John Guest®

Push-fit solutions for Air & Pneumatics

Technical Information

AN RWC BRAND

Contents

John Guest
Air & Pneumatics

Fast, reliable and efficient solutions... for compressed air and pneumatics

The John Guest range of push-fit fittings and pipe provide the ideal connection from compressor receiver to air line service components through to complete ring main and take off points. A Speedfit compressed air system can be installed quickly and easily, compared with other installation methods, time savings of at least 50% are easily achievable.

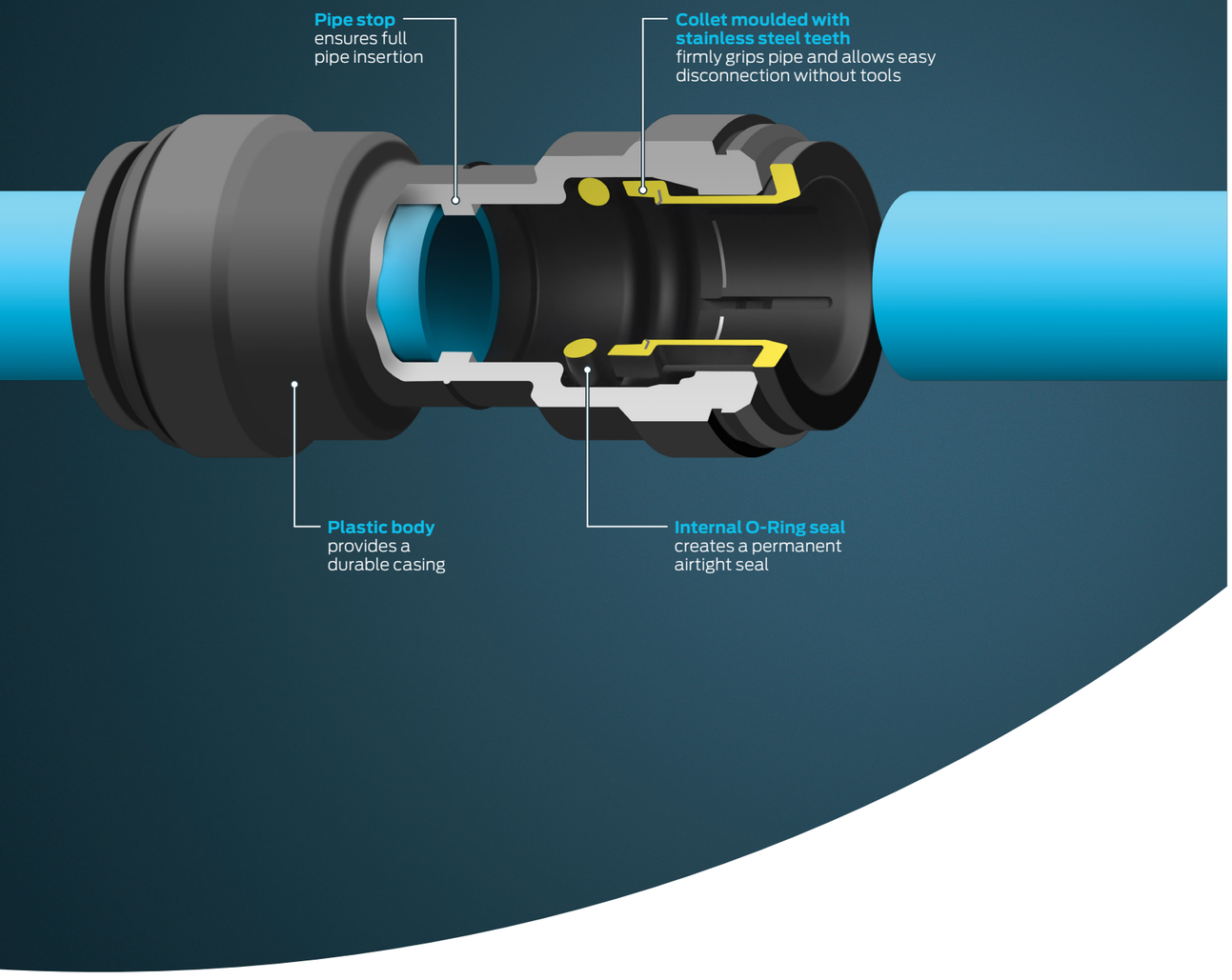
No need to prepare threaded pipe or solvent, all the connections can be made with a simple push-fit action. The system is then immediately ready for use. Complex systems can be assembled much more rapidly than with traditional methods and because fittings are easy to disconnect, systems can be altered or extended with much reduced production down time.

