
TSM28N	28	10	150	1000

Suitable for central heating systems.

SUPERSEAL PIPE INSERT



To be used with Speedfit Pipe and Speedfit fittings, to give enhanced sealing.

See page 3 for details.

PART No.	SIZE MM	BAG QTY	SMALL BOX	LARGE BOX
STS10	10	50	1000	12,500
STS15	15	50	500	5000
STS22	22	25	250	2000
STS28	28	10	150	1000

Suitable for central heating systems.

CONDUIT ELBOW



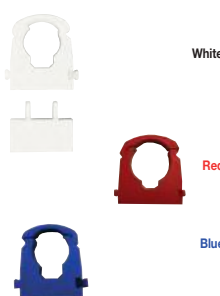
PART No.	SIZE	BAG QTY	PACK QTY
CONELB	FITS 10, 15 & 22mm	10	70

FOIL TAPE



PART No.	SIZE	PACK QTY
JGTAPE	50 x 45	8

PIPE CLIPS AND SPACERS



PART No.	SIZE MM	PACK QTY	Box QTY
White PC15W	15	50	200
PC22W	22	50	100
PC28W	28	20	80
PCSW		50	400
Red PC15R	15	50	200
PC22R	22	50	100
PC28R	28	20	80
Blue PC15B	15	50	200
PC22B	22	50	100
PC28B	28	20	80

NAIL CLIP



PART No.	SIZE MM	PACK QTY	Box QTY
NPC10	10	50	1000
NPC15	15	50	400
NPC22	22	50	250
NPC28	28	20	200

PIPE CUTTER



For up to 22mm size pipe.

PART No.	PACK QTY	PACK QTY
JG-TS	1	30

TECHNICAL CHECKLIST - PLUMBING AND HEATING FITTINGS

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

- **Sizes.** 10mm to 28mm diameter.
- **Pipes.** Speedfit fittings can be used with:
 - Copper pipe to BS EN 1057
 - Speedfit Barrier Pipe to BS7291
 Speedfit fittings cannot be used on stainless steel pipe.
- **Standards.** Speedfit products are designed and manufactured under a fully integrated system assessed by B.S.I. to BS EN ISO9001. They are approved by the Water Regulations Advisory Scheme and BBA. Speedfit 'PEM', 'PSE' and 'SFM' Fittings and Speedfit Barrier Pipe are Kitemarked to BS7291 Parts 1, 2 and 3 Class S (Licence No. KM39767).
- **Applications**
 - Mains fed and indirect cold water systems
 - Vented and unvented hot water systems
 - Vented and sealed central heating systems
- **DO NOT USE FOR Gas, fuel oil or compressed air applications.**
- **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

- **Burst Pressure (fittings).** With copper or plastic pipe at 20°C: Speedfit fittings used with copper or Speedfit Barrier Pipe will withstand pressures well in excess of normal service conditions.
- **High Temperatures.** Can withstand 114°C intermittently for short periods. The Speedfit system should not be used on an uncontrolled heat source.
- **Insulation.** Should comply with BS EN 806 and complementary guidance document BS 8558, and BS5422, as for copper.
- **Minimum Bend Radii (BPEX)**

Pipe Diameter	10mm	15mm	22mm	28mm
Min radius with clips	80mm	175mm	225mm	300mm
Min radius with cold forming bend	30mm	75mm	110mm	-

- **Minimum Bend Radii (BPP)**

Pipe Diameter	10mm	15mm	22mm	28mm
Min radius with clips	80mm	120mm	176mm	-
Min radius with cold forming bend	30mm	75mm	110mm	-

- **Clip Spacing (in mm) For Surface Mounted Pipes**

Pipe Diameter	Clip Spacing	
	Horizontal Run	Vertical Run
10-15mm	300mm	500mm
22mm	500mm	800mm
28mm	800mm	1,000mm

Where pipe is concealed, clipping may only be required where necessary.

- **Expansion (PEX pipe).** 1% on length between 20°C and 82°C.
- **Flow Rates.** Comparable with metal systems.
- **Cleaners, Inhibitors and Descaleants.** For advice on the replenishment of additives such as corrosion inhibitors, the following manufacturers should be contacted: Fernox Manufacturing Limited on 0330 100 7750 or Sentinel, BetzDearborn Limited on 0151 424 5351.
- **Paint and Chemicals.** Use only water or oil based paint. **DO NOT ALLOW CONTACT WITH** jointing compounds, cellulose based paints, paint thinners or strippers, solder flux, acid based descaleants or aggressive cleaning products, including those below pH4, high in hypochlorite (e.g. bleach) or containing hydrogen peroxide. (See the DISINFECTION OF HOT AND COLD WATER SYSTEMS section of the Product Guide installation advice for specifically permitted disinfection procedures).
- **Solder Flux.** No fluxes of any types should come into contact with JG Speedfit Pipe and Fittings. If fluxes are to be used in an environment where Speedfit is installed, then (1) extreme care should be taken to ensure that no such contact takes place and (2) JG recommend installers only use fluxes tested and approved in writing in advance by JG. At the date of this publication, the only such approved flux is Fernox Flux.
- **Chlorine.** Speedfit is not suitable for use in systems where the water contains high levels of chlorine. e.g. swimming pools, fountains etc.
- **Exposure to Sunlight.** Speedfit products, when used indoors, are not affected by sunlight. When used outdoors protect from ultra violet light by lagging or painting.
- **Pipe Clips.** Pipe clips should not be fitted any closer than 60mm from the end of the fitting. Pipe should be adequately supported by pipe clips to prevent undue stress (side load) on fittings.
- **Pipe Inserts.** Must be used on all installations when using plastic pipe and should be fully inserted. Only use a Speedfit Insert with Speedfit Pipe.
- **Metal Joists.** When 'cabling' plastic pipe through metal joists ensure rubber grommets are in place to prevent damage to pipe. Use of collet covers or collet clips on fittings recommended.

