



John Guest®

The Push-fit People

Fluid System Products



INCLUDES NEW

- Appliance Service Kit & Appliance Fittings
- 3/8" LLDPE Cut Lengths
- Extended Range of Black Polypropylene Fittings
- 3/8" CTS Fittings

USA Catalog
January 2016



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



Quality Manufacture

Both design and manufacture are carried out in John Guest's modern, purpose-built facilities in the United Kingdom.

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

It is this commitment to quality that has resulted in the Company receiving prestigious awards from many of the world's leading testing and approvals organizations.

John Guest is a preferred supplier to many international companies.



FLUID SYSTEM PRODUCTS



John Guest's Standard line of Push-In Fittings, Shut-off Valves, and Polyethylene Tubing has been designed for use with a wide range of industrial water treatment applications involving Water Purification, Reverse Osmosis, Ice Makers, Beverage Dispensing, Vending & OCS, R.V. and Marine, Car Washing Systems and many more.

The fittings are simple to use and require no tools to make reliable, leak-free connections.

Standard Push-In Fittings, Shut-Off Valves, and Polyethylene Tubing are produced from FDA compliant materials and are listed with NSF International Standards 51 and 61.

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How to make a Standard Connection

MAKING A GOOD CONNECTION:

To make a connection, the tube is simply pushed in by hand; the unique patented John Guest collet locking system then holds the tube firmly in place without deforming it or restricting flow.



CUT THE TUBE SQUARE



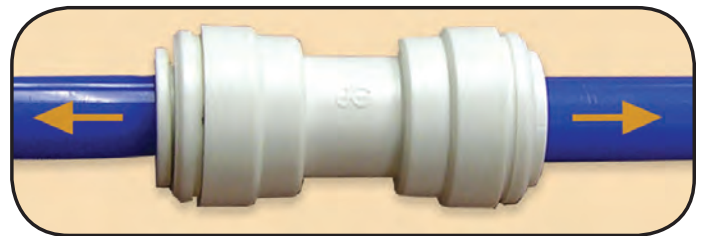
Cut the tube square and remove burrs and sharp edges. Ensure that the outside diameter is free from score marks. For soft or thin-walled plastic tubing we recommend the use of a tube insert.

PUSH UP TO TUBE STOP



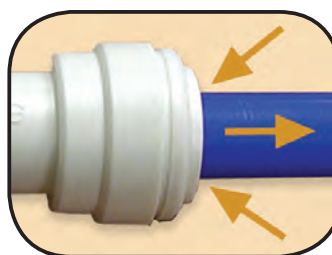
Push the tube into the fitting and up to the tube stop.

PULL TO CHECK SECURE



Pull on the tube to check that it is secure. Test the system before use.

TO DISCONNECT Push in collet and remove tube



To disconnect, ensure that the system is depressurized, push the collet square against the fitting. With the collet held in this position the tube can be removed.



Inch Polypropylene Fittings

The PP Range of inch-size push-in fittings is offered for tube sizes 1/4" O.D. to 1/2" O.D. The fittings are manufactured in white polypropylene with food grade EPDM O-rings. They have been developed to satisfy the filtered pure water market and wide range of applications.

The PP Range is NOT suitable for compressed air applications. For these situations we recommend the PI Range on pages 9-12.

Working Pressures and Temperatures

Water	Max.	150 psi at 70°F	(Max. 10 Bar at 20°C)
	Max.	60 psi at 140°F	(Max. 4 Bar at 60°C)
	Min.	33°F/1°C	

Detailed technical information is shown on page 31.

Prices are subject to change without notice.



MALE CONNECTOR NPTF THREAD



PART NO.	TUBE OD	THREAD NPTF	BAG QTY	BOX QTY
PP010821W	1/4	- 1/8	10	500
PP010822W	1/4	- 1/4	10	400
PP010823W	1/4	- 3/8	10	400
PP011222W	3/8	- 1/4	10	250
PP011223W	3/8	- 3/8	10	250
PP011224W	3/8	- 1/2	10	250
PP011623W	1/2	- 3/8	10	150
PP011624W	1/2	- 1/2	10	150