The fittings are produced in either a tough engineering plastics material or in brass in sizes 12mm to 28mm. They are intended for use with John Guest nylon, powder coated aluminium pipe, mild steel or copper and can also be used for a vacuum application.

- Installation time reduced by at least 50%
- Safe, secure, leakproof
- Easy to alter or extend a system
- Lightweight and easy to handle
- No corrosion, reduced maintenance

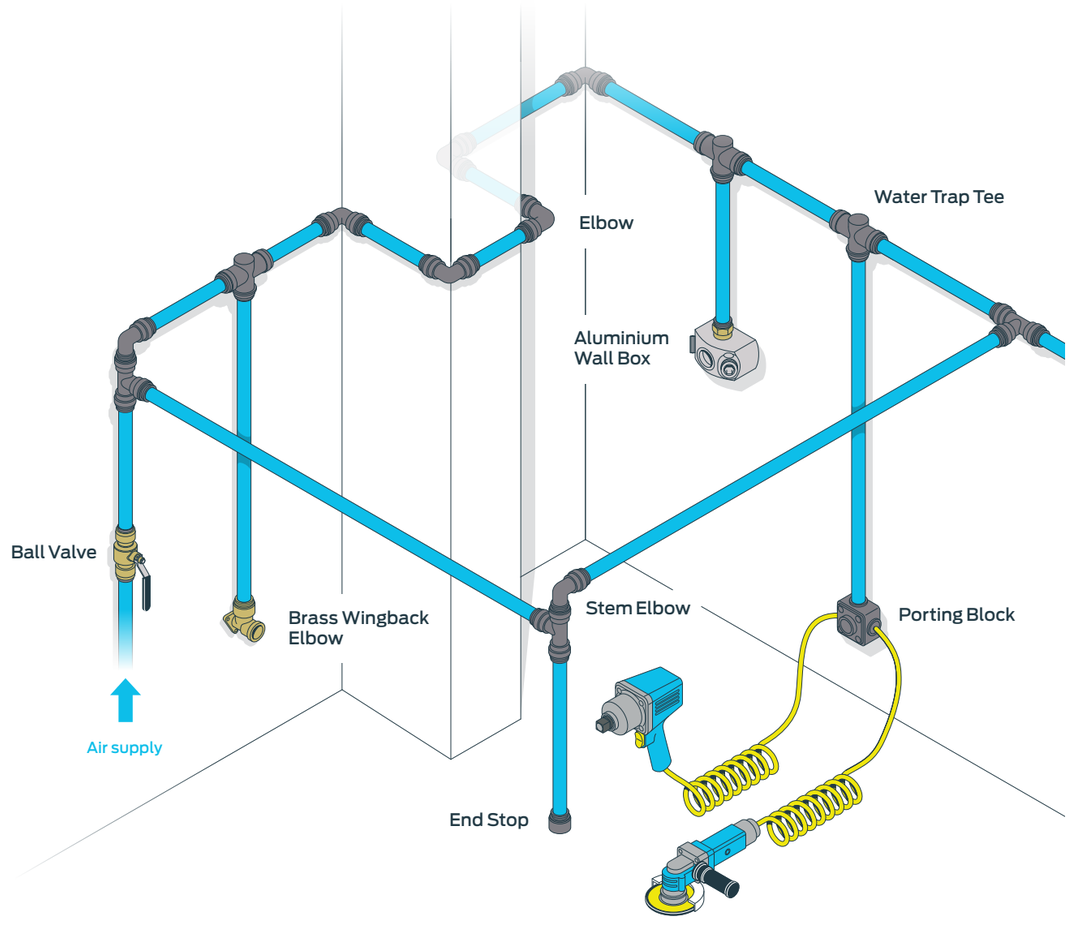
Inside John Guest technology

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.



System design

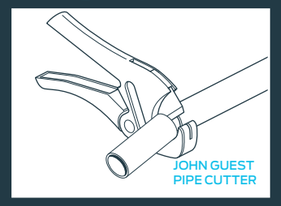
The John Guest Air & Pneumatics system offers rapid assembly from the compressor to air line, through to the complete ring main and take off points.



