



Solutions to  
Shape the World™

Reliance  
Worldwide  
Corporation

Fast, reliable  
and efficient  
solutions...

for compressed air  
and pneumatics



John Guest®



SharkBite®

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Welcome to our comprehensive range of pipes and fittings for compressed air and pneumatics.

NEW

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# One family of brands

Reliance Worldwide Corporation (RWC) and its family of brands transform the way pipe connections are made across the globe for a diverse range of sectors such as compressed air & pneumatics, plumbing & heating, drinks dispense, telecoms and automotive.

## Millions of connections made worldwide

Both market leaders and niche players have been using our push-fit technology for more than five decades to solve the key challenges they face. Why? Because the clever science behind our solutions ensure optimal performance, while providing fast, simple and reliable installation.

## Precision engineering and world-class quality

Innovative design is at our core. It means clever, time-saving solutions for you, engineered with lasting quality you can rely on. From state-of-the-art R&D to world-class product testing and quality control, our innovations are the by-product of pure engineering mastery. The same ethos drives our customer service and design service, ensuring we provide expert support whenever you need it.



# Fast, reliable and efficient solutions for air and pneumatics

Together John Guest and SharkBite offer an extended range of reliable, sustainable and efficient push-fit fittings and pipes for compressed air and pneumatics.

Available in 3 to 54mm sizes, our high performance air piping systems are fast and easy to install and deliver substantial labour and energy savings when compared to traditional methods.



## Optimal flow and air quality

Outperforming steel or copper, which can degrade over time, our range of products resist corrosion ensuring optimal flow and air quality, while extending system and equipment lifecycle and efficiency.

## Ultimate performance and efficiency

Since inventing the world's first push-fit compressed air fitting over 45 years ago, we have continued to perfect our design and unique sealing technology to reduce energy consumption, increase air flow and eliminate pressure drops and leaks.

## System set up in half the time

Fast and simple to use, our air piping systems reduce installation time by up to 50% when compared to

conventional methods. Using an instant push-fit action, connections are made without tools or the need to thread, solder or glue pipes.

## Alter, extend or modify in seconds

Our components are easy to disconnect, reusable and interchangeable, making layout modifications quick and simple with minimal production downtime and expense.

## Greater choice and design freedom

Plastic and brass push-fit fittings and lightweight pipe that is easier to handle than copper and steel. Components can be used in many combinations and are also compatible with other types of pipe.







# Make reliable connections **the fast and simple way**

## For small to mid-size commercial applications

Quick and easy to install, the John Guest Air & Pneumatics push-fit range ensures air tight pipe connections are made. Available in 3 to 28mm sizes, our robust range of fittings and pipes are ideal for small to mid-size applications such as garages and a variety of other commercial air piping systems.

John Guest offers rapid assembly using a simple push-fit action that eliminates the need for tools, threaded pipe, solvent and glue. Our unique collet locking design firmly and securely holds the pipe in place without deforming the pipe or restricting flow. John Guest air

systems are easy to extend or alter as fittings are fully demountable, without using tools, which reduces maintenance and production downtime.

Fittings are available in tough engineered plastic or brass, including a unique water trap that removes moisture from the air line to improve system performance and longevity.

Designed to work with our nylon, powder coated aluminium pipe or LLDPE pipe, our versatile solution is also compatible with copper, PEXa and other soft metal pipes.

### Features

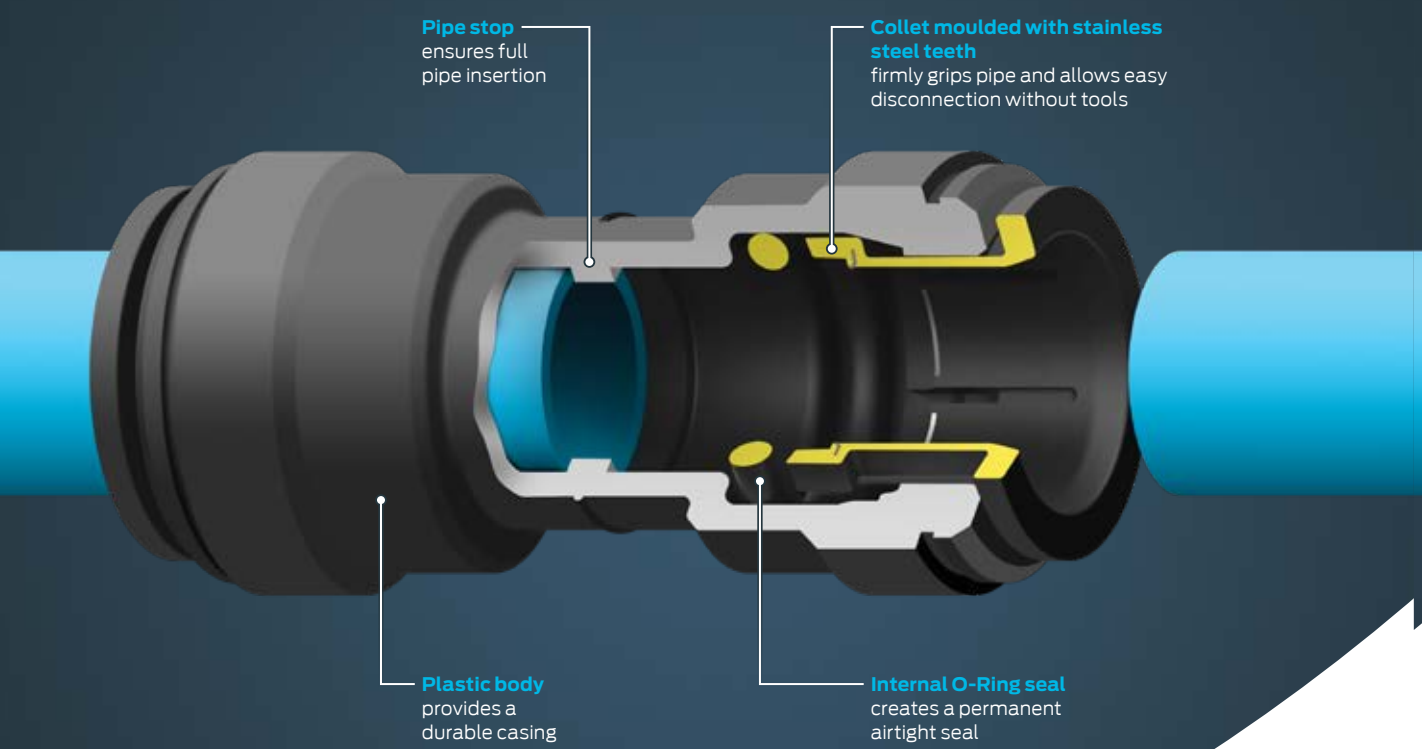
- Acetal copolymer or brass fittings
- Push-fit connection ends
- Demountable design without using tools
- Secure collet cover to prevent accidental disconnection
- Nitrile O-Ring and collet with stainless steel teeth
- Suitable for air and vacuum applications up to 10 bar

### Benefits

- Reliable leakproof solution that grips before it seals
- Instant, tool-free push-fit connection
- Corrosion-free solution that extends equipment lifecycle and reduces maintenance
- Fast and simple system alterations or extension, with minimal downtime
- Lightweight and easy to handle material
- A versatile solution that connects to metal or plastic pipe

# Inside John Guest **technology**

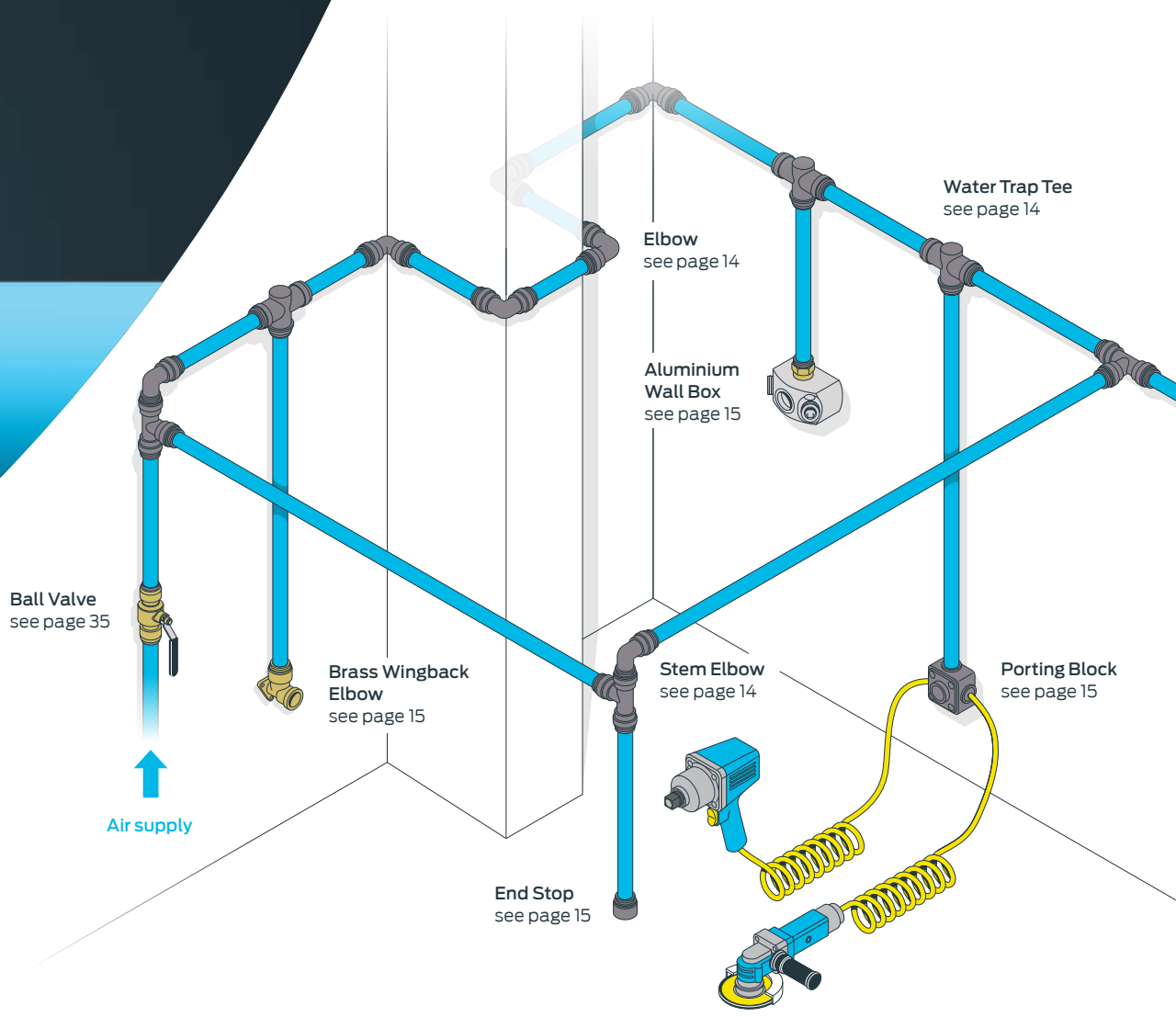
John Guest push-fit fittings use grip and seal technology. The collet with stainless steel teeth grips the pipe and the O-Ring provides an airtight seal.



Fitting  
the Future™

## Air system configuration

The John Guest Air & Pneumatics system offers rapid assembly from the compressor to air line, through to the complete ring main and take off points.

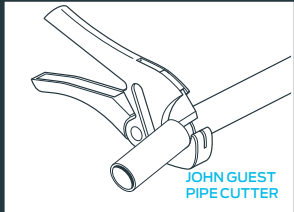




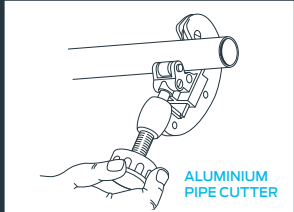
# Making a connection

## Connecting push-fit

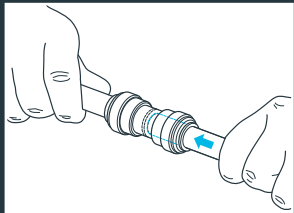
### Cutting the pipe



Cut the pipe square. Ideally use a John Guest pipe cutter for rigid nylon pipe and aluminium pipe cutters for aluminium pipe. To avoid damage to the O-Ring remove any burrs and sharp edges.

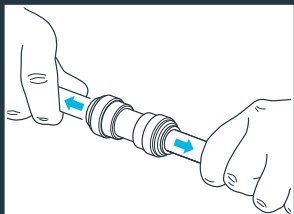


### Making the push-fit connection



Push the pipe up to the pipe stop.

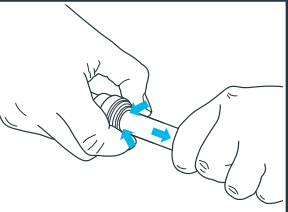
### Check the connection is secure



Pull to check a secure connection is made. Test the system before use.

## Demounting push-fit

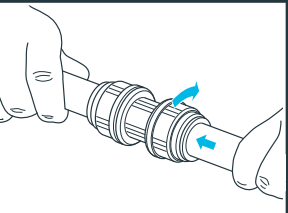
### Demounting push-fit fittings



To disconnect, ensure the system is depressurised. Push the collet towards the fitting and remove the pipe. Fittings are reusable.

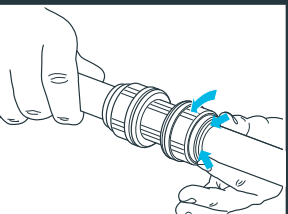
## Connecting and demounting screw cap

### Connecting screw cap fittings



After inserting the pipe, a ¼ turn of the screw cap locks the collet in place and reduces lateral and sideways movement of the pipe.

### Demounting screw cap fittings



To disconnect, ¼ turn the screw cap, push the collet and remove the pipe. Fittings are reusable.



### Nylon, aluminium and copper pipe

Whilst we recommend the use of John Guest Rigid Nylon Pipe, John Guest fittings can also be used with copper or aluminium pipe.



## Air ring main Fittings

### Straight Adaptor (BSP thread)



| Part number | Pipe OD |   | Thread BSP | Bag qty | Box qty |
|-------------|---------|---|------------|---------|---------|
| PM01123E    | 12      | x | 3/8        | 10      | 150     |
| PM01124E    | 12      | x | 1/2        | 10      | 150     |
| PM01153E    | 15      | x | 3/8        | 10      | 150     |
| PM01154E    | 15      | x | 1/2        | 10      | 150     |
| PM01156E*   | 15      | x | 3/4        | 10      | 50      |
| PM01184E    | 18      | x | 1/2        |         | 70      |
| PM012216E   | 22      | x | 3/4        |         | 50      |
| PM012818E   | 28      | x | 1          |         | 30      |

\*No thread seal.

### Equal Elbow



| Part number | Pipe OD |  | Bag qty | Box qty |
|-------------|---------|--|---------|---------|
| PM0312E     | 12      |  | 10      | 100     |
| PM0315E     | 15      |  | 10      | 50      |
| PM0318E     | 18      |  | 5       | 50      |
| PM0322E     | 22      |  | 5       | 30      |
| PM0328E     | 28      |  |         | 20      |

### Straight Connector



| Part number | Pipe OD |  | Bag qty | Box qty |
|-------------|---------|--|---------|---------|
| PM0412E     | 12      |  | 10      | 100     |
| PM0415E     | 15      |  | 10      | 100     |
| PM0418E     | 18      |  | 10      | 50      |
| PM0422E     | 22      |  | 10      | 50      |
| PM0428E     | 28      |  |         | 25      |

### Equal Tee



| Part number | Pipe OD |  | Bag qty | Box qty |
|-------------|---------|--|---------|---------|
| PM0212E     | 12      |  | 10      | 50      |
| PM0215E     | 15      |  | 5       | 50      |
| PM0218E     | 18      |  | 5       | 30      |
| PM0222E     | 22      |  | 5       | 20      |
| PM0228E     | 28      |  |         | 10      |

### Reducing Tee



| Part number | Pipe OD Ends | Pipe OD Branch | Bag qty | Box qty |
|-------------|--------------|----------------|---------|---------|
| PM3018AE    | 18           | 15             | 5       | 30      |
| PM3022AE    | 22           | 15             | 5       | 20      |

### Stem Adaptor (BSP thread)



| Part number | Stem OD | Thread BSP | Bag qty | Box qty |
|-------------|---------|------------|---------|---------|
| PM051213E   | 12      | x 3/8      | 10      | 200     |
| PM051214E   | 12      | x 1/2      | 10      | 150     |
| PM051513E   | 15      | x 3/8      | 10      | 150     |
| PM051514E   | 15      | x 1/2      | 10      | 100     |
| PM051814E   | 18      | x 1/2      | 10      | 100     |
| PM052214E   | 22      | x 1/2      | 10      | 100     |
| PM052216E   | 22      | x 3/4      | 10      | 50      |

Converts push-fit ends to male thread.