UNION CONNECTOR



PART NO.	TUBE OD	BAG QTY	BOX QTY
PP0408W	1/4	10	400
PPM0408W	5/16	10	300
PP0412W	3/8	10	200
PP0416W	1/2	10	100

PLUG



PART NO.	STEM OD	BAG QTY	BOX QTY
PP0808W	1/4	10	500
PPM0808W	5/16	10	500
PP0812W	3/8	10	400
PP0816W	1/2	10	300

UNION TEE



PART NO.	TUBE OD	BAG QTY	BOX QTY
PP0208W	1/4	10	300
PPM0208W	5/16	10	200
PP0212W	3/8	10	100
PP0216W	1/2	10	80
Blue Collet			
PP0208W-B	1/4	10	300

STEM ADAPTER NPTF THREAD



PART NO.	STEM OD	THREAD NPTF	BAG QTY	BOX QTY
PP050821W	1/4	x 1/8	10	500
PP050822W	1/4	x 1/4	10	500
PP051222W	3/8	x 1/4	10	300
PP051223W	3/8	x 3/8	10	200
PP051623W	1/2	x 3/8	10	250
PP051624W	1/2	x 1/2	10	200

SWIVEL ELBOW NPTF THREAD



PART NO.	TUBE OD	THREAD NPTF	BAG QTY	BOX QTY
PP090821W	1/4	x 1/8	10	300
PP090822W	1/4	x 1/4	10	200
PP091222W	3/8	x 1/4	10	100
PP091223W	3/8	x 3/8	10	100

UNION ELBOW



PART NO.	TUBE OD	BAG QTY	BOX QTY
PP0308W	1/4	10	400
PPM0308W	5/16	10	300
PP0312W	3/8	10	200
PP0316W	1/2	10	100
Blue Collet			
PP0308W-B	1/4	10	400

REDUCER



PART NO.	STEM OD	TUBE OD	BAG QTY	BOX QTY
PP061208W	3/8	- 1/4	10	400
PP061210W	3/8	- 5/16	10	400
PP061612W	1/2	- 3/8	10	200
PP062008W	5/8	- 1/4	10	200
PP062012W	5/8	- 3/8	10	200
PP062016W	5/8	- 1/2	10	150

SWIVEL BRANCH TEE CENTER LEG NPTF THREAD



PART NO.	TUBE OD	THREAD NPTF	BAG QTY	BOX QTY
PP100821W	1/4	x 1/8	10	200
PP100822W	1/4	x 1/4	10	200
PP101222W	3/8	x 1/4	10	100
PP101223W	3/8	x 3/8	10	100

SWIVEL MALE RUN TEE NPTF THREAD



PART NO.	TUBE OD	THREAD NPTF	BAG QTY	BOX QTY
PP110821W	1/4	x 1/8	10	200
PP110822W	1/4	x 1/4	10	200
PP111222W	3/8	x 1/4	10	100
PP111223W	3/8	x 3/8	10	100

BULKHEAD UNION



PART NO.	TUBE OD	Mounting Hole Dia.	BAG QTY	BOX QTY
PP1208W	1/4	0.67	10	200
PP1212W	3/8	0.83	10	100
PP1216W	1/2	1.06	5	50

Polypropylene Bulkhead Unions are not intended for submerged use.

REDUCING BULKHEAD UNION



PART NO.	TUBE OD	TUBE OD	Mounting Hole Dia.	BAG QTY	BOX QTY
PP121208W	3/8	- 1/4	0.83	10	150

Polypropylene Bulkhead Unions are not intended for submerged use.

REDUCING UNION CONNECTOR



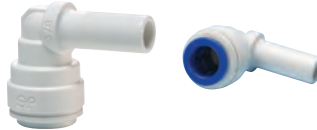
PART NO.	TUBE OD	TUBE OD	BAG QTY	BOX QTY
PP201208W	3/8	- 1/4	10	250
PP201612W	1/2	- 3/8	10	150

REDUCING ELBOW



PART NO.	TUBE OD	TUBE OD	BAG QTY	BOX QTY
PP211008W	5/16	- 1/4	10	300
PP211208W	3/8	- 1/4	10	200
PP211612W	1/2	- 3/8	10	150