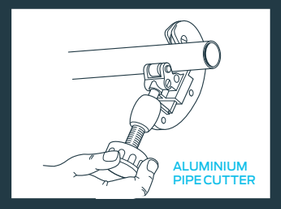
Making a connection

Connecting push-fit

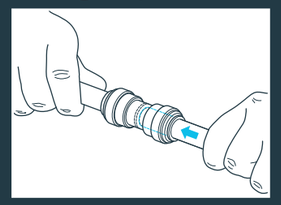
Cutting the pipe



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.

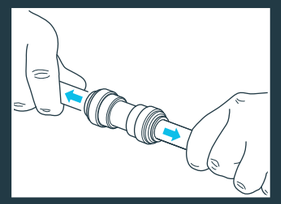


Making the push-fit connection



Push the pipe up to the pipe stop.

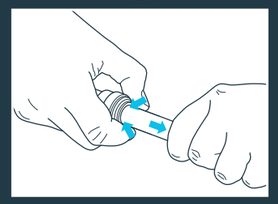
Check the connection is secure



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

Demounting push-fit

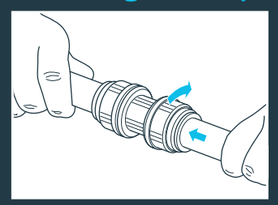
Demounting push-fit fittings



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

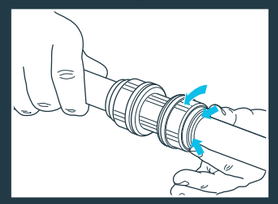
Connecting and demounting screw cap

Connecting screw cap fittings



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

Multiple pipes one solution

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

Powder Coated Aluminium Pipe

Powder Coated Aluminium Pipe in 15, 18, 22 and 28mm sizes. Manufactured in accordance to BS-EN755-1.

John Guest Nylon Pipe

Nylon pipe in 10, 15, 22 and 28mm sizes. Manufactured in accordance to DIN73378.

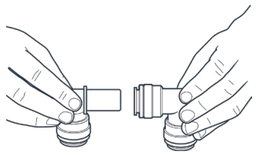
Copper Pipe

Connects compatibility sized copper pipes in 12 – 28 mm sizes that are manufactured in accordance with BS EN 1057. If 10mm annealed copper pipe is used, it must be re-calibrated in accordance with table 4 R250 tolerances of the above standard and a copper liner must be installed into the pipe prior to assembly.

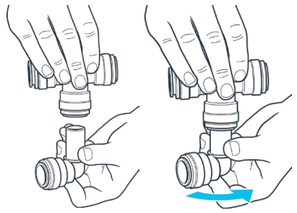
Unique features

Stem Elbow

Designed to simplify pipe connections in restricted spaces, the Stem Elbow gives an instant swivel fitting so a pipe can be orientated in any direction.



Can be used with an elbow to make 'U' turn connections.

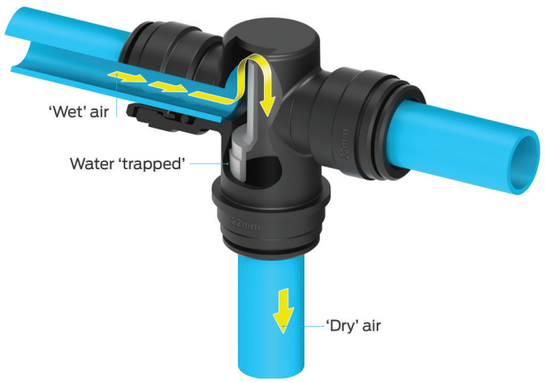


Can be used with a Tee.

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

Water Trap Tee

The Water Trap Tee from John Guest solves the on-going problem of moisture in a compressed air system and provides the easy alternative to the need to install "Swan Necks". The ingenious inside arrangement of the fitting allows air to flow, with minimum head loss, from the main to take-off point without allowing water to follow. The moisture is retained in the line to be drawn off at some suitable location.



Installation

It is of vital importance for the correct function of the Water Trap Tee that the air distribution system be nearly horizontal and that the outlet port be facing downwards.

Water Trap Tee Converter

The Water Trap Tee Convertor is a simple convenient way of converting a standard John Guest 28mm Tee to a Water Trap Tee. This will stop condensing water entering the vertical take off spur. The air supply needs to be installed with the correct fall and water drain points regularly vented.