### Two-Way Divider



| Part number | Pipe OD |  | Bag qty | Box qty |
|-------------|---------|--|---------|---------|
| PM2315E     | 15      |  | 5       | 50      |

### Reducer



| Part number | Stem OD | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|---------|
| PM061510E   | 15      | - 10    | 10      | 200     |
| PM061512E   | 15      | - 12    | 10      | 100     |
| PM061815E   | 18      | - 15    | 10      | 100     |
| PM062215E   | 22      | - 15    | 10      | 50      |
| PM062218E   | 22      | - 18    | 10      | 50      |
| PM062815E   | 28      | - 15    | 10      | 50      |
| PM062822E   | 28      | - 22    |         | 50      |

### Stem Elbow



| Part number | Pipe OD | Stem OD | Bag qty | Box qty |
|-------------|---------|---------|---------|---------|
| PM221212E   | 12      | - 12    | 10      | 100     |
| PM221515E   | 15      | - 15    | 10      | 100     |
| PM221818E   | 18      | - 18    | 5       | 50      |
| PM222222E   | 22      | - 22    |         | 50      |

Provides a swivel-type connector.

### Water Trap Tee



| Part number | Pipe OD Ends | Bag qty | Box qty |
|-------------|--------------|---------|---------|
| PMTT22E     | 22           | 5       | 20      |

The easy alternative to installing a 'Swan Neck'.

### U-Bend



| Part number | Pipe OD |  | Bag qty | Box qty |
|-------------|---------|--|---------|---------|
| PMUB15E     | 15      |  | 10      | 50      |

### End Stop



| Part number | Pipe OD |  | Bag qty | Box qty |
|-------------|---------|--|---------|---------|
| PM4612E     | 12      |  | 10      | 250     |
| PM4615E     | 15      |  | 10      | 200     |
| PM4618E     | 18      |  | 10      | 100     |
| PM4622E     | 22      |  | 5       | 80      |

### Porting Block



| Part number | Size                | Bag qty | Box qty |
|-------------|---------------------|---------|---------|
| JG-L-WSK    | 5 x 1/2 connections | 1       | 10      |
| JG-L-WSK-L  | 5 x 1/2 connections |         | 100     |

Supplied with blanking plugs.

### Aluminium Wall Box



| Part number   | Size | Bag qty | Box qty |
|---------------|------|---------|---------|
| JGWALLBOX 1/2 | 1/2  | 1       | 10      |
| JGWALLBOX 3/4 | 3/4  | 1       | 10      |

1/2 or 3/4 female thread on the top.

Both products have 3 x 1/2 female threads on the side. Supplied with blanking plugs.

### Brass Wingback Elbow (BSP thread)



| Part number | Pipe OD | Thread BSP | Box qty |
|-------------|---------|------------|---------|
| PM15WB      | 15      | x 1/2      | 20      |
| PM22WB      | 22      | x 3/4      | 10      |

### Brass Straight Adaptor (BSP thread)



| Part number | Pipe OD |   | Thread BSP | Bag qty | Box qty |
|-------------|---------|---|------------|---------|---------|
| MM011504N   | 15      | x | 1/2        | 5       | 100     |
| MM012206N   | 22      | x | 3/4        | 10      | 50      |
| MM012808N   | 28      | x | 1          | 5       | 20      |

### Male Brass Stem Adaptor



| Part number | Stem OD | Thread | Bag qty | Box qty |
|-------------|---------|--------|---------|---------|
| <b>BSPT</b> |         |        |         |         |
| MM051504N   | 15      | x 1/2  | 10      | 100     |
| MM052206N   | 22      | x 3/4  | 10      | 50      |
| <b>BSP</b>  |         |        |         |         |
| MM052818N   | 28      | x 1    | 10      | 20      |
| <b>NPT</b>  |         |        |         |         |
| MM052226N   | 22      | x 3/4  | 10      | 50      |
| MM052228N   | 22      | x 1    | 10      | 30      |
| MM052828N   | 28      | x 1    | 10      | 20      |

Converts push-fit ends to male thread.

### Female Brass Stem Adaptor (BSP thread)



| Part number | Stem OD | Thread BSP | Bag qty | Box qty |
|-------------|---------|------------|---------|---------|
| MM501514N   | 15      | x 1/2      | 10      | 100     |
| MM502216N   | 22      | x 3/4      | 10      | 50      |

Converts push-fit ends to female thread.

### Water Trap Tee Convertor



| Part number | Size | Bag qty | Box qty |
|-------------|------|---------|---------|
| WTC28       | 28   | 1       | 50      |

Converts a 28mm Tee to a Water Trap Tee.

### Plug



| Part number | Stem OD | Colour | Bag qty | Box qty |
|-------------|---------|--------|---------|---------|
| PM0812R     | 12      | Red    | 10      | 300     |
| PM0815E     | 15      | Black  | 10      | 200     |
| PM0818E     | 18      | Black  | 10      | 100     |
| PM0822E     | 22      | Black  | 10      | 100     |
| PM0828E     | 28      | Black  | 10      | 50      |

### Release Aid



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| 15RA        | 15      | 10      | 500     |
| 22RA        | 22      | 10      | 400     |
| 28RA        | 28      | 10      | 300     |

### Collet Covers



| Part number | Pipe OD | Colour | Bag qty | Box qty |
|-------------|---------|--------|---------|---------|
| PM1912E     | 12      | Black  | 10      | 500     |
| PM1915E     | 15      | Black  | 100     | 400     |
| PM1918E     | 18      | Black  | 10      | 200     |
| PM1922E     | 22      | Black  | 50      | 200     |

### Pipe Clips & Spacers



| Part number   | Pipe OD | Colour | Bag qty | Box qty |
|---------------|---------|--------|---------|---------|
| <b>Clip</b>   |         |        |         |         |
| PC15E         | 15      | Black  | 50      | 200     |
| PC22E         | 22      | Black  | 50      | 100     |
| PC28E         | 28      | Black  | 20      | 80      |
| <b>Spacer</b> |         |        |         |         |
| PCSE          |         | Black  | 50      | 400     |



## Air ring main Pipe

### Rigid Nylon Pipe



| Part number      | Size<br>mm x m | Pack<br>qty |
|------------------|----------------|-------------|
| PA-RM1209-3M-20B | 12 x 3         | 20          |
| PA-RM1512-3M-20B | 15 x 3         | 20          |
| PA-RM1814-3M-20B | 18 x 3         | 20          |
| PA-RM2218-3M-20B | 22 x 3         | 20          |
| PA-RM2823-3M-10B | 28 x 3         | 10          |

### Powder Coated Aluminium Pipe



| Part number      | Size<br>mm x m | Pack<br>qty |
|------------------|----------------|-------------|
| AL-RM1513-3M-20B | 15 x 3         | 20          |
| AL-RM1816-3M-20B | 18 x 3         | 20          |
| AL-RM2220-3M-20B | 22 x 3         | 20          |
| AL-RM2826-3M-10B | 28 x 3         | 10          |

### Aluminium Pipe Cutter



| Part number    | Pipe<br>OD | Qty |
|----------------|------------|-----|
| JG-AL-CUTTER15 | 15         | 1   |
| JG-AL-CUTTER18 | 18         | 1   |
| JG-AL-CUTTER22 | 22         | 1   |
| JG-AL-CUTTER28 | 28         | 1   |

### Deburring Tool



| Part number | Qty |
|-------------|-----|
| JG-DEBURR   | 1   |

## Air & pneumatics Miniature fittings

As well as standard push-fit connections and fittings that work with specific threads, we offer selected fittings with SuperThread technology that enables them to be used with any thread type.

LM fittings are suitable for use with plastic (Polyethylene, Nylon and Polyurethane) and soft metal (copper and mild steel) pipes with an outside diameter of 4mm +0.05/-0.07. The pipe must have a smooth outer surface and be free from burrs.

Tube inserts should be used for soft or thin wall pipe or when using Polyurethane pipe above 10 bar to a maximum of 16 bar.

M3 and M5 threaded ends are designed to be hand tightened. They should not be tightened above the maximum torque figures shown in our Technical Specification.

### Straight Adaptor (metric thread)



| Part number | Pipe<br>OD | Thread<br>metric | Bag<br>qty | Box<br>qty |
|-------------|------------|------------------|------------|------------|
| LM0103M3    | 3          | x M3             | 10         | 500        |
| LM0104M3    | 4          | x M3             | 10         | 300        |
| LM0104M5    | 4          | x M5             | 10         | 300        |

### Straight Adaptor (SuperThread)



| Part number | Pipe<br>OD | Super<br>Thread | Bag<br>qty | Box<br>qty |
|-------------|------------|-----------------|------------|------------|
| LM010411    | 4          | x 1/8           | 10         | 300        |

With integral seal. Thread can be used with BSP, BSPT, NPT, PF and PT.

### Equal Straight Connector



| Part number | Pipe<br>OD | Bag<br>qty | Box<br>qty |
|-------------|------------|------------|------------|
| LM0403E     | 3          | 10         | 300        |
| LM0404E     | 4          | 10         | 300        |

### Equal Elbow



| Part number | Pipe<br>OD | Bag<br>qty | Box<br>qty |
|-------------|------------|------------|------------|
| LM0303E     | 3          | 10         | 300        |
| LM0304E     | 4          | 10         | 300        |

### Swivel Elbow (metric thread)



| Part number | Pipe<br>OD | Thread<br>metric | Bag<br>qty | Box<br>qty |
|-------------|------------|------------------|------------|------------|
| LM0903M3    | 3          | x M3             | 10         | 500        |
| LM0904M3    | 4          | x M3             | 10         | 500        |
| LM0904M5    | 4          | x M5             | 10         | 500        |

### Equal Tee



| Part number | Pipe<br>OD | Bag<br>qty | Box<br>qty |
|-------------|------------|------------|------------|
| LM0203E     | 3          | 10         | 200        |
| LM0204E     | 4          | 10         | 200        |

## Metric fittings

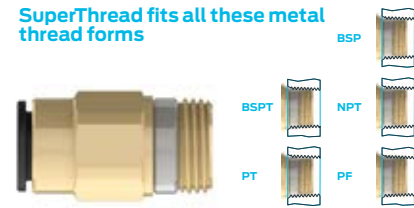
As well as standard push-fit connections and metric fittings that work with specific threads, we offer selected fittings with SuperThread technology that enables them to be used with any thread type.

The special Polyurethane seal feature means no sealant need be applied to make an airtight joint. There is no danger of tape entering the system.

Fittings with SuperThread also have countersunk throughbores to provide superior flow characteristics.

The design allows for a smaller compact body and reduced hexagon size.

SuperThread fits all these metal thread forms



### Straight Adaptor (SuperThread)



| Part number | Pipe<br>OD | Super<br>Thread | Bag<br>qty | Box<br>qty |
|-------------|------------|-----------------|------------|------------|
| RM010411    | 4          | x 1/8           | 10         | 500        |
| RM010412    | 4          | x 1/4           | 10         | 300        |
| RM010511    | 5          | x 1/8           | 10         | 300        |
| RM010512    | 5          | x 1/4           | 10         | 500        |
| RM010611    | 6          | x 1/8           | 10         | 400        |
| RM010612    | 6          | x 1/4           | 10         | 500        |
| RM010811    | 8          | x 1/8           | 10         | 500        |
| RM010812    | 8          | x 1/4           | 10         | 500        |
| RM010813    | 8          | x 3/8           | 10         | 400        |
| RM011012    | 10         | x 1/4           | 10         | 300        |
| RM011013    | 10         | x 3/8           | 10         | 300        |
| RM011014    | 10         | x 1/2           | 10         | 200        |
| RM011213    | 12         | x 3/8           | 10         | 150        |
| RM011214    | 12         | x 1/2           | 10         | 150        |

With integral seal. Thread can be used with BSP, BSPT, NPT, PF and PT.

### Straight Adaptor (metric thread)



| Part number | Pipe<br>OD | Thread<br>metric | Bag<br>qty | Box<br>qty |
|-------------|------------|------------------|------------|------------|
| RM0104M5    | 4          | x M5             | 10         | 500        |
| RM0105M5    | 5          | x M5             | 10         | 500        |
| RM0106M5    | 6          | x M5             | 10         | 300        |

### Brass Straight Adaptor (BSP thread)



| Part number | Pipe<br>OD | Thread<br>BSP | Bag<br>qty | Box<br>qty |
|-------------|------------|---------------|------------|------------|
| MM010411    | 4          | x 1/8         | 10         | 500        |
| MM010611    | 6          | x 1/8         | 10         | 400        |
| MM010612    | 6          | x 1/4         | 10         | 500        |
| MM010812    | 8          | x 1/4         | 10         | 500        |

### Straight Adaptor (BSP thread)



| Part number | Pipe<br>OD | Thread<br>BSP | Bag<br>qty | Box<br>qty |
|-------------|------------|---------------|------------|------------|
| PM010411E   | 4          | x 1/8         | 10         | 500        |
| PM010412E   | 4          | x 1/4         | 10         | 500        |
| PM010511E   | 5          | x 1/8         | 10         | 500        |
| PM010512E   | 5          | x 1/4         | 10         | 500        |
| PM010611E   | 6          | x 1/8         | 10         | 500        |
| PM010612E   | 6          | x 1/4         | 10         | 500        |
| PM010811E   | 8          | x 1/8         | 10         | 400        |
| PM010812E   | 8          | x 1/4         | 10         | 400        |
| PM010813E   | 8          | x 3/8         | 10         | 300        |
| PM011012E   | 10         | x 1/4         | 10         | 250        |
| PM011013E   | 10         | x 3/8         | 10         | 250        |
| PM011014E   | 10         | x 1/2         | 10         | 200        |
| PM011213E   | 12         | x 3/8         | 10         | 150        |
| PM011214E   | 12         | x 1/2         | 10         | 150        |

### Straight Adaptor (BSPT thread)



| Part number | Pipe<br>OD | Thread<br>BSPT | Bag<br>qty | Box<br>qty |
|-------------|------------|----------------|------------|------------|
| PM010401E   | 4          | x 1/8          | 10         | 500        |
| PM010402E   | 4          | x 1/4          | 10         | 500        |
| PM010501E   | 5          | x 1/8          | 10         | 500        |
| PM010502E   | 5          | x 1/4          | 10         | 500        |
| PM010601E   | 6          | x 1/8          | 10         | 500        |
| PM010602E   | 6          | x 1/4          | 10         | 500        |
| PM010801E   | 8          | x 1/8          | 10         | 400        |
| PM010802E   | 8          | x 1/4          | 10         | 400        |
| PM010803E   | 8          | x 3/8          | 10         | 300        |
| PM010804E   | 8          | x 1/2          | 10         | 200        |
| PM011002E   | 10         | x 1/4          | 10         | 250        |
| PM011003E   | 10         | x 3/8          | 10         | 250        |
| PM011004E   | 10         | x 1/2          | 10         | 200        |
| PM011203E   | 12         | x 3/8          | 10         | 150        |
| PM011204E   | 12         | x 1/2          | 10         | 150        |