PLUG IN ELBOW



PART NO.	STEM OD	TUBE OD	BAG QTY	BOX QTY
PP220808W	1/4	- 1/4	10	500
PPM220808W	5/16	- 5/16	10	400
PP221208W	3/8	- 1/4	10	300
PP221212W	3/8	- 3/8	10	200
PP221616W	1/2	- 1/2	10	150
Blue Collet				
PP221212W-B	3/8	- 3/8	10	200

TWO WAY DIVIDER



PART NO.	TUBE OD	BAG QTY	BOX QTY
PP2312W	3/8	10	150

UNEQUAL TWO WAY DIVIDER



PART NO.	TUBE OD INLET	TUBE OD OUTLET	BAG QTY	BOX QTY
PP241208W	3/8	x 1/4	10	200

TUBE TO HOSE STEM



PART NO.	STEM OD	HOSE ID	BAG QTY	BOX QTY
PP251212W	3/8	- 3/8	10	400
PP251216W	3/8	- 1/2	10	300
PP251612W	1/2	- 3/8	10	300
PP251616W	1/2	- 1/2	10	250

REDUCING TEE



PART NO.	TUBE OD END	TUBE OD END	TUBE OD BRANCH	BAG QTY	BOX QTY
PP30080812W	1/4	x 1/4	x 3/8	10	150
PP30120812W	3/8	x 1/4	x 3/8	10	150
PP30121208W	3/8	x 3/8	x 1/4	10	150
PP301612W	1/2	x 1/2	x 3/8	10	50

FIXED TEE ADAPTER



PART NO.	TUBE OD END	TUBE OD END	NPTF BRANCH	BAG QTY	BOX QTY
PP641223W	3/8	x 3/8	x 3/8	10	150

FAUCET CONNECTOR UNS THREAD



PART NO.	TUBE OD	THREAD UNS	BAG QTY	BOX QTY
PP3208U7W	1/4	x 7/16 - 24	10	400
PP3212U7W	3/8	x 7/16 - 24	10	300

7/16 - 24 UNS = 1/4 Compression Threads

FEMALE ADAPTER NPTF THREAD



PART NO.	TUBE OD	THREAD NPTF	BAG QTY	BOX QTY
PP450821W	1/4	x 1/8	10	400
PP450822W	1/4	x 1/4	10	200
PP451222W	3/8	x 1/4	10	200
PP451223W	3/8	x 3/8	10	150

NEW END CAP



PART NO.	TUBE OD	BAG QTY	BOX QTY
PP4608W	1/4	10	500

FIXED ELBOW NPTF THREAD



PART NO.	TUBE OD	THREAD NPTF	BAG QTY	BOX QTY
PP480821W	1/4	x 1/8	10	500
PP480822W	1/4	x 1/4	10	400
PP480823W	1/4	x 3/8	10	300
PP481222W	3/8	x 1/4	10	200
PP481223W	3/8	x 3/8	10	200
PP481623W	1/2	x 3/8	10	150

THREE WAY DIVIDER



PART NO.	TUBE OD INLET	TUBE OD OUTLET	BAG QTY	BOX QTY
PP491208W	3/8	x 1/4	150	150

STACKABLE TEE CONNECTOR



PART NO.	TUBE OD INLET	STEM OD	TUBE OD OUTLET	BAG QTY	BOX QTY
PP531212W	3/8	x 3/8	x 3/8	10	150

NEW FEMALE CONNECTOR



PART NO.	TUBE OD	UNEQF THREAD	BAG QTY	BOX QTY
PP6008U9W	1/4	9/16-24	10	300

Working Pressure and Temperature Range for Acetal Fittings (PI, SI, SM and PM Range).

		Temp. Pressure	
		Size	Size
		5/32" - 5/16" 4mm - 8mm	3/8" x 1/2" 10mm - 22mm
Air	-4°F	230 psi	150 psi
Potable	+33°F	230 psi	150 psi
Liquids	+68°F	230 psi	150 psi
and Air	+150°F	150 psi	100 psi

Also suitable for vacuum

For Polypropylene Working Pressure and Temperature Range, please refer to page 5.

Depending on the tube used, under certain conditions fittings may be used at higher pressures and temperatures. Please refer to our Technical Support Department for guidance. Note 1 Bar = 14.5 PSIG.

Tube Types

Plastic Tube - Polyethylene, nylon and polyurethane conforming to the tolerances shown below. For soft tubing or thin wall tube we recommend the use of tube inserts.