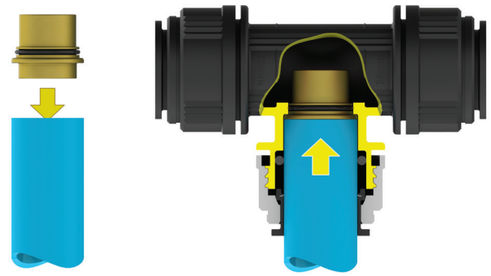
To assemble

Use either John Guest 28mm Nylon Pipe or 28mm copper pipe. The pipe to be cut square and be free of burrs.

Press the shorter spigot into the pipe. The fit on copper pipe will be loose, this will not affect the function.

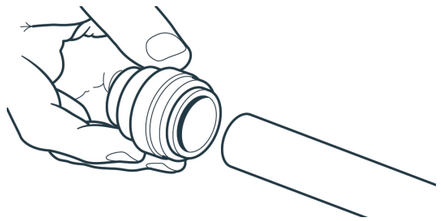
Push the pipe and convertor up to the pipe stop of the centre leg of the tee.

Turn the screw cap approx 1/4 turn to lock the pipe in position.



End Stop

The End Stop can be used to provide a permanent connection or a temporary shut off. Because it is easy to disconnect the fitting from the pipe, the End Stop can be put in place to be removed at a later date to allow a system to be extended or modified.



John Guest
Air & Pneumatics

Miniature fittings

We offer a range of 4mm fittings especially designed for miniature pneumatics applications. 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 to 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 on page 16.

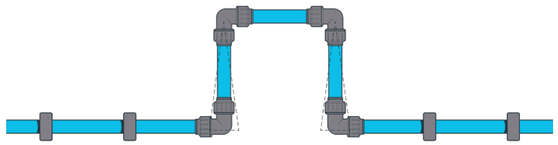
Installing a system

Thermoplastics have different properties to steel pipes and so different techniques need to be employed for the installation of the system. For example plastic pipe expands considerably more than metallic pipe, so the method of constraining the pipe needs to be suitable for this expansion to take place. If the pipe is constrained at both ends it will buckle and generate side loads and stress in the pipe. This can be alleviated by an expansion bend in the pipe work. Pipe should be able to slide through mounting brackets.

Plastic pipe work is much lighter than that of steel pipe work and so the mountings do not need to be as robust and using John Guest connectors means that the system can be easily modified to any new requirements quickly and without significant specialist tools such as threading equipment and pipe benders.

Using John Guest connectors means that no solvents or adhesives need to be employed in the installation. The coefficient of linear expansion of rigid nylon pipe is approximately 0.00012 metre per metre length per ºC. John Guest compressed air equipment is suitable to use above ground and below ground but we would strongly suggest that if it is installed below ground that it is installed in conduit so that the pipe can expand with temperature fluctuations and can easily be removed for service or maintenance.

John Guest Ltd. would remind all persons involved with installation and service of compressed air systems that reference should be made to “Approved Code of Practice - Safety of Pressure Systems” available from HMSO in the United Kingdom. For installation in other countries, the appropriate Codes of Practice should apply.

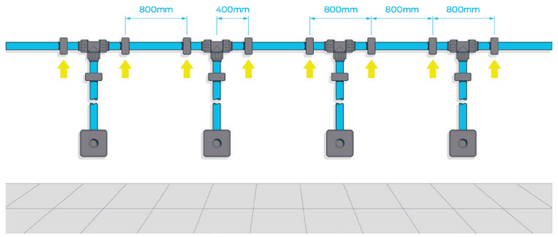


On long pipe runs, it is advisable to install an expansion bend, as shown in the diagram.

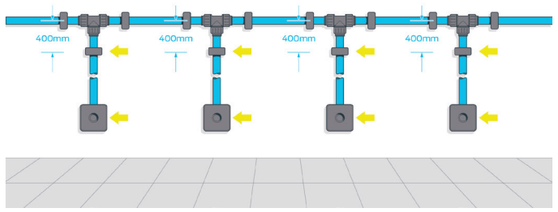
Condensate and dirt in the system

It is always desirable to have clean dry air at the outlets of a compressed air system, as condensate and dirt will affect the performance and life of ancillary equipment. We would strongly recommend that a filter be fitted to the system to clean the air and that John Guest Water Trap Tees be used to trap any residue condensate and this should be taken to a “drain off” facility to extract it from the system.

When installing a compressed air system, it is advisable to first attach the horizontal pipe clips and only attach the clips to the vertical pipes after a small amount of pressure has been applied to the system. This will ensure that the vertical pipes have positioned themselves correctly before they are clipped.