### Straight Adaptor (NPTF thread)



| Part number | Pipe<br>OD | Thread<br>NPTF | Bag<br>qty | Box<br>qty |
|-------------|------------|----------------|------------|------------|
| PM010622E   | 6          | x 1/4          | 10         | 500        |

### Equal Straight Connector



| Part number | Pipe<br>OD | Bag<br>qty | Box<br>qty |
|-------------|------------|------------|------------|
| RM0404E     | 4          | 10         | 500        |
| RM0405E     | 5          | 10         | 500        |
| RM0406E     | 6          | 10         | 500        |
| RM0408E     | 8          | 10         | 300        |
| RM0410E     | 10         | 10         | 200        |
| RM0412E     | 12         | 10         | 100        |

### Equal Straight Connector



| Part number | Pipe<br>OD | Bag<br>qty | Box<br>qty |
|-------------|------------|------------|------------|
| PM0404E     | 4          | 10         | 500        |
| PM0405E     | 5          | 10         | 500        |
| PM0406E     | 6          | 10         | 400        |
| PM0408E     | 8          | 10         | 300        |
| PM0410E     | 10         | 10         | 200        |
| PM0412E     | 12         | 10         | 100        |

### Reducing Straight Connector



| Part number | Pipe<br>OD | Pipe<br>OD | Bag<br>qty | Box<br>qty |
|-------------|------------|------------|------------|------------|
| PM200604E   | 6          | - 4        | 10         | 400        |
| PM200804E   | 8          | - 4        | 10         | 300        |
| PM200806E   | 8          | - 6        | 10         | 200        |
| PM201004E   | 10         | - 4        | 10         | 200        |
| PM201006E   | 10         | - 6        | 10         | 200        |
| PM201008E   | 10         | - 8        | 10         | 200        |
| PM201208E   | 12         | - 8        | 10         | 100        |
| PM201210E   | 12         | - 10       | 10         | 100        |

Air & pneumatics

Metric fittings

Equal Elbow



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| RM0304E     | 4       | 10      | 500     |
| RM0305E     | 5       | 10      | 500     |
| RM0306E     | 6       | 10      | 400     |
| RM0308E     | 8       | 10      | 400     |
| RM0310E     | 10      | 10      | 200     |
| RM0312E     | 12      | 10      | 100     |

Equal Elbow



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| PM0304E     | 4       | 10      | 500     |
| PM0305E     | 5       | 10      | 500     |
| PM0306E     | 6       | 10      | 400     |
| PM0308E     | 8       | 10      | 300     |
| PM0310E     | 10      | 10      | 200     |
| PM0312E     | 12      | 10      | 100     |

Reducing Elbow Connector



| Part number | Pipe OD | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|---------|
| PM210604E   | 6       | - 4     | 10      | 400     |
| PM210804E   | 8       | - 4     | 10      | 300     |
| PM210806E   | 8       | - 6     | 10      | 200     |
| PM211004E   | 10      | - 4     | 10      | 200     |
| PM211006E   | 10      | - 6     | 10      | 200     |
| PM211008E   | 10      | - 8     | 10      | 200     |
| PM211208E   | 12      | - 8     | 10      | 100     |
| PM211210E   | 12      | - 10    | 10      | 100     |

Stem Elbow



| Part number | Pipe OD | Stem OD | Bag qty | Box qty |
|-------------|---------|---------|---------|---------|
| PM220404E   | 4       | - 4     | 10      | 500     |
| PM220505E   | 5       | - 5     | 10      | 500     |
| PM220606E   | 6       | - 6     | 10      | 500     |
| PM220808E   | 8       | - 8     | 10      | 400     |
| PM221010E   | 10      | - 10    | 10      | 200     |
| PM221212E   | 12      | - 12    | 10      | 100     |

Swivel Elbow (SuperThread)



| Part number | Pipe OD | Super Thread | Bag qty | Box qty |
|-------------|---------|--------------|---------|---------|
| RM090411    | 4       | x 1/8        | 10      | 500     |
| RM090412    | 4       | x 1/4        | 10      | 200     |
| RM090611    | 6       | x 1/8        | 10      | 400     |
| RM090612    | 6       | x 1/4        | 10      | 400     |
| RM090811    | 8       | x 1/8        | 10      | 400     |
| RM090812    | 8       | x 1/4        | 10      | 300     |
| RM091012    | 10      | x 1/4        | 10      | 200     |
| RM091013    | 10      | x 3/8        | 10      | 200     |
| RM091213    | 12      | x 3/8        | 10      | 100     |
| RM091214    | 12      | x 1/2        | 10      | 100     |

With integral seal. Thread can be used with BSP, BSPT, NPT, PF and PT.

Swivel Elbow (metric thread)



| Part number | Pipe OD | Thread metric | Bag qty | Box qty |
|-------------|---------|---------------|---------|---------|
| RM0904M5    | 4       | x M5          | 10      | 500     |
| RM0906M5    | 6       | x M5          | 10      | 500     |

Swivel Elbow (BSP thread)



| Part number | Pipe OD | Thread BSP | Bag qty | Box qty |
|-------------|---------|------------|---------|---------|
| MM090611    | 6       | x 1/8      | 10      | 400     |
| MM090612    | 6       | x 1/4      | 10      | 400     |
| MM090812    | 8       | x 1/4      | 10      | 300     |

With plastic body, brass parallel thread and O-Ring thread seal.

Swivel Elbow (BSP thread)



| Part number | Pipe OD | Thread BSP | Box qty |
|-------------|---------|------------|---------|
| PM090411E   | 4       | x 1/8      | 400     |
| PM090412E   | 4       | x 1/4      | 200     |
| PM090511E   | 5       | x 1/8      | 400     |
| PM090512E   | 5       | x 1/4      | 200     |
| PM090611E   | 6       | x 1/8      | 200     |
| PM090612E   | 6       | x 1/4      | 200     |
| PM090811E   | 8       | x 1/8      | 200     |
| PM090812E   | 8       | x 1/4      | 200     |
| PM090813E   | 8       | x 3/8      | 200     |
| PM091012E   | 10      | x 1/4      | 100     |
| PM091013E   | 10      | x 3/8      | 100     |
| PM091014E   | 10      | x 1/2      | 100     |
| PM091213E   | 12      | x 3/8      | 50      |
| PM091214E   | 12      | x 1/2      | 50      |

Swivel Elbow (BSPT thread)



| Part number | Pipe OD | Thread BSPT | Box qty |
|-------------|---------|-------------|---------|
| PM090401E   | 4       | x 1/8       | 400     |
| PM090402E   | 4       | x 1/4       | 200     |
| PM090501E   | 5       | x 1/8       | 400     |
| PM090502E   | 5       | x 1/4       | 200     |
| PM090601E   | 6       | x 1/8       | 200     |
| PM090602E   | 6       | x 1/4       | 200     |
| PM090801E   | 8       | x 1/8       | 200     |
| PM090802E   | 8       | x 1/4       | 200     |
| PM090803E   | 8       | x 3/8       | 200     |
| PM091002E   | 10      | x 1/4       | 100     |
| PM091003E   | 10      | x 3/8       | 100     |
| PM091004E   | 10      | x 1/2       | 100     |
| PM091203E   | 12      | x 3/8       | 50      |
| PM091204E   | 12      | x 1/2       | 50      |

Equal Tee



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| RM0204E     | 4       | 10      | 500     |
| RM0205E     | 5       | 10      | 300     |
| RM0206E     | 6       | 10      | 300     |
| RM0208E     | 8       | 10      | 200     |
| RM0210E     | 10      | 10      | 100     |
| RM0212E     | 12      | 10      | 50      |

Equal Tee



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| PM0204E     | 4       | 10      | 400     |
| PM0205E     | 5       | 10      | 400     |
| PM0206E     | 6       | 10      | 300     |
| PM0208E     | 8       | 10      | 200     |
| PM0210E     | 10      | 10      | 100     |
| PM0212E     | 12      | 10      | 50      |

Swivel Tee (centre leg BSP thread)



| Part number | Pipe OD | Thread BSP | Box qty |
|-------------|---------|------------|---------|
| PM100411E   | 4       | x 1/8      | 200     |
| PM100512E   | 5       | x 1/4      | 200     |
| PM100611E   | 6       | x 1/8      | 200     |
| PM100612E   | 6       | x 1/4      | 200     |
| PM100811E   | 8       | x 1/8      | 100     |
| PM100812E   | 8       | x 1/4      | 100     |
| PM100813E   | 8       | x 3/8      | 100     |
| PM101012E   | 10      | x 1/4      | 100     |
| PM101013E   | 10      | x 3/8      | 100     |
| PM101014E   | 10      | x 1/2      | 50      |
| PM101213E   | 12      | x 3/8      | 50      |
| PM101214E   | 12      | x 1/2      | 50      |

Swivel Tee (centre leg BSPT thread)



| Part number | Pipe OD | Thread BSPT | Box qty |
|-------------|---------|-------------|---------|
| PM100402E   | 4       | x 1/4       | 200     |
| PM100502E   | 5       | x 1/4       | 200     |
| PM100601E   | 6       | x 1/8       | 200     |
| PM100602E   | 6       | x 1/4       | 200     |
| PM100801E   | 8       | x 1/8       | 100     |
| PM100802E   | 8       | x 1/4       | 100     |
| PM101002E   | 10      | x 1/4       | 100     |
| PM101003E   | 10      | x 3/8       | 100     |
| PM101004E   | 10      | x 1/2       | 100     |
| PM101204E   | 12      | x 1/2       | 50      |

Swivel Male Run Tee (BSP thread)



| Part number | Pipe OD | Thread BSP | Box qty |
|-------------|---------|------------|---------|
| PM110411E   | 4       | x 1/8      | 200     |
| PM110412E   | 4       | x 1/4      | 200     |
| PM110611E   | 6       | x 1/8      | 200     |
| PM110612E   | 6       | x 1/4      | 200     |
| PM110811E   | 8       | x 1/8      | 100     |
| PM110812E   | 8       | x 1/4      | 100     |
| PM110813E   | 8       | x 3/8      | 100     |
| PM111012E   | 10      | x 1/4      | 100     |
| PM111013E   | 10      | x 3/8      | 100     |
| PM111014E   | 10      | x 1/2      | 50      |
| PM111213E   | 12      | x 3/8      | 50      |

Swivel Male Run Tee (BSPT thread)



| Part number | Pipe OD | Thread BSPT | Box qty |
|-------------|---------|-------------|---------|
| PM110401E   | 4       | x 1/8       | 200     |
| PM110602E   | 6       | x 1/4       | 200     |
| PM110802E   | 8       | x 1/4       | 100     |
| PM110803E   | 8       | x 3/8       | 100     |
| PM111002E   | 10      | x 1/4       | 100     |
| PM111003E   | 10      | x 3/8       | 100     |

Brass Bulkhead Adaptor



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| RM070612    | 6       | 10      | 200     |
| RM070812    | 8       | 10      | 200     |

Bulkhead Connector



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| RM1206      | 6       | 10      | 200     |
| RM1208      | 8       | 10      | 200     |

Bulkhead Connector



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| PM1204E     | 4       | 10      | 200     |
| PM1205E     | 5       | 10      | 200     |
| PM1206E     | 6       | 10      | 200     |
| PM1208E     | 8       | 10      | 100     |
| PM1210E     | 10      | 10      | 100     |
| PM1212E     | 12      | 5       | 50      |

Larger sizes

For sizes 15mm - 28mm see pages 14-15



Air & pneumatics

Metric fittings

Reducer



| Part number | Stem OD | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|---------|
| PM060504E   | 5       | - 4     | 10      | 500     |
| PM060604E   | 6       | - 4     | 10      | 500     |
| PM060605E   | 6       | - 5     | 10      | 500     |
| PM060804E   | 8       | - 4     | 10      | 500     |
| PM060805E   | 8       | - 5     | 10      | 500     |
| PM060806E   | 8       | - 6     | 10      | 500     |
| PM061006E   | 10      | - 6     | 10      | 400     |
| PM061008E   | 10      | - 8     | 10      | 400     |
| PM061208E   | 12      | - 8     | 10      | 300     |
| PM061210E   | 12      | - 10    | 10      | 250     |

Larger size reducers are shown on pages 14-15.

Enlarger



| Part number | Stem OD | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|---------|
| PM130405E   | 4       | x 5     | 10      | 500     |

Stem Adaptor (SuperThread)



| Part number | Pipe OD | Super Thread | Box qty |
|-------------|---------|--------------|---------|
| RM050612    | 6       | x 1/4        | 500     |
| RM050812    | 8       | x 1/4        | 500     |

With integral seal. Thread can be used with BSP, BSPT, NPT, PF and PT.

Stem Adaptor (metric thread)



| Part number | Pipe OD | Thread metric | Box qty |
|-------------|---------|---------------|---------|
| RM0504M5    | 4       | x M5          | 500     |

Stem Adaptor (BSP thread)



| Part number | Stem OD | Thread BSP | Bag qty | Box qty |
|-------------|---------|------------|---------|---------|
| PM050411E   | 4       | x 1/8      | 10      | 500     |
| PM050412E   | 4       | x 1/4      | 10      | 500     |
| PM050511E   | 5       | x 1/8      | 10      | 500     |
| PM050512E   | 5       | x 1/4      | 10      | 500     |
| PM050611E   | 6       | x 1/8      | 10      | 500     |
| PM050612E   | 6       | x 1/4      | 10      | 500     |
| PM050811E   | 8       | x 1/8      | 10      | 500     |
| PM050812E   | 8       | x 1/4      | 10      | 500     |
| PM050813E   | 8       | x 3/8      | 10      | 300     |
| PM051012E   | 10      | x 1/4      | 10      | 300     |
| PM051013E   | 10      | x 3/8      | 10      | 300     |
| PM051014E   | 10      | x 1/2      | 10      | 200     |
| PM051213E   | 12      | x 3/8      | 10      | 200     |
| PM051214E   | 12      | x 1/2      | 10      | 150     |

Stem Adaptor (BSPT thread)



| Part number | Stem OD | Thread BSPT | Bag qty | Box qty |
|-------------|---------|-------------|---------|---------|
| PM050401E   | 4       | x 1/8       | 10      | 500     |
| PM050402E   | 4       | x 1/4       | 10      | 500     |
| PM050501E   | 5       | x 1/8       | 10      | 500     |
| PM050502E   | 5       | x 1/4       | 10      | 500     |
| PM050601E   | 6       | x 1/8       | 10      | 500     |
| PM050602E   | 6       | x 1/4       | 10      | 500     |
| PM050801E   | 8       | x 1/8       | 10      | 500     |
| PM050802E   | 8       | x 1/4       | 10      | 500     |
| PM050803E   | 8       | x 3/8       | 10      | 300     |
| PM051002E   | 10      | x 1/4       | 10      | 300     |
| PM051003E   | 10      | x 3/8       | 10      | 300     |
| PM051004E   | 10      | x 1/2       | 10      | 200     |
| PM051203E   | 12      | x 3/8       | 10      | 200     |
| PM051204E   | 12      | x 1/2       | 10      | 150     |

Two-Way Divider



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| RM2306E     | 6       | 10      | 300     |
| RM2308E     | 8       | 10      | 250     |
| RM2312E     | 12      | 10      | 50      |

Two-Way Divider



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| PM2304E     | 4       | 10      | 300     |
| PM2308E     | 8       | 10      | 100     |
| PM2310E     | 10      | 10      | 100     |

Tube To Hose Stem



| Part number | Stem OD | Hose ID | Bag qty | Box qty |
|-------------|---------|---------|---------|---------|
| PM250604E   | 6       | - 4     | 10      | 500     |
| PM250806E   | 8       | - 6     | 10      | 500     |
| PM251008E   | 10      | - 8     | 10      | 300     |

Female Adaptor (BSP thread)



| Part number | Pipe OD | Thread BSP | Bag qty | Box qty |
|-------------|---------|------------|---------|---------|
| PM450411E*  | 4       | x 1/8      | 10      | 500     |
| PM450611E   | 6       | x 1/8      | 10      | 500     |
| PM450612E*  | 6       | x 1/4      | 10      | 300     |
| PM450812E*  | 8       | x 1/4      | 10      | 300     |
| PM450813E*  | 8       | x 3/8      | 10      | 200     |
| PM451015FE* | 10      | x 5/8      | 10      | 100     |
| PM451215FE* | 12      | x 5/8      | 10      | 150     |

\*With thread seal. Other size no seal.