- **Connection to Boilers.** A minimum 1 metre run of copper pipe must be installed between the boiler and the Speedfit system, as per BS5955: Part 8.
- **Connection to Copper Pipe.** 450mm is the minimum distance to make a solder connection on copper pipe inserted into a Speedfit Fitting. Ensure that any residual flux and solder does not come into contact with the fitting.
- **Concrete and Masonry.** Speedfit pipe and fittings can be laid in concrete and masonry providing they are installed in conduit pipe with access boxes for the fittings. This is to enable the pipe to expand and to provide accessibility for both pipe and fitting. As stated in Water Regulation Schedule 2.7 and BS8000: Part 15, fittings and pipe should be removable for possible replacement. Insulation is also recommended to protect against heat loss and the effects of frost.
- **Electrical Continuity.** If Speedfit is used in an existing metal system which may have been used for earthing, electrical continuity should be reinstated.
- **Valves and Taps.** Plastic 15mm and 22mm valves and taps available from JG Speedfit Ltd are not suitable for central heating installations.
- **1/4 Turn Valves.** 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".
- **Collet Covers.** Collet covers provide added security against pipe disconnection, e.g. the fittings coming into contact with rigid surfaces and behind dry-lining walls. They are offered in white as standard and in red or blue to provide colour coding of pipe.
- **Collet Clips.** White and Grey collet clips are used with standard fittings to prevent accidental pipe disconnection. Red or blue clips provide colour coding of pipe. Red and blue clips should not be used to prevent accidental release of pipe.
- **Continuously Operated Re-Circulating Systems (Secondary Hot Water Circulation/Ring Main Installations):** A continuously operated re-circulating system is a water-replenished circulating system which is maintained at a constant high temperature to provide a constant source of hot water. Continuously operated re-circulating systems are used to distribute constant hot water to draw off points that may be distant from the source or hot water storage vessel. Continuously operated re-circulating systems are very different from conventional hot water supply and central heating systems found in domestic properties, for which our products have been tested to, under either BS7291 2010 Class S or WRAS approval standards, and for this reason Speedfit products must not be used on any continuously operated re-circulating systems as they are not approved under the current version of these standards.
- **System Testing.** To ensure the pipework and fittings have been installed correctly, whether it be on a new or extended system, it is essential that the system is checked and hydraulically wet tested. Testing should be at 2 bar for 10 minutes and 10 bar for 10 minutes. This testing, combined with other relevant checks, should reveal installation problems and is regarded as good plumbing practice. Speedfit Stop Ends and Plugs are particularly useful during this operation, enabling all outlets and any fittings to be easily plugged. However, system testing should not be regarded as a substitute for correct installation. See also "Making a Good Connection".
- **System Flushing.** As is usual practice for any plumbing installation, flushing of the system prior to the use of Speedfit is recommended to remove any contaminants/chemical residue from elsewhere in the system.
- **British Gas Service has accepted the John Guest Speedfit fittings as being suitable for open vented and sealed central heating systems and as eligible for acceptance onto its service contracts.**
- Products within this Price List are designed for use within UK plumbing and heating installations or in other countries where similar installation requirements apply. For information on products suitable for use in other countries please consult our Technical Advisory Service.
- **Vermin.** Speedfit products should not be used in vermin infested areas.

- **Maximum Torque Figures (BSP & BSPT).** Plastic threads are not generally as strong as brass threads. Customers and end users should be aware of this when choosing products for their applications. Overtightening of plastic threads will cause undue stress and eventual cracking and leakage. The maximum torque figures for BSP and BSPT threads used on Speedfit plumbing products in mating threads conforming to relevant BS or International thread standards are shown below.

Threads	Size	Maximum Torque
Plastic	1/2"	3.0 Nm
	3/4"	4.0 Nm
Brass	1/2"	4.0 Nm
	3/4"	5.0 Nm

It is recommended that all installations are checked prior to use to determine that a seal has been made.

- **Side Loads.** John Guest products are not designed to be used whilst under side load as this may adversely affect their ability to function long-term. Always ensure tubes have good alignment with the fitting. They must also not be subjected to any form of impact or other damage, such as being hit or dropped, even accidentally. If fittings have been damaged or suffered an impact, they should be replaced immediately. John Guest warranty does not cover loss caused by any form of damage.