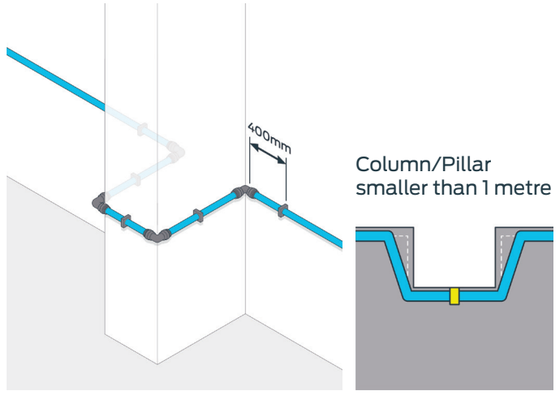


Phase 1: System without pressure

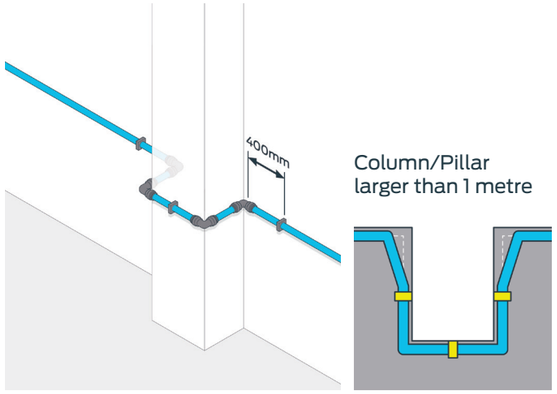


Phase 2: System with pressure

When installing around a column or pillar, maintain a distance of approximately 10cm between the wall and the pipe. Always maintain a distance of 400mm between the fittings and the pipe clip.



Note: All compressed air systems should be equipped with an air line water trap, we recommend our PMTT22E Water Trap Tee for this purpose (as shown on page 8 of this brochure).



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		Nylon Pipe					Aluminium Pipe			
kPa	(bar)	12mm	15mm	18mm	22mm	28mm	15mm	18mm	22mm	28mm
20	**0.2**	0.4 l/s	0.8 l/s	1.2 l/s	2.0 l/s	2.9 l/s	0.9 l/s	1.7 l/s	2.2 l/s	4.0 l/s
40	**0.4**	0.6 l/s	1.2 l/s	1.8 l/s	3.0 l/s	4.5 l/s	1.4 l/s	2.6 l/s	3.5 l/s	6.2 l/s
63	**0.63**	0.9 l/s	1.6 l/s	2.4 l/s	4.1 l/s	6.0 l/s	1.9 l/s	3.5 l/s	4.6 l/s	8.3 l/s
80	**0.8**	1.0 l/s	1.9 l/s	2.8 l/s	4.8 l/s	7.2 l/s	2.2 l/s	4.1 l/s	5.5 l/s	10.1 l/s
100	**1**	1.2 l/s	2.3 l/s	3.4 l/s	5.7 l/s	8.4 l/s	2.6 l/s	4.9 l/s	6.5 l/s	11.8 l/s
125	**1.25**	1.4 l/s	2.7 l/s	4.0 l/s	6.7 l/s	9.8 l/s	3.1 l/s	5.8 l/s	7.7 l/s	13.5 l/s
160	**1.6**	1.7 l/s	3.3 l/s	4.9 l/s	8.0 l/s	11.7 l/s	3.8 l/s	7.0 l/s	9.0 l/s	16.7 l/s
200	**2**	2.0 l/s	3.9 l/s	5.8 l/s	9.9 l/s	14.8 l/s	4.5 l/s	8.4 l/s	11.5 l/s	20.3 l/s
250	**2.5**	2.5 l/s	4.8 l/s	7.0 l/s	11.7 l/s	17.3 l/s	5.5 l/s	10.0 l/s	13.3 l/s	24.3 l/s
315	**3.15**	3.0 l/s	5.8 l/s	8.5 l/s	14.3 l/s	21.7 l/s	6.7 l/s	12.0 l/s	16.7 l/s	29.7 l/s
400	**4**	3.7 l/s	7.2 l/s	10.5 l/s	17.7 l/s	26.3 l/s	8.3 l/s	15.0 l/s	20.3 l/s	36.3 l/s
500	**5**	4.6 l/s	8.7 l/s	13.0 l/s	22.0 l/s	32.3 l/s	10.0 l/s	19.0 l/s	25.0 l/s	44.7 l/s
630	**6.3**	5.6 l/s	11.2 l/s	16.3 l/s	27.0 l/s	40.2 l/s	13.0 l/s	23.0 l/s	31.0 l/s	55.7 l/s
800	**8**	7.0 l/s	13.8 l/s	20.3 l/s	34.0 l/s	50.3 l/s	16.0 l/s	29.0 l/s	39.0 l/s	69.3 l/s
1000	**10**	8.7 l/s	16.4 l/s	24.7 l/s	42.0 l/s	61.7 l/s	19.0 l/s	36.0 l/s	48.0 l/s	84.7 l/s