Banjo Flow Control

Banjo Flow Controls are designed for installation directly into cylinder ports to give precise control. They regulate the speed of pneumatic cylinders and other actuators.

John Guest Controls provide a neat compact assembly which can be orientated to a suitable position for the circuit arrangement prior to tightening. The design offers especially precise adjustment through the control needle which is captive within its housing.

Suitable for both soft metal and plastic tubing.

Technical Specifications

Temperature range

Working pressure range

Materials used

5°C - 70°C

0.5 bar to 10 bar

Acetal Copolymer, Brass, Stainless Steel and Nitrile.

Filtration

Air supply should be filtered to 50 micron.

ISO 1219-1: 2012



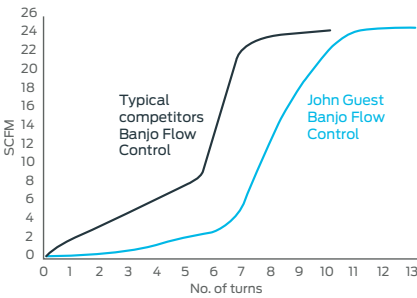
Typical Response Curve

Response curve for Banjo Flow Control with screwdriver slot.

Pattern no. BFC360611E

1 scfm = 28.3 litres/min. or 28317 cc/min. @ 1 atmosphere discharge

For 6mm x 1/8 BSP Banjo Flow Control



Banjo Flow Control (manual adjustment)



| Part number | Pipe OD | Thread    | Bag qty | Box qty |
|-------------|---------|-----------|---------|---------|
| CFM3604M5E  | 4       | x M5      | 1       | 200     |
| CFM360611E  | 6       | x 1/8 BSP | 1       | 100     |
| CFM360612E  | 6       | x 1/4 BSP | 1       | 100     |
| CFM360812E  | 8       | x 1/4 BSP | 1       | 100     |

Banjo Flow Control (screwdriver slot, BSP thread)



| Part number | Pipe OD | Thread BSP | Bag qty | Box qty |
|-------------|---------|------------|---------|---------|
| BFC360411E  | 4       | x 1/8      | 1       | 100     |
| BFC360611E  | 6       | x 1/8      | 1       | 100     |
| BFC360612E  | 6       | x 1/4      | 1       | 50      |
| BFC360812E  | 8       | x 1/4      | 1       | 100     |
| BFC361013E  | 10      | x 3/8      | 1       | 50      |
| BFC361214E  | 12      | x 1/2      | 1       | 50      |

Miniature Banjo Flow Control (screwdriver slot, metric thread)



| Part number | Pipe OD | Thread metric | Bag qty | Box qty |
|-------------|---------|---------------|---------|---------|
| LM1503M3E   | 3       | x M3          | 10      | 1000    |

Imperial fittings

Imperial fittings offered in sizes 5/32" to 5/8" are manufactured in grey acetal copolymer, making them especially suitable for applications involving foodstuffs and potable liquids.

They are however equally suitable for air and inert gases and can be used on N2/CO2 (installed in accordance with The British Beer and Pub Association Code of Practice) mixed gas dispense lines and in pneumatic applications and vacuum.

Straight Adaptor (BSPT thread)



| Part number | Pipe OD | Thread BSPT | Bag qty | Box qty |
|-------------|---------|-------------|---------|---------|
| PM010401S   | 5/32" x | 1/8         | 10      | 500     |
| PM010402S   | 5/32" x | 1/4         | 10      | 500     |
| PI010601S   | 3/16" x | 1/8         | 10      | 500     |
| PI010602S   | 3/16" x | 1/4         | 10      | 500     |
| PI010801S   | 1/4" x  | 1/8         | 10      | 500     |
| PI010802S   | 1/4" x  | 1/4         | 10      | 400     |
| PM010801S   | 5/16" x | 1/8         | 10      | 400     |
| PM010802S   | 5/16" x | 1/4         | 10      | 400     |
| PM010803S   | 5/16" x | 3/8         | 10      | 300     |
| PI011202S   | 3/8" x  | 1/4         | 10      | 250     |
| PI011203S   | 3/8" x  | 3/8         | 10      | 250     |
| PI011603S   | 1/2" x  | 3/8         | 10      | 150     |
| PI011604S   | 1/2" x  | 1/2         | 10      | 150     |

Straight Adaptor (BSP thread)



| Part number | Pipe OD | Thread BSP | Bag qty | Box qty |
|-------------|---------|------------|---------|---------|
| PI010812S   | 1/4" x  | 1/4        | 10      | 250     |
| PI011212S   | 3/8" x  | 1/4        | 10      | 250     |
| PI011213S   | 3/8" x  | 3/8        | 10      | 250     |
| PI011613S   | 1/2" x  | 3/8        | 10      | 150     |

For use with spot face ports.

Straight Adaptor (BSP thread)



| Part number | Pipe OD | Thread BSP | Bag qty | Box qty |
|-------------|---------|------------|---------|---------|
| NCPI011211S | 3/8" x  | 1/8        | 10      | 200     |
| NCPI011212S | 3/8" x  | 1/4        | 10      | 250     |

With special large seal for use with chamfered face ports.

Air & pneumatics  
Imperial fittings

Straight Adaptor (NPTF thread)



| Part number | Pipe OD | Thread NPTF | Bag qty | Box qty |
|-------------|---------|-------------|---------|---------|
| PM010421S   | 5/32" x | 1/8         | 10      | 500     |
| PM010422S   | 5/32" x | 1/4         | 10      | 500     |
| PI010621S   | 3/16" x | 1/8         | 10      | 500     |
| PI010821S   | 1/4" x  | 1/8         | 10      | 500     |
| PI010822S   | 1/4" x  | 1/4         | 10      | 400     |
| PI010823S   | 1/4" x  | 3/8         | 10      | 300     |
| PM010821S   | 5/16" x | 1/8         | 10      | 400     |
| PM010822S   | 5/16" x | 1/4         | 10      | 400     |
| PM010823S   | 5/16" x | 3/8         | 10      | 300     |
| PI011221S   | 3/8" x  | 1/8         | 10      | 250     |
| PI011222S   | 3/8" x  | 1/4         | 10      | 250     |
| PI011223S   | 3/8" x  | 3/8         | 10      | 250     |
| PI011224S   | 3/8" x  | 1/2         | 10      | 200     |
| PI011623S   | 1/2" x  | 3/8         | 10      | 150     |
| PI011624S   | 1/2" x  | 1/2         | 10      | 150     |
| PI012026S   | 5/8" x  | 3/4         | 10      | 100     |

Equal Straight Connector



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| PM0404S     | 5/32"   | 10      | 500     |
| PI0406S     | 3/16"   | 10      | 500     |
| PI0408S     | 1/4"    | 10      | 400     |
| PM0408S     | 5/16"   | 10      | 300     |
| PI0412S     | 3/8"    | 10      | 200     |
| PI0416S     | 1/2"    | 10      | 100     |

Reducing Straight Connector



| Part number | Pipe OD | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|---------|
| PI200806S   | 1/4"    | - 3/16" | 10      | 200     |
| PM200804S   | 5/16"   | - 5/32" | 10      | 300     |
| PI201006S   | 5/16"   | - 3/16" | 10      | 200     |
| PI201008S   | 5/16"   | - 1/4"  | 10      | 200     |
| PI201206S   | 3/8"    | - 3/16" | 10      | 200     |
| PI201208S   | 3/8"    | - 1/4"  | 10      | 200     |
| PI201210S   | 3/8"    | - 5/16" | 10      | 200     |
| PI201608S   | 1/2"    | - 1/4"  | 10      | 200     |
| PI201610S   | 1/2"    | - 5/16" | 10      | 100     |
| PI201612S   | 1/2"    | - 3/8"  | 10      | 100     |

Equal Elbow



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| PM0304S     | 5/32"   | 10      | 500     |
| PI0306S     | 3/16"   | 10      | 500     |
| PI0308S     | 1/4"    | 10      | 400     |
| PM0308S     | 5/16"   | 10      | 300     |
| PI0312S     | 3/8"    | 10      | 200     |
| PI0316S     | 1/2"    | 10      | 100     |

Reducing Elbow



| Part number | Pipe OD | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|---------|
| PM210804S   | 5/16"   | - 5/32" | 10      | 300     |
| PI211006S   | 5/16"   | - 3/16" | 10      | 200     |
| PI211008S   | 5/16"   | - 1/4"  | 10      | 200     |
| PI211206S   | 3/8"    | - 3/16" | 10      | 200     |
| PI211208S   | 3/8"    | - 1/4"  | 10      | 200     |
| PI211210S   | 3/8"    | - 5/16" | 10      | 200     |
| PI211610S   | 1/2"    | - 5/16" | 10      | 100     |
| PI211612S   | 1/2"    | - 3/8"  | 10      | 100     |

Stem Elbow



| Part number | Stem OD | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|---------|
| PM220404S   | 5/32"   | - 5/32" | 10      | 500     |
| PI220606S   | 3/16"   | - 3/16" | 10      | 500     |
| PI220808S   | 1/4"    | - 1/4"  | 10      | 500     |
| PM220808S   | 5/16"   | - 5/16" | 10      | 400     |
| PI221206S   | 3/8"    | - 3/16" | 10      | 300     |
| PI221208S   | 3/8"    | - 1/4"  | 10      | 300     |
| PI221210S   | 3/8"    | - 5/16" | 10      | 200     |
| PI221212S   | 3/8"    | - 3/8"  | 10      | 200     |
| PI221616S   | 1/2"    | - 1/2"  | 10      | 100     |

Swivel Elbows/Tees and pre-assembled Swivels

Swivel Elbows/Tees can be made up by using an Equal Elbow (page 22), Equal Tee (page 23) and the appropriate Stem Adaptor (page 24). Pre-assembled Swivels may be purchased from John Guest on request.

Rigid Elbow (NPTF thread)



| Part number | Pipe OD | Thread NPTF | Bag qty | Box qty |
|-------------|---------|-------------|---------|---------|
| PI480821S   | 1/4" x  | 1/8         | 10      | 500     |
| PI480822S   | 1/4" x  | 1/4         | 10      | 400     |
| PI480823S   | 1/4" x  | 3/8         | 10      | 300     |
| PI481022S   | 5/16" x | 1/4         | 10      | 300     |
| PI481023S   | 5/16" x | 3/8         | 10      | 300     |
| PI481222S   | 3/8" x  | 1/4         | 10      | 200     |
| PI481223S   | 3/8" x  | 3/8         | 10      | 200     |
| PI482024S   | 5/8" x  | 1/2         | 10      | 100     |

Swivel Elbow (BSPT thread)



| Part number | Pipe OD | Thread BSPT | Bag qty | Box qty |
|-------------|---------|-------------|---------|---------|
| PI090601S   | 3/16" x | 1/8         | 10      | 200     |
| PI090801S   | 1/4" x  | 1/8         | 10      | 200     |
| PI090802S   | 1/4" x  | 1/4         | 10      | 200     |
| PM090801S   | 5/16" x | 1/8         | 10      | 200     |
| PM090802S   | 5/16" x | 1/4         | 10      | 200     |
| PM090803S   | 5/16" x | 3/8         | 10      | 200     |
| PI091202S   | 3/8" x  | 1/4         | 10      | 100     |
| PI091203S   | 3/8" x  | 3/8         | 10      | 100     |
| PI091603S   | 1/2" x  | 3/8         | 10      | 50      |
| PI091604S   | 1/2" x  | 1/2         | 10      | 50      |

Swivel Elbow (NPTF thread)



| Part number | Pipe OD | Thread NPTF | Bag qty | Box qty |
|-------------|---------|-------------|---------|---------|
| PM090421S   | 5/32" x | 1/8         | 10      | 400     |
| PM090422S   | 5/32" x | 1/4         | 10      | 200     |
| PI090621S   | 3/16" x | 1/8         | 10      | 200     |
| PI090821S   | 1/4" x  | 1/8         | 10      | 200     |
| PI090822S   | 1/4" x  | 1/4         | 10      | 200     |
| PM090821S   | 5/16" x | 1/8         | 10      | 200     |
| PM090822S   | 5/16" x | 1/4         | 10      | 200     |
| PM090823S   | 5/16" x | 3/8         | 10      | 200     |
| PI091222S   | 3/8" x  | 1/4         | 10      | 100     |
| PI091223S   | 3/8" x  | 3/8         | 10      | 100     |
| PI091623S   | 1/2" x  | 3/8         | 10      | 50      |
| PI091624S   | 1/2" x  | 1/2         | 10      | 50      |

Equal Tee



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| PM0204S     | 5/32"   | 10      | 400     |
| PI0206S     | 3/16"   | 10      | 400     |
| PI0208S     | 1/4"    | 10      | 300     |
| PM0208S     | 5/16"   | 10      | 200     |
| PI0212S     | 3/8"    | 10      | 100     |
| PI0216S     | 1/2"    | 10      | 50      |

Reducing Tee



| Part number | Pipe OD Ends | Pipe OD Branch | Bag qty | Box qty |
|-------------|--------------|----------------|---------|---------|
| PI301208S   | 3/8" -       | 1/4"           | 10      | 150     |
| PI301612S   | 1/2" -       | 3/8"           | 10      | 50      |

Swivel Male Run Tee (BSPT thread)



| Part number | Pipe OD | Thread BSPT | Bag qty | Box qty |
|-------------|---------|-------------|---------|---------|
| PI110801S   | 1/4" x  | 1/8         | 10      | 200     |
| PI110802S   | 1/4" x  | 1/4         | 10      | 200     |
| PM110801S   | 5/16" x | 1/8         | 10      | 100     |
| PM110802S   | 5/16" x | 1/4         | 10      | 100     |
| PM110803S   | 5/16" x | 3/8         | 10      | 100     |
| PI111202S   | 3/8" x  | 1/4         | 10      | 100     |
| PI111203S   | 3/8" x  | 3/8         | 10      | 100     |
| PI111603S   | 1/2" x  | 3/8         | 5       | 50      |
| PI111604S   | 1/2" x  | 1/2         | 5       | 50      |

Swivel Male Run Tee (NPTF thread)



| Part number | Pipe OD | Thread NPTF | Bag qty | Box qty |
|-------------|---------|-------------|---------|---------|
| PI110621S   | 3/16" x | 1/8         | 10      | 200     |
| PI110821S   | 1/4" x  | 1/8         | 10      | 200     |
| PI110822S   | 1/4" x  | 1/4         | 10      | 200     |
| PI111222S   | 3/8" x  | 1/4         | 10      | 100     |
| PI111223S   | 3/8" x  | 3/8         | 10      | 100     |