Braided Tube - Use of Tube to Hose Stems listed on page 9 is essential when using braided tube or hose. The use of clamps to retain braided tube 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 or chrome plated tubes.

For stainless steel and other polished metal tubes we recommend the use of Superseal fittings. These are shown on page 14 of this catalog.

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

Tube Tolerances

Super Speedfit® fittings are offered for tubes with outside diameters to the following tolerances.

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

Installation and System Testing

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

All tube and fittings installations must be pressure tested after installation to ensure system integrity before handing over to the final user. Refer to "How to make a connection".

Chemicals

For use with chemicals or other potentially aggressive liquids, please contact our Technical Support Department.

Super Speedfit fittings are not recommended for use with explosive gases, petroleum spirits, and other fuels or for central heating systems.

Collet Covers

Are available as additional security against removal of the tube or to provide a simple means of color coding. The cover is offered in a range of six colors. Please see page 23 of this catalog.

Food Quality



All the fittings in this catalog are produced in Food and Drug Administration (FDA) approved materials and are therefore recommended for food quality applications.

The wetted surfaces of John Guest PI, PM, SI, SM, CI, CM and NC plastic fittings, PPSV and ASV Valves, and PE Tubing are in compliance with FDA requirements for direct contact with food as detailed in 21CFR part 177.2470 for the body and 177.2600 for the O-ring.

NSF International Standard 51 and 61.

Maximum Torque Values for Plastic Threads BSP, BSPT & NPT.

Do not overtighten plastic threaded fittings as this could cause undue stress and eventual failure. Maximum recommended torque figures are shown below.

	Threads		
	1/8" - 1/4"	3/8" - 1/2"	3/4"
Maximum Torque	1.0ft lbs 1.5Nm	2ft lbs 3.0Nm	3ft lbs 4.0Nm

John Guest recommends that OEM customers consider replacing threaded ports with the more modern Cartridge Systems.

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 Speedfit fittings are dependent on the mating thread conforming to the relevant U.S., British or International thread standard.

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 damaged, cracked, charred, discolored, heat distorted or corroded, they should be replaced. Any product that is or appears to be leaking 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.

Cleaners and Sanitizing of Fittings

The external surfaces of John Guest products must not come into contact with oxidizing or acidic cleaners and sanitizing agents, for example (but not limited to) those below pH 4, high in sodium hypochlorite level (bleach) or containing hydrogen peroxide. Our plastic material suppliers recommend ECOLAB Oasis 133 as a suitable cleaner for the external surfaces of products manufactured by John Guest. Several different methods exist for sanitizing the internal surfaces of

fluid systems, including sodium hypochlorite, hydrogen peroxide, chlorine dioxide or ozone. It is entirely the responsibility of the end user to determine if the chosen method is suitable for use with John Guest products over the planned working life of the system. However, to avoid unnecessary early failure, John Guest requires that the disinfection solution must be immediately flushed out at all draw off points with fresh, wholesome water at the end of the disinfection period. **The solution must not be left in the system.** Disinfection solutions must only come into contact with the internal (fluid carrying) surfaces of the system. If any other surfaces of a fitting come into contact with disinfection solution **the whole fitting must be replaced immediately.** Polypropylene fittings offer greater resistance to aggressive chemicals but does not have the same mechanical properties as other materials. John Guest polypropylene fittings are generally designated by the part number prefix PP or PPM.

Our material suppliers recommend ECOLAB Oasis 133 as a suitable external cleaner for products manufactured by John Guest.

Responsibility of Use

While we give a warranty against defects in manufacture or materials, it is the responsibility of the user/installer 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 recognized codes of practice and relevant national standards, and be properly maintained. Please refer to our terms and conditions of sale.

Side Load

Fittings should not be subject to excessive side loads and they should not be used as support brackets. Tubing and fittings should be adequately supported to prevent excessive side loading.

Product Selection and Installation

John Guest fittings and related products are specifically designed and manufactured by John Guest to the Technical Specifications set out in the John Guest Product Catalog. 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, and 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 customers with any relevant technical information about John Guest products it supplies them.

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 catalog. John Guest reserves the right to change the color and shape of products. Photographs are for illustration purposes only.

Subject to our Terms and Conditions of Sale shown on page 36-37.

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