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

Working pressure and temperature

Diameter	Temperature	Nylon Pipe	PEXa Pipe	Anodised Aluminium Pipe	Powder Coated Aluminium Pipe	Copper Pipe	LLDPE Pipe
10mm	-20ºC	15 bar	N/A	N/A	N/A	16 bar	N/A
	20ºC	15 bar	N/A	N/A	N/A	16 bar	N/A
	65ºC	8 bar	N/A	N/A	N/A	10 bar	N/A
15mm	-20ºC	15 bar	16 bar	20 bar	20 bar	20 bar	10 bar
	20ºC	15 bar	16 bar	20 bar	20 bar	20 bar	10 bar
	65ºC	8 bar	9 bar	16 bar	16 bar	16 bar	7 bar
22mm	-20ºC	14 bar	16 bar	20 bar	20 bar	20 bar	N/A
	20ºC	14 bar	16 bar	20 bar	20 bar	20 bar	N/A
	65ºC	7 bar	9 bar	16 bar	16 bar	16 bar	N/A
28mm	-20ºC	14 bar	16 bar	20 bar	20 bar	20 bar	N/A
	20ºC	14 bar	16 bar	20 bar	20 bar	20 bar	N/A
	65ºC	7 bar	9 bar	16 bar	16 bar	16 bar	N/A

John Guest
Air & Pneumatics

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. 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)									
Nm^3/H	Nm^3/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									

Technical specification - compressed air system

Working temperature range

Minimum Working Temperature -20ºC

Maximum Working Temperature +70ºC

The above is for use with air. For below 0ºC please consult our Customer Service Department.

Working pressure

The John Guest Compressed Air System is suitable for the following temperatures and pressures.

Temperature	Pressure
+ 23ºC	10 bar
+ 70ºC	7 bar

The above ratings are for air. For use with other fluids or at other temperatures and pressures please contact our Customer Service Department.

Pipe types

John Guest fittings are intended for use with John Guest nylon pipe but are also suitable for use with a wide range of plastic and soft metal pipes including UPVC, ABS, polyethylene, aluminium, nylon, mild steel and copper to the tolerances set out below. Soft plastic pipe, such as nylon to have a minimum wall thickness of 1.5mm. The pipe must have a good quality surface and be damage free.

Pipe tolerances

The John Guest fittings featured in this brochure are intended for pipes with outside diameters to the following tolerances.

Size	Tolerance
12mm to 28mm OD	+0.05 to -0.10 OD

Maximum torque values

The following maximum torque values should be applied.

Thread size	Plastic threads	Metal threads
3/8	3.0Nm	N/A
1/2	3.0Nm	4.0Nm
3/4	4.0Nm	5.0Nm
1	4.0Nm	5.0Nm

It is recommended that all installations are checked prior to use to determine that a seal has been made. The maximum torque figures quoted for use with John Guest fittings are dependant on the mating thread conforming to the relevant British or International thread standard.

Do not over tighten plastic fittings as this could cause undue stress and eventual failure. Recommended torque figures are shown above and must be adhered to. John Guest recommend OEM Customers consider replacing threaded 'ports' with the modern method of using John Guest Cartridge Systems.

Material specification

The fittings are made up of three components: Bodies are produced in strong engineering plastic or in brass. O-Rings are Nitrile rubber. Collets are produce in acetal copolymer with stainless steel teeth.

Applications

Pipe and fittings should be kept clean and undamaged before use. These products are designed for use with air. For other applications please contact our Customer Services Department. The system is not recommended for use with explosive gases, petroleum spirits and other fuels or for central heating systems.

Installations - our recommendations

The pressure rating and installation guidelines of the pipe employed must also be considered during the design of compressed air system. Pipe should be supported between 600mm to 800mm to prevent excessive load being applied to the fitting(s). These supports should not be closer than 25mm from the end of the fitting. John Guest fittings and pipe should only be connected after the air receiver and not direct to a compressor. We recommend collet covers be fitted when pipework is hidden inside walls and ceilings. It is recommended that all pipe and fittings installations are pressure tested after installation and before handing over to the final user.