Swivel Branch Tee (BSPT thread)



| Part number | Pipe OD | Thread BSPT | Bag qty | Box qty |
|-------------|---------|-------------|---------|---------|
| PI1100601S  | 3/16" x | 1/8         | 10      | 200     |
| PI1100801S  | 1/4" x  | 1/8         | 10      | 200     |
| PI1100802S  | 1/4" x  | 1/4         | 10      | 200     |
| PM1100801S  | 5/16" x | 1/8         | 10      | 100     |
| PM1100802S  | 5/16" x | 1/4         | 10      | 100     |
| PM1100803S  | 5/16" x | 3/8         | 10      | 100     |
| PI1101202S  | 3/8" x  | 1/4         | 10      | 100     |
| PI1101203S  | 3/8" x  | 3/8         | 10      | 100     |
| PI1101603S  | 1/2" x  | 3/8         | 5       | 50      |
| PI1101604S  | 1/2" x  | 1/2         | 5       | 50      |

Swivel Branch Tee (NPTF thread)



| Part number | Pipe OD | Thread NPTF | Bag qty | Box qty |
|-------------|---------|-------------|---------|---------|
| PM1100421S  | 5/32" x | 1/8         | 10      | 200     |
| PM1100422S  | 5/32" x | 1/4         | 10      | 200     |
| PI1100621S  | 3/16" x | 1/8         | 10      | 200     |
| PI1100821S  | 1/4" x  | 1/8         | 10      | 200     |
| PI1100822S  | 1/4" x  | 1/4         | 10      | 200     |
| PM1100821S  | 5/16" x | 1/8         | 10      | 100     |
| PM1100822S  | 5/16" x | 1/4         | 10      | 100     |
| PM1100823S  | 5/16" x | 3/8         | 10      | 100     |
| PI1101222S  | 3/8" x  | 1/4         | 10      | 100     |
| PI1101223S  | 3/8" x  | 3/8         | 10      | 100     |
| PI1101623S  | 1/2" x  | 3/8         | 5       | 50      |
| PI1101624S  | 1/2" x  | 1/2         | 5       | 50      |

Female Adaptor (BSP thread - Flat end)



| Part number | Pipe OD | Thread BSP | Bag qty | Box qty |
|-------------|---------|------------|---------|---------|
| PI451014FS  | 5/16" x | 1/2        | 10      | 150     |
| PI451015FS  | 5/16" x | 5/8        | 10      | 150     |
| PI451213S   | 3/8" x  | 3/8        | 10      | 150     |
| PI451214FS  | 3/8" x  | 1/2        | 10      | 150     |
| PI451215FS  | 3/8" x  | 5/8        | 10      | 150     |
| PI451613S   | 1/2" x  | 3/8        | 10      | 150     |
| PI451615FS  | 1/2" x  | 5/8        | 10      | 150     |

Female Adaptor (NPTF thread)



| Part number | Pipe OD | Thread NPTF | Bag qty | Box qty |
|-------------|---------|-------------|---------|---------|
| PI450822S   | 1/4" x  | 1/4         | 10      | 400     |
| PI451222S   | 3/8" x  | 1/4         | 10      | 250     |

Three-Way Divider



| Part number | Pipe OD Inlet | Pipe OD Outlet | Bag qty | Box qty |
|-------------|---------------|----------------|---------|---------|
| PI491612S   | 1/2"          | - 3/8"         | 10      | 50      |
| PI491616S   | 1/2"          | - 1/2"         | 5       | 40      |

Two-Way Divider



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| PI2308S     | 1/4"    | 10      | 150     |
| PM2308S     | 5/16"   | 10      | 100     |
| PI2312S     | 3/8"    | 10      | 100     |
| PI2316S     | 1/2"    | 5       | 100     |

Unequal Two-Way Divider



| Part number | Pipe OD Inlet | Pipe OD Outlet | Bag qty | Box qty |
|-------------|---------------|----------------|---------|---------|
| PI241210S   | 3/8"          | - 5/16"        | 10      | 100     |

Larger sizes

For sizes 15mm - 28mm see pages 14-15



Air & pneumatics  
Imperial fittings

| Bulkhead Connector                                                                |         |         |         |  |
|-----------------------------------------------------------------------------------|---------|---------|---------|--|
|  |         |         |         |  |
| Part number                                                                       | Pipe OD | Bag qty | Box qty |  |
| PM1204S                                                                           | 5/32"   | 10      | 200     |  |
| PI1206S                                                                           | 3/16"   | 10      | 200     |  |
| PI1208S                                                                           | 1/4"    | 10      | 200     |  |
| PM1208S                                                                           | 5/16"   | 10      | 100     |  |
| PI1212S                                                                           | 3/8"    | 10      | 100     |  |
| PI1216S                                                                           | 1/2"    | 5       | 50      |  |

| Reducing Bulkhead Connector                                                       |         |         |         |         |
|-----------------------------------------------------------------------------------|---------|---------|---------|---------|
|  |         |         |         |         |
| Part number                                                                       | Pipe OD | Pipe OD | Bag qty | Box qty |
| PM121208S                                                                         | 3/8"    | - 1/4"  | 10      | 150     |

| Stem Adaptor (BSPT thread)                                                          |         |            |         |         |
|-------------------------------------------------------------------------------------|---------|------------|---------|---------|
|  |         |            |         |         |
| Part number                                                                         | Stem OD | Thread BSP | Bag qty | Box qty |
| PI050601S                                                                           | 3/16"   | x 1/8      | 10      | 500     |
| PI050801S                                                                           | 1/4"    | x 1/8      | 10      | 500     |
| PI050802S                                                                           | 1/4"    | x 1/4      | 10      | 500     |
| PM050801S                                                                           | 5/16"   | x 1/8      | 10      | 500     |
| PM050802S                                                                           | 5/16"   | x 1/4      | 10      | 500     |
| PM050803S                                                                           | 5/16"   | x 3/8      | 10      | 300     |
| PI051202S                                                                           | 3/8"    | x 1/4      | 10      | 300     |
| PI051203S                                                                           | 3/8"    | x 3/8      | 10      | 300     |
| PI051603S                                                                           | 1/2"    | x 3/8      | 10      | 200     |
| PI051604S                                                                           | 1/2"    | x 1/2      | 10      | 150     |

| Stem Adaptor (BSP thread)                                                           |         |            |         |         |
|-------------------------------------------------------------------------------------|---------|------------|---------|---------|
|  |         |            |         |         |
| Part number                                                                         | Stem OD | Thread BSP | Bag qty | Box qty |
| PM050812S                                                                           | 5/16"   | x 1/4      | 10      | 500     |
| PI051212S                                                                           | 3/8"    | x 1/4      | 10      | 300     |
| PI051213S                                                                           | 3/8"    | x 3/8      | 10      | 300     |

| Stem Adaptor (NPTF thread)                                                        |         |             |         |         |
|-----------------------------------------------------------------------------------|---------|-------------|---------|---------|
|  |         |             |         |         |
| Part number                                                                       | Pipe OD | Thread NPTF | Bag qty | Box qty |
| PM050421S                                                                         | 5/32"   | x 1/8       | 10      | 500     |
| PM050422S                                                                         | 5/32"   | x 1/4       | 10      | 500     |
| PI050621S                                                                         | 3/16"   | x 1/8       | 10      | 500     |
| PI050821S                                                                         | 1/4"    | x 1/8       | 10      | 500     |
| PI050822S                                                                         | 1/4"    | x 1/4       | 10      | 500     |
| PI050823S                                                                         | 1/4"    | x 3/8       | 10      | 300     |
| PM050821S                                                                         | 5/16"   | x 1/8       | 10      | 500     |
| PM050822S                                                                         | 5/16"   | x 1/4       | 10      | 500     |
| PM050823S                                                                         | 5/16"   | x 3/8       | 10      | 300     |
| PI051222S                                                                         | 3/8"    | x 1/4       | 10      | 300     |
| PI051223S                                                                         | 3/8"    | x 3/8       | 10      | 300     |
| PI051623S                                                                         | 1/2"    | x 3/8       | 10      | 150     |
| PI051624S                                                                         | 1/2"    | x 1/2       | 10      | 150     |

| Reducer                                                                           |         |         |         |         |
|-----------------------------------------------------------------------------------|---------|---------|---------|---------|
|  |         |         |         |         |
| Part number                                                                       | Stem OD | Pipe OD | Bag qty | Box qty |
| PI060605S                                                                         | 3/16"   | - 5/32" | 10      | 500     |
| PI061006S                                                                         | 5/16"   | - 3/16" | 10      | 500     |
| PI061008S                                                                         | 5/16"   | - 1/4"  | 10      | 500     |
| PI061206S                                                                         | 3/8"    | - 3/16" | 10      | 500     |
| PI061208S                                                                         | 3/8"    | - 1/4"  | 10      | 400     |
| PI061210S                                                                         | 3/8"    | - 5/16" | 10      | 400     |
| PI061610S                                                                         | 1/2"    | - 5/16" | 10      | 300     |
| PI061612S                                                                         | 1/2"    | - 3/8"  | 10      | 250     |

| Enlarger                                                                            |         |         |         |         |
|-------------------------------------------------------------------------------------|---------|---------|---------|---------|
|  |         |         |         |         |
| Part number                                                                         | Stem OD | Pipe OD | Bag qty | Box qty |
| PI131012S                                                                           | 5/16"   | - 3/8"  | 10      | 250     |
| PI131216S                                                                           | 3/8"    | - 1/2"  | 10      | 200     |

| Offset Connector                                                                    |         |         |         |         |
|-------------------------------------------------------------------------------------|---------|---------|---------|---------|
|  |         |         |         |         |
| Part number                                                                         | Pipe OD | Pipe OD | Bag qty | Box qty |
| NC641                                                                               | 1/2"    | - 5/16" | 10      | 200     |

| Cross                                                                               |         |         |         |  |
|-------------------------------------------------------------------------------------|---------|---------|---------|--|
|  |         |         |         |  |
| Part number                                                                         | Pipe OD | Bag qty | Box qty |  |
| PI4712S                                                                             | 3/8"    | 10      | 100     |  |

| U-Bend                                                                               |         |         |         |
|--------------------------------------------------------------------------------------|---------|---------|---------|
|  |         |         |         |
| Part number                                                                          | Pipe OD | Bag qty | Box qty |
| PIUB12S                                                                              | 3/8"    | 10      | 100     |
| PIUB16S                                                                              | 1/2"    | 10      | 50      |

The U-Bend is offered for 1/2 inch OD pipe sizes. Existing 1/2 inch ID lines can be accommodated by using a standard Tube to Hose Connector.

| End Stop                                                                              |         |         |         |
|---------------------------------------------------------------------------------------|---------|---------|---------|
|  |         |         |         |
| Part number                                                                           | Pipe OD | Bag qty | Box qty |
| PI4608S                                                                               | 1/4"    | 10      | 500     |
| PI4612S                                                                               | 3/8"    | 10      | 500     |

| Plug                                                                                |         |         |         |
|-------------------------------------------------------------------------------------|---------|---------|---------|
|  |         |         |         |
| Part number                                                                         | Stem OD | Bag qty | Box qty |
| PM0804S                                                                             | 5/32"   | 10      | 1000    |
| PI0806S                                                                             | 3/16"   | 10      | 1000    |
| PI0808S                                                                             | 1/4"    | 10      | 500     |
| PM0808S                                                                             | 5/16"   | 10      | 500     |
| PI0812S                                                                             | 3/8"    | 10      | 400     |
| PI0816S                                                                             | 1/2"    | 10      | 300     |

| Tube to Hose Stem                                                                   |         |         |         |         |
|-------------------------------------------------------------------------------------|---------|---------|---------|---------|
|  |         |         |         |         |
| Part number                                                                         | Stem OD | Hose ID | Bag qty | Box qty |
| PI250806S                                                                           | 1/4"    | - 3/16" | 10      | 500     |
| PI250808S                                                                           | 1/4"    | - 1/4"  | 10      | 500     |
| PI250810S                                                                           | 1/4"    | - 5/16" | 10      | 500     |
| PI251006S                                                                           | 5/16"   | - 3/16" | 10      | 500     |
| PI251008S                                                                           | 5/16"   | - 1/4"  | 10      | 500     |
| PM250808S                                                                           | 5/16"   | - 5/16" | 10      | 500     |
| PI251012S                                                                           | 5/16"   | - 3/8"  | 10      | 400     |
| PI251208S                                                                           | 3/8"    | - 1/4"  | 10      | 400     |
| PI251210S                                                                           | 3/8"    | - 5/16" | 10      | 400     |
| PI251212S                                                                           | 3/8"    | - 3/8"  | 10      | 400     |
| PI251216S                                                                           | 3/8"    | - 1/2"  | 10      | 300     |
| PI251612S                                                                           | 1/2"    | - 3/8"  | 10      | 300     |
| PI251616S                                                                           | 1/2"    | - 1/2"  | 10      | 200     |

| Tube To Hose Elbow                                                                    |         |         |         |         |
|---------------------------------------------------------------------------------------|---------|---------|---------|---------|
|  |         |         |         |         |
| Part number                                                                           | Stem OD | Hose ID | Bag qty | Box qty |
| PI290808S                                                                             | 1/4"    | - 1/4"  | 10      | 500     |
| PI290810S                                                                             | 1/4"    | - 5/16" | 10      | 500     |
| PI291008S                                                                             | 5/16"   | - 1/4"  | 10      | 500     |
| PM290808S                                                                             | 5/16"   | - 5/16" | 10      | 500     |
| PI291208S                                                                             | 3/8"    | - 1/4"  | 10      | 400     |
| PI291210S                                                                             | 3/8"    | - 5/16" | 10      | 400     |

LLDPE pipe

John Guest Linear Low Density Polyethylene Pipe is suitable for a wide range of temperature and pressures, has a broad chemical compatibility and is made from non contaminating materials.

The pipe is suitable for pneumatics applications maximum pressure 10 bar @ 20°C. At elevated temperatures (50°C), mineral oil used in some systems will degrade LLDPE pipe and therefore, LLDPE pipe used in pneumatic circuits should be periodically checked and replaced if necessary.

**Chemical Resistance**

For use of LLDPE with chemicals or potentially aggressive liquids, please refer to our Technical Service Department.

NOTE: When using cleaning agents or other potentially aggressive liquids, please ensure compatibility with pipe and fittings. LLDPE is not recommended for mineral oils, gases and fuels or high pressure compressed air / pneumatic systems.

**Exposure to Ultraviolet Light**

Only black pipe should be installed in areas exposed to any light if biofilm growth is considered an issue. In this case other colours must be protected from exposure to light. Black pipe is also UV stabilised and can be installed where exposed to direct sunlight (UV).

| Pipe Tolerances |                |
|-----------------|----------------|
| 1/4" to 1/2"    | +0.001/-0.004" |
| 4mm             | +0.05/-0.07mm  |
| 6mm to 12mm     | +0.05/-0.10mm  |
| 15mm            | +0.10/-0.10mm  |

| 4mm OD x 2.5mm ID - 100mm Coils                                   |         |
|-------------------------------------------------------------------|---------|
| Part number                                                       | Colour  |
| PE-04025-0100M-N                                                  | Natural |
| PE-04025-0100M-B                                                  | Blue    |
| PE-04025-0100M-R                                                  | Red     |
| PE-04025-0100M-E                                                  | Black   |
| PE-04025-0100M-W                                                  | White   |
| PE-04025-0100M-G                                                  | Green   |
| PE-04025-0100M-Y                                                  | Yellow  |
| PE-04025-0100M-O                                                  | Orange  |
| Products shown in blue have a minimum order quantity of 50 coils. |         |

| 6mm OD x 4mm ID - 100mm Coils                                     |         |
|-------------------------------------------------------------------|---------|
| Part number                                                       | Colour  |
| PE-0604-0100M-N                                                   | Natural |
| PE-0604-0100M-B                                                   | Blue    |
| PE-0604-0100M-R                                                   | Red     |
| PE-0604-0100M-E                                                   | Black   |
| PE-0604-0100M-W                                                   | White   |
| PE-0604-0100M-G                                                   | Green   |
| PE-0604-0100M-Y                                                   | Yellow  |
| PE-0604-0100M-O                                                   | Orange  |
| Products shown in blue have a minimum order quantity of 50 coils. |         |

**Minimum order quantities**

Popular items highlighted in black are generally in stock and available in minimum order quantities of 2 coils. Items listed in blue are non-standard and are subject to minimum order quantities unless in stock and will incur longer lead time.