John Guest
Air & Pneumatics

Side Loads

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

Note: Aluminium pipe should NOT be connected direct to a compressor.

Working Temperature Range (Air)

Minimum Working Temperature -20ºC

Maximum Working Temperature +70ºC

Also suitable for vacuum.

Working Pressure

Super Speedfit fittings are suitable for the following pressure.

Temperature	Size 4mm - 8mm 5/32" - 5/16"	10mm - 12mm 3/8" - 1/2"
- 20ºC	16 bar	10 bar
+ 20ºC	16 bar	10 bar
+ 65ºC	10 bar	7 bar

The above ratings are for air when Super Speedfit fittings are used with John Guest Nylon Tube. For use with other fluids or other pipe or at other temperatures and pressures, please consult our Customer Services Department.

Tube types

Plastic Tube

Polyethylene, Nylon and Polyurethane conforming to the tolerances shown below. For soft pipe or thin wall pipe we recommend the use of pipe inserts. The recommended minimum ID of Nylon pipes is shown in the table below.

Braided Tube

Use of Tube to Hose Stems and Elbows is essential when using braided pipe. Use of clamps to retain braided pipe on barbs is recommended.

Metal Tube (soft)

Brass, copper or mild steel conforming to the tolerances below.

Metal Tube (hard)

We do not recommend Super Speedfit Fittings for hard metal pipes.

It is essential that outside diameters be free from score marks and that the pipe be deburred before inserting into the fitting.

Tube Tolerance

Super Speedfit fittings are offered for Nylon pipe with the following dimensions:

Size (inches)	Tolerance (inches)	Size (mm)	Tolerance (mm)
5/32 - 3/16	+0.001/-0.003	4 - 5	+0.05/-0.07
1/4 - 1/2	+0.001/-0.004	6 - 22	+0.05/-0.10

Pneumatics fittings

Working Temperature Range (Air)

Side Loads

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

Material Specifications

The fittings are made up of three components:

Bodies. Bodies are produced in an acetal copolymer engineering plastic, especially suitable for pneumatics and corrosion free applications. Selected bodies and body parts are brass.

O-rings. Are Nitrile rubber.

Collets. Are produced in acetal copolymer with stainless steel teeth.

Chemicals

For use with chemicals or other potentially aggressive liquids, please refer to our Customer Services Department. In general, use only water or oil based paint.

DO NOT ALLOW CONTACT WITH Cellulose based paint, paint thinners or strippers, solder flux or aggressive cleaners (see Cleaners and Sanitising). Keep away from ozone generators such as electric motors, mercury vapour lamps and high voltage electrical equipment. Super Speedfit fittings are not recommended for use with explosive gases, petroleum spirits, and other fuels or for central heating systems. Installation and System Testing Fittings and pipe should be kept clean and undamaged before use. All pipe and fittings installations must be pressure tested after installation to ensure system integrity before handing over to the final user. See also “Making a connection” on page 06.

Maximum Torque Value in Nm

	M3	M5	1/8	1/4	3/8	1/2
Plastic Threads	-	-	1.5	1.5	3.0	3.0
Metal Threads						
LM Range	0.5	1.5	6.0	-	-	-
Superthread	-	-	6.0	10.0	10.0	10.0
Banjo Systems	-	-	6.0	10.0	10.0	10.0
Banjo Flow Controls	-	1.5	4.0	10.0	-	-
Metric Threaded Fittings	-	0.7	-	-	-	-

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

B. The maximum torque figures quoted for the use with John Guest fittings are dependent on the mating thread conforming to the relevant British or international thread standard.

Do not over tighten plastic fittings as this could cause undue stress and eventual failure. Recommended torque figures are shown above and must be adhered to. John Guest recommend OEM Customers consider replacing threaded ‘ports’ with the modern method of using John Guest Cartridge Systems.

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.