**Imperial sizes also available on application.**

| 8mm OD x 6mm ID - 100mm Coils                                      |         |
|--------------------------------------------------------------------|---------|
| Part number                                                        | Colour  |
| PE-0806-100M-N                                                     | Natural |
| PE-0806-100M-B                                                     | Blue    |
| PE-0806-100M-R                                                     | Red     |
| PE-0806-100M-E                                                     | Black   |
| PE-0806-100M-W                                                     | White   |
| PE-0806-100M-G                                                     | Green   |
| PE-0806-100M-Y                                                     | Yellow  |
| PE-0806-100M-O                                                     | Orange  |
| Products shown in blue have a minimum order quantity of 100 coils. |         |

| 10mm OD x 7mm ID - 100mm Coils                                    |         |
|-------------------------------------------------------------------|---------|
| Part number                                                       | Colour  |
| PE-1007-100M-N                                                    | Natural |
| PE-1007-100M-B                                                    | Blue    |
| PE-1007-100M-R                                                    | Red     |
| PE-1007-100M-E                                                    | Black   |
| PE-1007-100M-W                                                    | White   |
| PE-1007-100M-G                                                    | Green   |
| PE-1007-100M-Y                                                    | Yellow  |
| PE-1007-100M-O                                                    | Orange  |
| Products shown in blue have a minimum order quantity of 50 coils. |         |

| 12mm OD x 9mm ID - 100mm Coils                                    |         |
|-------------------------------------------------------------------|---------|
| Part number                                                       | Colour  |
| PE-1209-100M-N                                                    | Natural |
| PE-1209-100M-B                                                    | Blue    |
| PE-1209-100M-R                                                    | Red     |
| PE-1209-100M-E                                                    | Black   |
| PE-1209-100M-G                                                    | Green   |
| PE-1209-100M-Y                                                    | Yellow  |
| PE-1209-100M-O                                                    | Orange  |
| Products shown in blue have a minimum order quantity of 50 coils. |         |

| 15mm OD x 11.5mm ID - 100mm Coils                                 |        |
|-------------------------------------------------------------------|--------|
| Part number                                                       | Colour |
| PE-15115-0100M-B                                                  | Blue   |
| PE-15115-0100M-R                                                  | Red    |
| PE-15115-0100M-G                                                  | Green  |
| PE-15115-0100M-E                                                  | Black  |
| Products shown in blue have a minimum order quantity of 50 coils. |        |

| 1/4" OD 0.17" ID - 500ft Coils                                    |         |
|-------------------------------------------------------------------|---------|
| Part number                                                       | Colour  |
| PE-08-BI-0500F-N                                                  | Natural |
| PE-08-BI-0500F-B                                                  | Blue    |
| PE-08-BI-0500F-R                                                  | Red     |
| PE-08-BI-0500F-E                                                  | Black   |
| PE-08-BI-0500F-W                                                  | White   |
| PE-08-BI-0500F-G                                                  | Green   |
| PE-08-BI-0500F-Y                                                  | Yellow  |
| PE-08-BI-0500F-O                                                  | Orange  |
| Products shown in blue have a minimum order quantity of 50 coils. |         |

Air & pneumatics

LLDPE pipe

| 1/4" OD 0.17" ID - 1000ft Coils |         |
|---------------------------------|---------|
| Part number                     | Colour  |
| PE-08-BI-1000F-N                | Natural |
| PE-08-BI-1000F-B                | Blue    |
| PE-08-BI-1000F-R                | Red     |
| PE-08-BI-1000F-E                | Black   |
| PE-08-BI-1000F-W                | White   |
| PE-08-BI-1000F-Y                | Yellow  |
| PE-08-BI-1000F-O                | Orange  |

Products shown in blue have a minimum order quantity of 25 coils.

| 5/16" OD 0.187" ID - 500ft Coils |         |
|----------------------------------|---------|
| Part number                      | Colour  |
| PE-10-CI-0500F-N                 | Natural |
| PE-10-CI-0500F-B                 | Blue    |
| PE-10-CI-0500F-R                 | Red     |
| PE-10-CI-0500F-E                 | Black   |
| PE-10-CI-0500F-W                 | White   |
| PE-10-CI-0500F-G                 | Green   |
| PE-10-CI-0500F-Y                 | Yellow  |
| PE-10-CI-0500F-O                 | Orange  |

Products shown in blue have a minimum order quantity of 50 coils.

| 3/8" OD 0.25" ID - 500ft Coils |         |
|--------------------------------|---------|
| Part number                    | Colour  |
| PE-12-EI-0500F-N               | Natural |
| PE-12-EI-0500F-B               | Blue    |
| PE-12-EI-0500F-R               | Red     |
| PE-12-EI-0500F-E               | Black   |
| PE-12-EI-0500F-W               | White   |
| PE-12-EI-0500F-G               | Green   |
| PE-12-EI-0500F-Y               | Yellow  |
| PE-12-EI-0500F-O               | Orange  |

Products shown in blue have a minimum order quantity of 50 coils.

| 1/2" OD 0.375" ID - 250ft Coils |         |
|---------------------------------|---------|
| Part number                     | Colour  |
| PE-16-GI-0250F-N                | Natural |
| PE-16-GI-0250F-B                | Blue    |
| PE-16-GI-0250F-R                | Red     |
| PE-16-GI-0250F-E                | Black   |
| PE-16-GI-0250F-W                | White   |
| PE-16-GI-0250F-G                | Green   |
| PE-16-GI-0250F-Y                | Yellow  |
| PE-16-GI-0250F-O                | Orange  |

Products shown in blue have a minimum order quantity of 50 coils.

Minimum order quantities

Popular items highlighted in black are generally in stock and available in minimum order quantities of 2 coils. Items listed in blue are non-standard and are subject to minimum order quantities unless in stock and will incur longer lead time.

Imperial sizes also available on application.

Accessories

Collet Covers

The slip-on Collet Cover prevents accidental pipe removal or tampering. The pipe can be inserted with the Collet Cover already attached to the fittings or the cover can slide into position afterwards. The cover is easily removed when required and comes in a variety of colours for colour coding.

Colours available – Suffix indicates colours  
E = Black    Y = Yellow    B = Blue  
R = Red    S = Grey    G = Green

Collet Cover (Imperial)



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| PM1904S     | 5/32"   | 10      | 1000    |
| PI1906S     | 3/16"   | 10      | 1000    |
| PI1908S     | 1/4"    | 10      | 1000    |
| PM1908S     | 5/16"   | 10      | 1000    |
| PI1912S     | 3/8"    | 10      | 500     |
| PI1916S     | 1/2"    | 10      | 500     |

Please indicate by suffix, colour required or grey will be supplied.

Collet Cover (Metric)



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| PM1904E     | 4       | 10      | 1000    |
| PM1905E     | 5       | 10      | 1000    |
| PM1906E     | 6       | 10      | 1000    |
| PM1908E     | 8       | 10      | 1000    |
| PM1910E     | 10      | 10      | 500     |
| PM1912E     | 12      | 10      | 500     |
| PM1915E     | 15      | 100     | 400     |
| PM1918E     | 18      | 10      | 200     |
| PM1922E     | 22      | 50      | 200     |

Please indicate by suffix, colour required or black will be supplied. 15mm to 22mm sizes available in black as standard, white, red or blue.

Locking Clip



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| PIC1808R    | 1/4"    | 100     | 5000    |
| PMC1808R    | 5/16"   | 100     | 8000    |
| PIC1812R    | 3/8"    | 100     | 1000    |
| PIC1816R    | 1/2"    | 100     | 2000    |
| PMC1815R    | 15mm    | 100     | 2000    |

Secures the collet in its position to prevent an accidental disconnection of the pipe.

Flow Bend Clip



| Part number | Pipe OD   | Box qty |
|-------------|-----------|---------|
| PM2608S     | 8mm/5/16" | 300     |
| PM2610S     | 10mm/3/8" | 200     |

Designed to support pipe and eliminate kinking.

Plug



| Part number | Stem OD | Colour | Bag qty | Box qty |
|-------------|---------|--------|---------|---------|
| PM0804R     | 4       | Red    | 10      | 1000    |
| PM0805R     | 5       | Red    | 10      | 1000    |
| PM0806R     | 6       | Red    | 10      | 500     |
| PM0808R     | 8       | Red    | 10      | 500     |
| PM0810R     | 10      | Red    | 10      | 400     |
| PM0812R     | 12      | Red    | 10      | 300     |
| PM0815E     | 15      | Black  | 10      | 200     |
| PM0818E     | 18      | Black  | 10      | 100     |
| PM0822E     | 22      | Black  | 10      | 100     |
| PM0828E     | 28      | Black  | 10      | 50      |

8mm size also available in black. Part No. PM0808E.

Tube Insert



| Part number | Pipe OD | Pipe ID | Box qty |
|-------------|---------|---------|---------|
| TSI250S     | 3/8"    | 1/4"    | 1000    |
| TSI312S     | 7/16"   | 5/16"   | 2500    |
| TSI375S     | 1/2"    | 3/8"    | 500     |

Tube Insert



| Part number | Pipe OD | Pipe ID | Bag qty | Box qty |
|-------------|---------|---------|---------|---------|
| TSM10N      | 10      | 7       | 50      | 1000    |
| TSM1209S    | 12      | 9       |         | 1000    |
| TSM15N      | 15      | 11.5    | 50      | 500     |

Tube Insert



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| LMTS04      | 4       | 1000    | 15000   |

Tube inserts should be used for soft wall tubing or when using polyurethane pipe above 10 bar to a maximum of 16 bar.

Collet Locking Tool



| Part number | Size         | Box qty |
|-------------|--------------|---------|
| ICLT/2      | 3/16" - 1/2" | 50      |

Tube Cutter



| Part number | Box qty |
|-------------|---------|
| TSNIP       | 50      |
| BLADES only | 300     |

Suitable for up to 12mm pipe.

Pipe Cutter



| Part number | Box qty |
|-------------|---------|
| JG-TS       | 60      |

Suitable for up to 22mm pipe.

Heavy Duty Pipe Cutter



| Part number | Pack qty      |
|-------------|---------------|
| HDC         | 20            |
| BLADE-HDC   | Spare blade 1 |

Suitable for up to 28mm pipe.





# Create an efficient **high performance** **solution**

## For small to large commercial and industrial applications

The SharkBite Air & Pneumatics push-fit range provides fast, simple and reliable pipe connections. Available in 10 to 54mm sizes, the robust brass-body fittings can withstand high pressure and a range of system requirements, making it ideal for small to large commercial and industrial applications.

Suitable for use from the compressor to the point of use, we offer a wide range of fittings and anodised aluminium pipe, including a 45° elbow for improved air flow.

Using a simple push-fit action, pipes are instantly joined without the need for tools, silicon, hot works, solder or glue. Fittings can also be disconnected with a secure demounting tool, making system extensions and modifications quick and easy.

Designed to securely grip our range of anodised aluminium pipe, SharkBite is also compatible with powder coated aluminium, copper, PEXa and nylon pipes.

### Features

- Engineered brass body
- Push-fit connection ends
- Tamperproof secure demounting tool
- Nitrile O-Ring and stainless steel grab ring
- Suitable for air and vacuum applications up to 20 bar

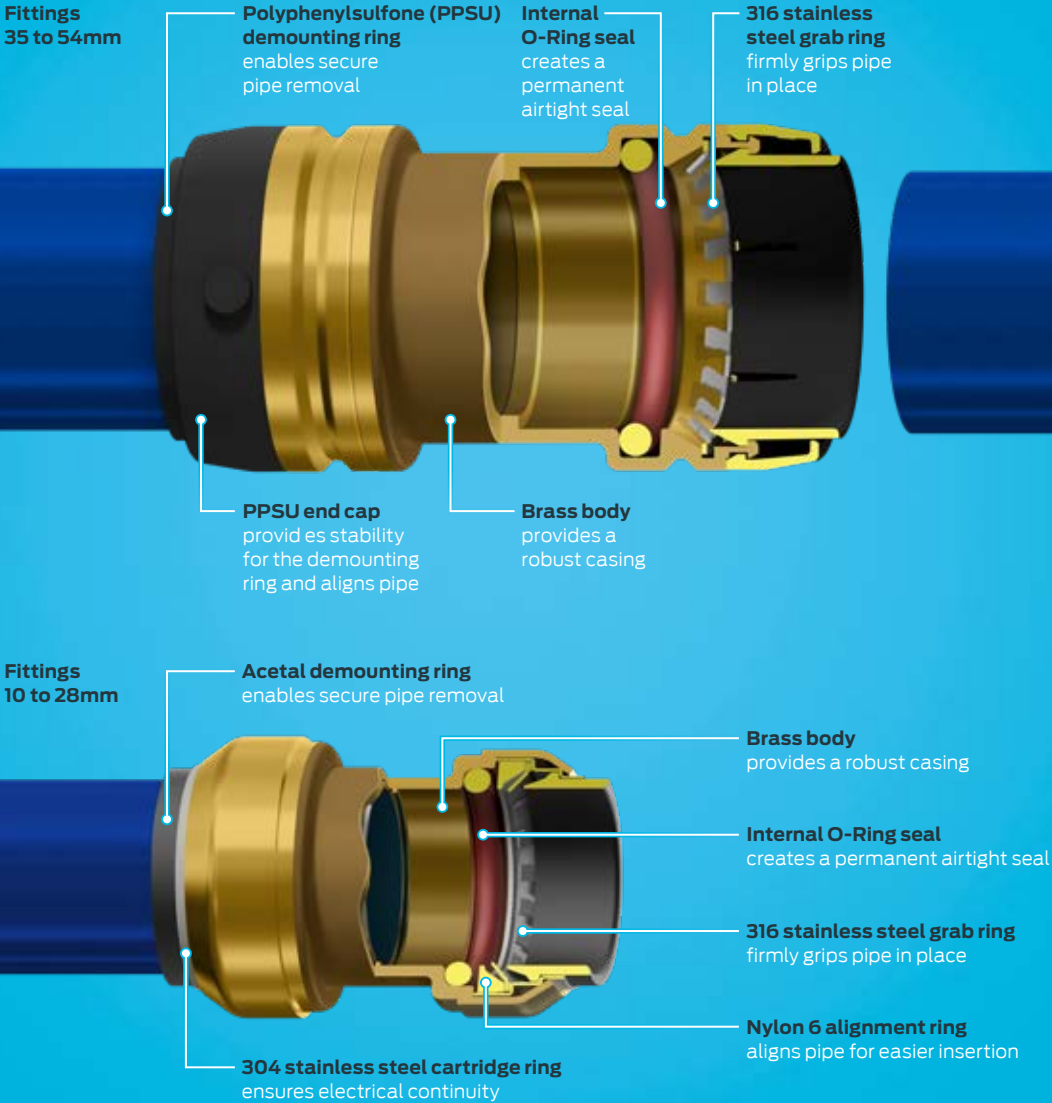
### Benefits

- Reliable leakproof solution that withstands high pressure
- Instant, tool-free, push-fit connection with no hot works, silicon, solvent or glue
- Corrosion-free solution that extends equipment lifecycle and reduces maintenance
- Quick and easy system reconfiguration and extension, with minimal downtime
- Lightweight and easy to handle material
- A versatile solution that connects to metal or plastic pipe