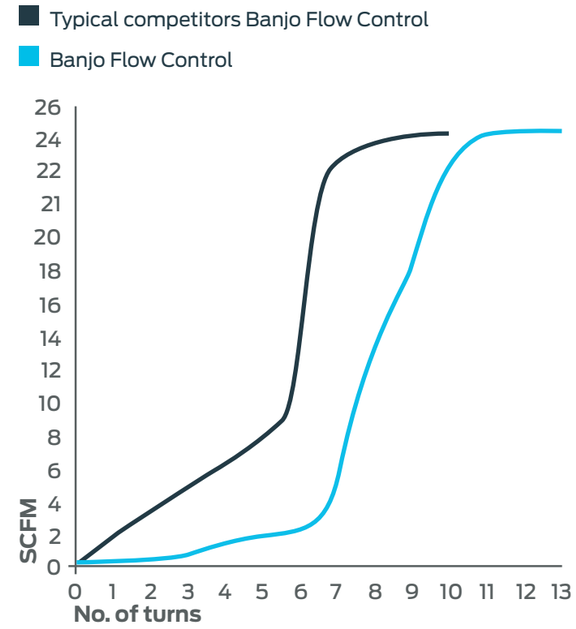
Suitable for both soft metal and plastic pipe.

Maximum Torque Values are shown on page 16.

Technical specifications Temperature range 5ºC - 70ºC

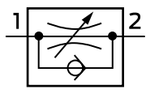
- Working pressure range 0.5 bar to 10 bar
- Materials used
- Acetal copolymer, brass, stainless steel and nitrile.
- Filtration
- Air supply should be filtered to 50 micron.

Banjo Flow Control (6mm x 1/8 BSP)



Typical response curve

ISO 1219-1 : 1991



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.

LLDPE pipe

John Guest Linear Low Density Polyethylene Tubing 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 @ 20ºC. At elevated temperatures, (50ºC), 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 or blue 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" - 1/2"	4mm	6mm - 12mm	15mm
+0.001/-0.004	+0.05/-0.07	+0.05/-0.10	+0.10/-0.10

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.

Metric Sizes

4mm OD x 2.5mm ID - 100m 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 - 100m 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.

8mm OD x 6mm ID - 100m 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 - 100m 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 - 100m 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 - 100m 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.

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.

Product selection and installation

John Guest fittings and related products are specifically designed and manufactured by John Guest to the Technical Specification set out in the John Guest Product Catalogues. All John Guest fittings and related products should be selected, installed, used and maintained in accordance with these Technical Specifications. It is the customer's / user's responsibility to ensure that John Guest fittings and related products are suitable for their intended applications, are properly installed and maintained and are used in accordance with the Technical Specifications. It is also the customer's / user's responsibility to provide its own customers with any relevant technical information about John Guest products it supplies them. If you have any questions about our technical specifications, please contact us.

Maintenance and Replacement Intervals

John Guest products generally require little maintenance but as a minimum we recommend routine visual inspection. Frequency of visual inspection will depend on severity of application and risk of failure. If after visual inspection John Guest products appear to be damaged, cracked, charred, discoloured, heat distorted, corroded or leaking they should be replaced. Product life is affected by the severity of the application, the hostility of the working environment, and contact with aggressive chemicals or liquids. It is therefore, important that specific replacement intervals be considered by specifiers/users/customers based on previous service life or when failure could result in unacceptable downtime, damage or injury risk. The company has a policy of continuous research and development and reserves the right to amend without notice the specification and design of all products illustrated in this catalogue. John Guest reserve the right to change the colour and shape of products. Photographs are for illustration purposes only.

Cleaners and Sanitising Acetal Fittings

Our advice to customers is to use cleaners and sanitising agents that are above pH4 and low in hypochlorite level. Acetal fittings and parts that are cleaned and/or sanitised should be rinsed immediately with copious amounts of clean tap water to remove all traces of the cleaners. Details of which products are made from acetal are shown in our catalogues but generally John Guest products incorporating acetal are designated by the part number prefix PI, PM, CI, CM and RM. Polypropylene fittings offer greater resistance to aggressive chemicals than acetal fittings. Polypropylene does not have the same mechanical properties as acetal and John Guest polypropylene fittings are generally designated by the part number prefix PP. Our material suppliers recommend ECOLAB Oasis 133 as a suitable external cleaner for acetal products manufactured by John Guest.

Warranty

While we give a warranty against defects in manufacture or materials, it is the responsibility of the specifier to ensure that fittings and related products are suitable for their application. The installation must be carried out correctly in accordance with our recommendations, complying with recognised codes of practice and relevant national standards, and be properly maintained. Please refer to our terms and conditions of sale.

John Guest®

Technical support

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

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

Reliance Worldwide Corporation (UK) Limited
Horton Road
West Drayton
UB7 8JL
United Kingdom
Tel: +44 (0) 1895 449233

www.rwc.co.uk

AN RWC BRAND