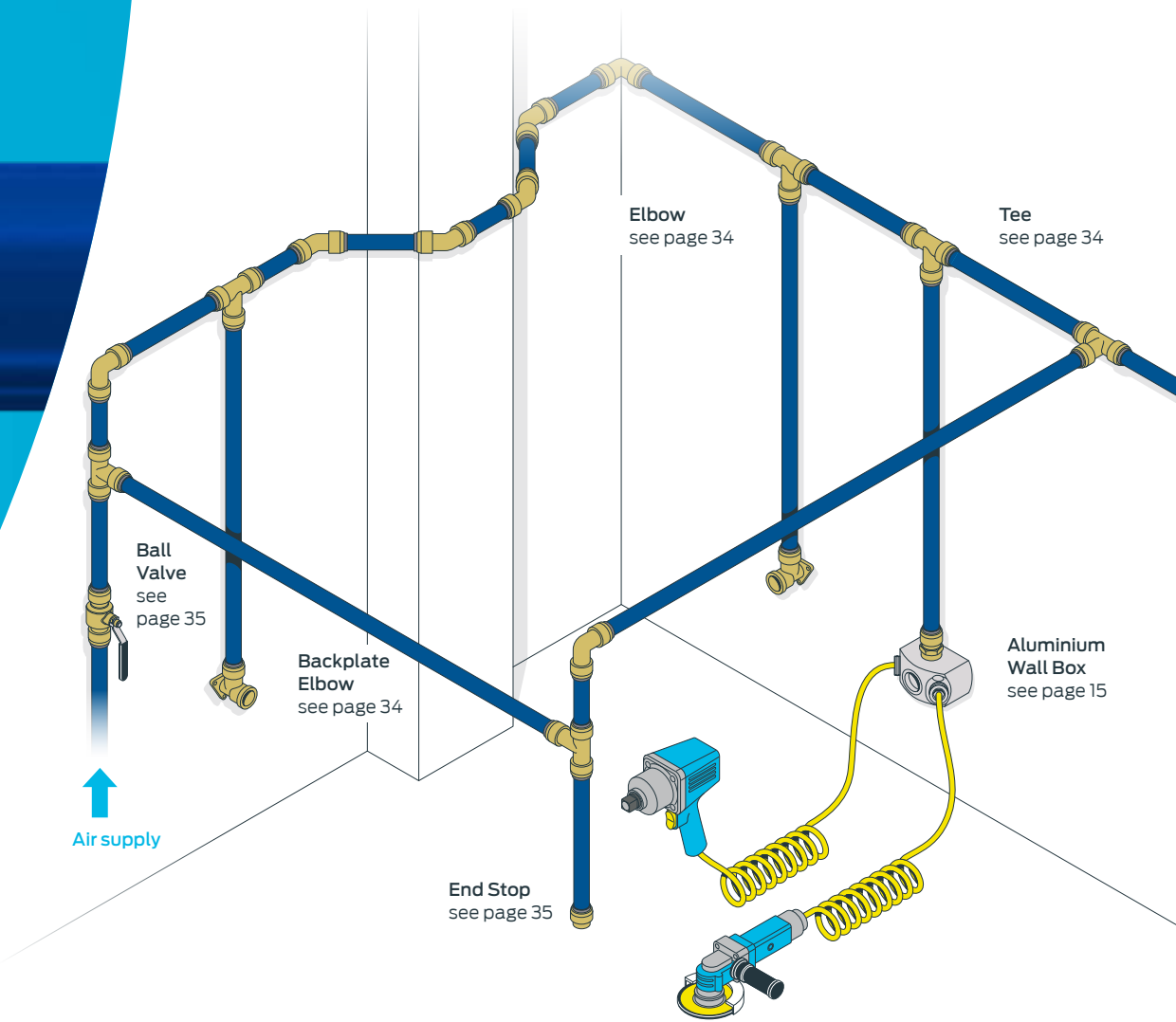
# Inside SharkBite technology

SharkBite push-fit fittings use grip and seal technology. The stainless steel grab ring grips the pipe and the O-Ring provides an airtight seal.



## Air system configuration

The SharkBite Air & Pneumatics system offers rapid assembly from the compressor to air line, through to the complete ring main and take off points.

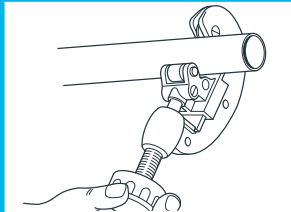




# Making a connection

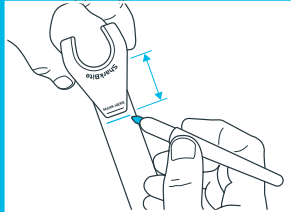
## Connecting push-fit

### Cutting the pipe



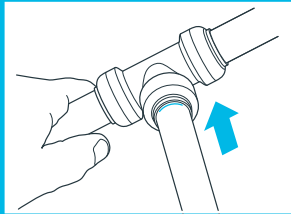
Cut the pipe square using a rotary pipe cutter and then debur using a SharkBite Depth/Deburring tool. There should be no burrs or sharp edges on the pipe end as this can damage the O-Ring during pipe insertion.

### Measure the depth



Using the appropriate Depth Marker Demounting Clip or tape measure, mark the insertion depth onto the pipe.

### Making the connection



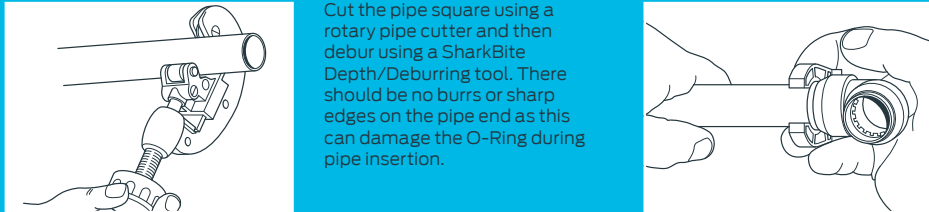
Align the pipe squarely with the fitting de-mounting ring and push the pipe into the fitting with a slight twist until the pipe reaches the pipe stop. If using plastic pipe, use a liner if specified by the pipe manufacturer.

### Note

SharkBite fittings utilise a PTFE coated O-Ring. This coating is semi-permanent and multiple pipe insertions/de-mountings will remove this coating, making pipe insertion harder.

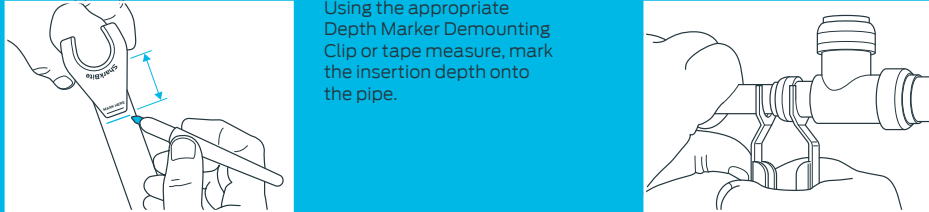
### Demounting push-fit

#### Demounting 10-28mm with clip



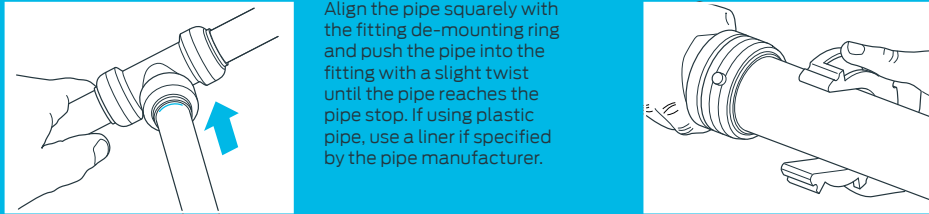
Holding the fitting in the palm of the hand, snap the demounting clip over the pipe, with the SharkBite logo away from the fitting. Slide the clip up to the demounting ring and press firmly on the two 'finger pads', while simultaneously twisting and pulling the pipe to release.

#### Demounting 10-28mm with tongs



Position the tongs over the fitting and pipe with the SharkBite logo facing away from the fitting. Squeeze the tongs together, while gripping the pipe in the other hand, simultaneously twist and pull the pipe to remove, if necessary. Use the thumb as a lever to assist release.

#### Demounting 35-54mm UXL



Snap the demounting clip over the pipe and locate the clip slots over the two studs in the end cap. Rotate the clip clockwise by 10° until it locks, then twist and pull the pipe from the fitting.



Air & pneumatics

Brass fittings

Straight Coupling



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| SBA0110     | 10      | 5       | 360     |
| SBA0115     | 15      | 10      | 300     |
| SBA0122     | 22      | 5       | 130     |
| SBA0128     | 28      | 5       | 75      |
| UXL         |         |         |         |
| SBA0135E    | 35      | 1       | 12      |
| SBA0142E    | 42      | 1       | 12      |
| SBA0154E    | 54      | 1       | 8       |

Reducing Coupling



| Part number | Pipe OD | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|---------|
| SBA011510   | 15      | 10      | 5       | 200     |
| SBA012215   | 22      | 15      | 5       | 130     |
| SBA012822   | 28      | 22      | 1       | 60      |
| UXL         |         |         |         |         |
| SBA013528E  | 35      | 28      | 1       | 12      |
| SBA014235E  | 42      | 35      | 1       | 8       |
| SBA015442E  | 54      | 42      | 1       | 6       |

Slip Coupling



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| SBA01S15    | 15      | 10      | 170     |
| SBA01S22    | 22      | 5       | 80      |
| SBA01S28    | 28      | 5       | 40      |
| UXL         |         |         |         |
| SBA01S35E   | 35      | 1       | 12      |
| SBA01S42E   | 42      | 1       | 10      |
| SBA01S54E   | 54      | 1       | 6       |

45 Degree Elbow



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| SBA0515     | 15      | 10      | 150     |
| SBA0522     | 22      | 5       | 60      |
| SBA0528     | 28      | 5       | 35      |
| UXL         |         |         |         |
| SBA0535E    | 35      | 1       | 10      |
| SBA0542E    | 42      | 1       | 8       |
| SBA0554E    | 54      | 1       | 6       |

90 Degree Elbow



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| SBA0210     | 10      | 5       | 250     |
| SBA0215     | 15      | 10      | 150     |
| SBA0222     | 22      | 5       | 70      |
| SBA0228     | 28      | 5       | 65      |
| UXL         |         |         |         |
| SBA0235E    | 35      | 1       | 10      |
| SBA0242E    | 42      | 1       | 8       |
| SBA0254E    | 54      | 1       | 6       |

Female Backplate Elbow (FBSP thread)



| Part number  | Tube OD | Thread FBSP | Bag qty | Box qty |
|--------------|---------|-------------|---------|---------|
| SBA121515FBP | 15      | 1/2         | 5       | 100     |
| SBA122220FBP | 22      | 3/4         | 5       | 70      |

Equal Tee



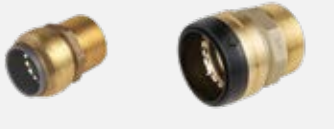
| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| SBA0310     | 10      | 5       | 110     |
| SBA0315     | 15      | 10      | 100     |
| SBA0322     | 22      | 5       | 45      |
| SBA0328     | 28      | 1       | 30      |
| UXL         |         |         |         |
| SBA0335E    | 35      | 1       | 8       |
| SBA0342E    | 42      | 1       | 5       |
| SBA0354E    | 54      | 1       | 2       |

Reduced Branch Tee



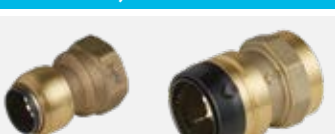
| Part number  | Pipe OD | Pipe OD | Bag qty | Box qty |
|--------------|---------|---------|---------|---------|
| SBA03222210  | 22      | 10      | 1       | 60      |
| SBA03222215  | 22      | 15      | 5       | 50      |
| SBA03282815  | 28      | 15      | 1       | 25      |
| SBA03282822  | 28      | 22      | 1       | 25      |
| UXL          |         |         |         |         |
| SBA03353522E | 35      | 22      | 1       | 12      |
| SBA03353528E | 35      | 28      | 1       | 12      |
| SBA03424222E | 42      | 22      | 1       | 6       |
| SBA03424228E | 42      | 28      | 1       | 6       |
| SBA03424235E | 42      | 35      | 1       | 4       |
| SBA03545428E | 54      | 28      | 1       | 5       |
| SBA03545435E | 54      | 35      | 1       | 5       |
| SBA03545442E | 54      | 42      | 1       | 5       |

Male Threaded Connector (MBSP thread)



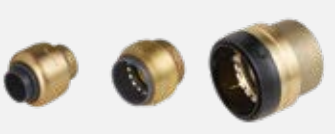
| Part number | Pipe OD | Thread MBSP | Bag qty | Box qty |
|-------------|---------|-------------|---------|---------|
| SBA111515MT | 15      | 1/2         | 5       | 250     |
| SBA112220MT | 22      | 3/4         | 5       | 150     |
| SBA112825MT | 28      | 1           | 1       | 120     |
| UXL         |         |             |         |         |
| SBA113532ME | 35      | 1¼          | 1       | 15      |
| SBA114240ME | 42      | 1½          | 1       | 12      |
| SBA115450ME | 54      | 2           | 1       | 10      |

Female Threaded Connector (FBSP thread)



| Part number | Pipe OD | Thread FBSP | Bag qty | Box qty |
|-------------|---------|-------------|---------|---------|
| SBA111515F  | 15      | 1/2         | 5       | 200     |
| SBA112220F  | 22      | 3/4         | 5       | 140     |
| UXL         |         |             |         |         |
| SBA113532FE | 35      | 1¼          | 1       | 15      |
| SBA114240FE | 42      | 1½          | 1       | 12      |
| SBA115450FE | 54      | 2           | 1       | 10      |

End Stop



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| SBA0410     | 10      | 5       | 600     |
| SBA0415     | 15      | 10      | 500     |
| SBA0422     | 22      | 5       | 250     |
| SBA0428     | 28      | 5       | 130     |
| UXL         |         |         |         |
| SBA0435E    | 35      | 1       | 20      |
| SBA0442E    | 42      | 1       | 16      |
| SBA0454E    | 54      | 1       | 12      |

Brass valves

Quarter Turn Ball Valve

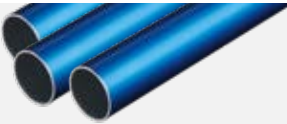


| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| SBA2715     | 15      | 1       | 30      |
| SBA2722     | 22      | 1       | 16      |
| SBA2728     | 28      | 1       | 12      |
| UXL         |         |         |         |
| SBA2735E    | 35      | 1       | 9       |
| SBA2742E    | 42      | 1       | 4       |
| SBA2754E    | 54      | 1       | 4       |

Tamperproof lockable handles.

Pipe

Anodised Aluminium Pipe



| Part number      | Pipe OD | Size mm/m | Pack qty |
|------------------|---------|-----------|----------|
| AL-IR1513-3M-20B | 15      | 13 x 3    | 20       |
| AL-IR2220-3M-20B | 22      | 20 x 3    | 20       |
| AL-IR2826-3M-10B | 28      | 26 x 3    | 10       |
| AL-IR3531-3M-10B | 35      | 31 x 3    | 5        |
| AL-IR4238-3M-10B | 42      | 38 x 3    | 5        |
| AL-IR5450-3M-10B | 54      | 50 x 3    | 5        |

Pipe Clips



| Part number | Size mm | Box qty |
|-------------|---------|---------|
| SBA0855510  | 10-12   | 100     |
| SBA0855515  | 14-16   | 100     |
| SBA0855518  | 16-20   | 100     |
| SBA0855522  | 20-23   | 50      |
| SBA0855531  | 28-32   | 50      |
| SBA0855538  | 35-40   | 25      |
| SBA0855542  | 40-44   | 25      |
| SBA0855554  | 48-55   | 15      |
| SBA0855310* | 10      | 25      |

\* Spacer block can only be used with sizes up to and including SBA0855531

Accessories

Depth/Deburring Tool



| Part number | Pipe OD | Bag qty |
|-------------|---------|---------|
| UXLGO3      | 35 - 54 | 1       |

Depth Marker Demounting Clip



| Part number | Pipe OD | Bag qty |
|-------------|---------|---------|
| SB2910      | 10      | 1       |
| SB2915      | 15      | 1       |
| SB2922      | 22      | 1       |
| SB2928      | 28      | 1       |

Demounting Tongs



| Part number | Pipe OD | Bag qty |
|-------------|---------|---------|
| SB3010      | 10      | 1       |
| SB3015      | 15      | 1       |
| SB3022      | 22      | 1       |
| SB3028      | 28      | 1       |

Demounting Clip (UXL sizes)



| Part number | Pipe OD | Bag qty | Box qty |
|-------------|---------|---------|---------|
| UXLDC35     | 35      | 1       | 100     |
| UXLDC41     | 42      | 1       | 80      |
| UXLDC54     | 54      | 1       | 60      |



# Selecting the right pipe

Select the pipe and diameter for your application based on the required flow against pressure drop.

### Pipe flow rates

Maximum recommended flow rates according to ISO 4414

| Working Pressure |       | Aluminium Pipe |           |            |           |           |           | Nylon Pipe |           |          |          |
|------------------|-------|----------------|-----------|------------|-----------|-----------|-----------|------------|-----------|----------|----------|
| kPa              | (bar) | 15mm           | 22mm      | 28mm       | 35mm      | 42mm      | 54mm      | 10mm       | 15mm      | 22mm     | 28mm     |
| 20               | 0.2   | 0.86 l/s       | 2.11 l/s  | 3.57 l/s   | 9.81 l/s  | 15.0 l/s  | 28.0 l/s  | 0.33 l/s   | 0.79 l/s  | 2.0 l/s  | 2.9 l/s  |
| 40               | 0.4   | 1.32 l/s       | 3.27 l/s  | 5.49 l/s   | 10.2 l/s  | 17.0 l/s  | 43.0 l/s  | 0.51 l/s   | 1.21 l/s  | 3.0 l/s  | 4.5 l/s  |
| 63               | 0.63  | 1.80 l/s       | 4.38 l/s  | 7.39 l/s   | 13.7 l/s  | 22.9 l/s  | 59.0 l/s  | 0.69 l/s   | 1.64 l/s  | 4.1 l/s  | 6.0 l/s  |
| 80               | 0.8   | 2.08 l/s       | 5.19 l/s  | 8.91 l/s   | 16.5 l/s  | 27.4 l/s  | 70.0 l/s  | 0.81 l/s   | 1.90 l/s  | 4.8 l/s  | 7.2 l/s  |
| 100              | 1     | 2.46 l/s       | 6.14 l/s  | 10.43 l/s  | 19.3 l/s  | 32.0 l/s  | 82.0 l/s  | 0.97 l/s   | 2.25 l/s  | 5.7 l/s  | 8.4 l/s  |
| 125              | 1.25  | 2.93 l/s       | 7.25 l/s  | 12.05 l/s  | 22.4 l/s  | 37.9 l/s  | 97.0 l/s  | 1.14 l/s   | 2.68 l/s  | 6.7 l/s  | 9.8 l/s  |
| 160              | 1.6   | 3.59 l/s       | 8.55 l/s  | 14.67 l/s  | 27.5 l/s  | 46.0 l/s  | 120.0 l/s | 1.38 l/s   | 3.28 l/s  | 8.0 l/s  | 11.7 l/s |
| 200              | 2     | 4.25 l/s       | 10.78 l/s | 18.13 l/s  | 33.0 l/s  | 55.4 l/s  | 140.0 l/s | 1.64 l/s   | 3.88 l/s  | 9.9 l/s  | 14.8 l/s |
| 250              | 2.5   | 5.20 l/s       | 12.58 l/s | 21.53 l/s  | 39.9 l/s  | 66.9 l/s  | 170.0 l/s | 2.03 l/s   | 4.75 l/s  | 11.7 l/s | 17.3 l/s |
| 315              | 3.15  | 6.33 l/s       | 15.62 l/s | 26.47 l/s  | 48.5 l/s  | 82.1 l/s  | 210.0 l/s | 2.43 l/s   | 5.78 l/s  | 14.3 l/s | 21.7 l/s |
| 400              | 4     | 7.84 l/s       | 19.13 l/s | 32.33 l/s  | 59.9 l/s  | 100.0 l/s | 260.0 l/s | 3.00 l/s   | 7.15 l/s  | 17.7 l/s | 26.3 l/s |
| 500              | 5     | 9.46 l/s       | 23.65 l/s | 39.67 l/s  | 74.4 l/s  | 124.3 l/s | 320.0 l/s | 3.73 l/s   | 8.65 l/s  | 22.0 l/s | 32.2 l/s |
| 630              | 6.3   | 12.26 l/s      | 29.20 l/s | 49.47 l/s  | 90.0 l/s  | 150.0 l/s | 390.0 l/s | 4.57 l/s   | 11.15 l/s | 27.0 l/s | 40.2 l/s |
| 800              | 8     | 15.10 l/s      | 36.75 l/s | 61.73 l/s  | 115.0 l/s | 192.9 l/s | 490.0 l/s | 5.70 l/s   | 13.75 l/s | 34.0 l/s | 50.3 l/s |
| 1000             | 10    | 17.97 l/s      | 45.30 l/s | 75.47 l/s  | 141.3 l/s | 238.6 l/s | 610.0 l/s | 7.10 l/s   | 16.43 l/s | 42.0 l/s | 61.7 l/s |
| 1250             | 12.5  | 22.60 l/s      | 56.37 l/s | 96.40 l/s  | 178.8 l/s | 297.1 l/s | 750.0 l/s | 8.27 l/s   | 20.50 l/s | 52.3 l/s | 77.5 l/s |
| 1600             | 16    | 29.20 l/s      | 71.47 l/s | 120.00 l/s | 223.8 l/s | 375.7 l/s | 950.0 l/s | 10.70 l/s  | 26.50 l/s | 66.3 l/s | 97.5 l/s |

Note: The flow rates are based on 10% pressure drops for 10 and 15mm pipe sizes and 5% for 22, 28, 35, 42 and 54mm pipe sizes.

### John Guest Air working pressure and temperature

| Diameter | Temperature | Rigid Nylon Pipe | Powder Coated Aluminium Pipe | Copper Pipe | LLDPE Pipe |
|----------|-------------|------------------|------------------------------|-------------|------------|
| 4mm      | -20°C       | N/A              | N/A                          | N/A         | 10 bar     |
|          | 23°C        | N/A              | N/A                          | N/A         | 10 bar     |
|          | 65°C        | N/A              | N/A                          | N/A         | 7 bar      |
| 6mm      | -20°C       | N/A              | N/A                          | N/A         | 10 bar     |
|          | 23°C        | N/A              | N/A                          | N/A         | 10 bar     |
|          | 65°C        | N/A              | N/A                          | N/A         | 7 bar      |
| 8mm      | -20°C       | N/A              | N/A                          | N/A         | 10 bar     |
|          | 23°C        | N/A              | N/A                          | N/A         | 10 bar     |
|          | 65°C        | N/A              | N/A                          | N/A         | 7 bar      |
| 10mm     | -20°C       | N/A              | N/A                          | N/A         | 10 bar     |
|          | 23°C        | N/A              | N/A                          | N/A         | 10 bar     |
|          | 65°C        | N/A              | N/A                          | N/A         | 7 bar      |
| 12mm     | -20°C       | 10 bar           | N/A                          | N/A         | 10 bar     |
|          | 23°C        | 10 bar           | N/A                          | N/A         | 10 bar     |
|          | 65°C        | 7 bar            | N/A                          | N/A         | 7 bar      |
| 15mm     | -20°C       | 10 bar           | 10 bar                       | 10 bar      | 10 bar     |
|          | 23°C        | 10 bar           | 10 bar                       | 10 bar      | 10 bar     |
|          | 65°C        | 7 bar            | 7 bar                        | 7 bar       | 7 bar      |
| 18mm     | -20°C       | 10 bar           | 10 bar                       | N/A         | N/A        |
|          | 23°C        | 10 bar           | 10 bar                       | N/A         | N/A        |
|          | 65°C        | 7 bar            | 7 bar                        | N/A         | N/A        |
| 22mm     | -20°C       | 10 bar           | 10 bar                       | 10 bar      | N/A        |
|          | 23°C        | 10 bar           | 10 bar                       | 10 bar      | N/A        |
|          | 65°C        | 7 bar            | 7 bar                        | 7 bar       | N/A        |
| 28mm     | -20°C       | 10 bar           | 10 bar                       | 10 bar      | N/A        |
|          | 23°C        | 10 bar           | 10 bar                       | 10 bar      | N/A        |
|          | 65°C        | 7 bar            | 7 bar                        | 7 bar       | N/A        |

### SharkBite Air working pressure and temperature

| Diameter | Temperature | Nylon Pipe | PEXa Pipe | Anodised Aluminium Pipe | Powder Coated Aluminium Pipe | Copper Pipe | LLDPE Pipe |
|----------|-------------|------------|-----------|-------------------------|------------------------------|-------------|------------|
| 10mm     | -20°C       | 15 bar     | N/A       | N/A                     | N/A                          | 16 bar      | N/A        |
|          | 20°C        | 15 bar     | N/A       | N/A                     | N/A                          | 16 bar      | N/A        |
|          | 65°C        | 8 bar      | N/A       | N/A                     | N/A                          | 10 bar      | N/A        |
| 15mm     | -20°C       | 15 bar     | 16 bar    | 20 bar                  | 20 bar                       | 20 bar      | 10 bar     |
|          | 20°C        | 15 bar     | 16 bar    | 20 bar                  | 20 bar                       | 20 bar      | 10 bar     |
|          | 65°C        | 8 bar      | 9 bar     | 16 bar                  | 16 bar                       | 16 bar      | 7 bar      |
| 22mm     | -20°C       | 14 bar     | 16 bar    | 20 bar                  | 20 bar                       | 20 bar      | N/A        |
|          | 20°C        | 14 bar     | 16 bar    | 20 bar                  | 20 bar                       | 20 bar      | N/A        |
|          | 65°C        | 7 bar      | 9 bar     | 16 bar                  | 16 bar                       | 16 bar      | N/A        |
| 28mm     | -20°C       | 14 bar     | 16 bar    | 20 bar                  | 20 bar                       | 20 bar      | N/A        |
|          | 20°C        | 14 bar     | 16 bar    | 20 bar                  | 20 bar                       | 20 bar      | N/A        |
|          | 65°C        | 7 bar      | 9 bar     | 16 bar                  | 16 bar                       | 16 bar      | N/A        |
| 35mm     | -20°C       | N/A        | N/A       | 20 bar                  | 20 bar                       | 20 bar      | N/A        |
|          | 20°C        | N/A        | N/A       | 20 bar                  | 20 bar                       | 20 bar      | N/A        |
|          | 65°C        | N/A        | N/A       | 16 bar                  | 16 bar                       | 16 bar      | N/A        |
| 42mm     | -20°C       | N/A        | N/A       | 20 bar                  | 20 bar                       | 20 bar      | N/A        |
|          | 20°C        | N/A        | N/A       | 20 bar                  | 20 bar                       | 20 bar      | N/A        |
|          | 65°C        | N/A        | N/A       | 16 bar                  | 16 bar                       | 16 bar      | N/A        |
| 54mm     | -20°C       | N/A        | N/A       | 18 bar                  | 18 bar                       | 18 bar      | N/A        |
|          | 20°C        | N/A        | N/A       | 18 bar                  | 18 bar                       | 18 bar      | N/A        |
|          | 65°C        | N/A        | N/A       | 14 bar                  | 14 bar                       | 14 bar      | N/A        |

Note: Ball Valves. 16 bar @ 20°C max.

### System pipe sizing

To determine the correct size of pipe required for a closed loop network, select the flow and pipe length for your application from the tables. Velocity is not used in the calculation. The calculations show the data for an 8 and 16 bar system with SharkBite Anodised Aluminium system pipe, further data is available on request.

### 8 bar network pressure using hard anodised pipe with a maximum 0.24 bar (3%) pressure loss

| Flow  |         | Length (m) |     |     |     |     |     |      |      |      |      |  |  |
|-------|---------|------------|-----|-----|-----|-----|-----|------|------|------|------|--|--|
| Nm³/H | Nm³/min | 50         | 100 | 150 | 300 | 500 | 750 | 1000 | 1300 | 1600 | 2000 |  |  |
| 10    | 0.2     | 15         | 15  | 15  | 22  | 22  | 22  | 22   | 22   | 22   | 28   |  |  |
| 30    | 0.5     | 22         | 22  | 22  | 28  | 28  | 28  | 35   | 35   | 35   | 35   |  |  |
| 50    | 0.8     | 22         | 28  | 28  | 28  | 35  | 35  | 35   | 42   | 42   | 42   |  |  |
| 70    | 1.2     | 22         | 28  | 28  | 35  | 35  | 42  | 42   | 42   | 42   | 54   |  |  |
| 100   | 1.7     | 28         | 35  | 35  | 42  | 42  | 42  | 54   | 54   | 54   | 54   |  |  |
| 150   | 2.5     | 35         | 35  | 42  | 42  | 54  | 54  | 54   | 54   |      |      |  |  |
| 250   | 4.2     | 35         | 42  | 42  | 54  | 54  |     |      |      |      |      |  |  |
| 350   | 5.8     | 42         | 54  | 54  | 54  |     |     |      |      |      |      |  |  |
| 500   | 8.3     | 54         | 54  | 54  |     |     |     |      |      |      |      |  |  |
| 750   | 12.5    | 54         |     |     |     |     |     |      |      |      |      |  |  |

### 16 bar network pressure using hard anodised pipe with a maximum 0.49 bar (3%) pressure loss

| Flow  |         | Length (m) |     |     |     |     |     |      |      |      |      |  |  |
|-------|---------|------------|-----|-----|-----|-----|-----|------|------|------|------|--|--|
| Nm³/H | Nm³/min | 50         | 100 | 150 | 300 | 500 | 750 | 1000 | 1300 | 1600 | 2000 |  |  |
| 10    | 0.2     | 15         | 15  | 15  | 15  | 15  | 15  | 22   | 22   | 22   | 22   |  |  |
| 30    | 0.5     | 15         | 15  | 22  | 22  | 22  | 22  | 28   | 28   | 28   | 28   |  |  |
| 50    | 0.8     | 22         | 22  | 22  | 22  | 28  | 28  | 28   | 28   | 35   | 35   |  |  |
| 70    | 1.2     | 22         | 22  | 22  | 28  | 28  | 35  | 35   | 35   | 35   | 35   |  |  |
| 100   | 1.7     | 22         | 22  | 28  | 28  | 35  | 35  | 35   | 42   | 42   | 42   |  |  |
| 150   | 2.5     | 28         | 28  | 28  | 35  | 35  | 42  | 42   | 42   | 54   | 54   |  |  |
| 250   | 4.2     | 28         | 35  | 35  | 42  | 42  | 54  | 54   | 54   | 54   | 54   |  |  |
| 350   | 5.8     | 35         | 35  | 42  | 42  | 54  | 54  | 54   |      |      |      |  |  |
| 500   | 8.3     | 35         | 42  | 42  | 54  | 54  |     |      |      |      |      |  |  |
| 750   | 12.5    | 42         | 54  | 54  | 54  |     |     |      |      |      |      |  |  |
| 1000  | 16.7    | 54         | 54  | 54  |     |     |     |      |      |      |      |  |  |
| 1250  | 20.8    | 54         | 54  |     |     |     |     |      |      |      |      |  |  |
| 1500  | 25.0    | 54         |     |     |     |     |     |      |      |      |      |  |  |
| 1750  | 29.2    | 54         |     |     |     |     |     |      |      |      |      |  |  |
| 2000  | 33.3    | 54         |     |     |     |     |     |      |      |      |      |  |  |