

#### **Technical Specification**

#### Working Pressure and Temperature Range

Super Speedfit fittings are suitable for the following pressures and temperatures.

Temp.	Pre	essure
	5/32" - 5/16" 4mm - 8mm	3/8" -1/2" 10mm - 22mm
Air		
- 20°C	16 Bar	10 Bar
Potable Liquids and Air		
+1°C	16 Bar	10 Bar
+20°C	16 Bar	10 Bar
+65°C	10 Bar	7 Bar

Also suitable for vacuum

Depending on the tube used, under certain conditions fittings may be used at higher pressures and temperatures. Please refer to our Customer Services 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 pages 5 and 12 is essential when using tube. 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 chromium plated tubes.

For stainless steel and other polished metal tubes we recommend the use of Superseal fittings. These are shown on page 9 of this brochure. 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. See also "How to make a connection"

#### 1/4 Turn Valves

These valves have been designed to allow temporary servicing of downstream equipment and must only be used in the fully open or fully closed position. DO NOT USE THESE VALVES: In a partially open position to control flow; to provide a permanent termination; without tubing assembled or plugged (or threaded connections sealed, or as a tap or "faucet".

#### 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.

#### **Collet Covers**

Are available as additional security against removal of the tube or to provide a simple means of colour coding. The cover is offered in a range of six colours. Please see page 26 of this brochure.

Food Quality 77 All the fittings in the brochure are produced in Food and Drug Administration (FDA) approved materials and are therefore recommended for food quality applications.

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

Plastic threads are not generally as strong as brass threads. Customers and end users should be aware of this when choosing products for their applications. Overtightening of plastic threads will cause undue stress and eventual cracking and leakage. The maximum torque figures for BSP and BSPT threads used on John Guest fittings in mating threads conforming to the relevant BS or International thread standards are shown below.

	Threads		
	1/8 - 1/4	3/8 - 1/2	3/4
Max. Torque	1.5Nm	3.0Nm	4.0Nm

John Guest recommend OEM customers to 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.

#### 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, discoloured, 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 Sanitising of Fittings

The external surfaces of John Guest products must not come into contact with oxidising or acidic cleaners and sanitising 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 sanitising 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 than Acetal fittings but do not have the same mechanical properties. John Guest polypropylene fittings are generally designated by the part number prefix PP or PPM.

#### Side Loads

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

#### Warranty

Whilst 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.



#### **How Super Speedfit Works**

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.

#### **Materials of construction**

'O' ring provides a

leakproof seal

Super Speedfit fittings are made up of three components:

Bodies are produced in an acetal copolymer or polypropylene. 'O' rings are Nitrile rubber or EPDM.

**Collets** are produced in acetal copolymer or polypropylene with stainless steel teeth.



The Collet (gripper) has stainless steel teeth which hold the tube firmly in position while the 'O' ring provides a permanent leakproof seal.

#### How to make a connection

Cut the tube square



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

Push up to tube stop



Push the tube into the fitting, to the tube stop.

Pull to check secure



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

- Collet

Stainless steel teeth grip the pipe

#### To disconnect

Push in collet and remove tube



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



<del>J John Guest</del>®

#### **Grey Acetal Fittings**

PI 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 N<sup>2</sup>/CO<sup>2</sup> (installed in accordance with The British Beer and Pub Association Code of Practice) mixed gas dispense lines and in pneumatic applications and vacuum.

Technical information shown on page 34.



# for liquids & inert gases

#### STRAIGHT ADAPTOR BSPT Thread



PART NO.	TUBE OD	1	HREAD BSPT
PM010401S	5/32	х	1/8
PM010402S	5/32	х	1/4
PI010601S	3/16	х	1/8
PI010602S	3/16	х	1/4
PI010801S	1/4	х	1/8
PI010802S	1/4	х	1/4
PM010801S	5/16	х	1/8
PM010802S	5/16	х	1/4
PM010803S	5/16	х	3/8
PI011202S	3/8	х	1/4
PI011203S	3/8	х	3/8
PI011603S	1/2	х	3/8
PI011604S	1/2	x	1/2

**STRAIGHT ADAPTOR** 

TUBE OD

For use with spot face ports.

PART NO.

PI010812S

PI011212S

PI011213S

PI011613S

THREAD

BSP

1/4 x 1/4

3/8 x 1/4

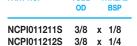
3/8 x 3/8

1/2 x 3/8

**BSP** Thread

#### STRAIGHT ADAPTOR **BSP** Thread





3/8" x 1/4" has special large seal for use with chamfered face ports.

No thread seal on 3/8" x 1/8"

#### STRAIGHT ADAPTOR NPTF Thread



PART NO.	TUBE OD	1	THREAD NPTF	
PM010421S	5/32	х	1/8	
PM010422S	5/32	х	1/4	
PI010621S	3/16	х	1/8	
PI010821S	1/4	х	1/8	
PI010822S	1/4	х	1/4	
PI010823S	1/4	х	3/8	
PM010821S	5/16	х	1/8	
PM010822S	5/16	х	1/4	
PM010823S	5/16	х	3/8	
PI011221S	3/8	х	1/8	
PI011222S	3/8	х	1/4	
PI011223S	3/8	х	3/8	
PI011224S	3/8	х	1/2	
PI011623S	1/2	х	3/8	
PI011624S	1/2	х	1/2	
PI012026S	5/8	х	3/4	

#### **STRAIGHT ADAPTOR** British Nipple Type



PART NO.	TUBE OD		THREAD BSW
PI0106E5S	3/16	х	1/2 - 24
PI0108E5S	1/4	х	1/2 - 24
PM0108E5S	5/16	х	1/2 - 24
PM0108E6S	5/16	х	9/16 - 24
PI0112E5S	3/8	х	1/2 - 24
PI0112E6S	3/8	х	9/16 - 24

#### **STRAIGHT ADAPTOR** MFL Thread

6			
PART NO.	TUBE OD		THREAD MFL
PI0108F4S	1/4	x	1/4
PI0112F4S	3/8	х	1/4
PI0112F5S	3/8	х	5/16
PI0112F6S	3/8	х	3/8
PI0112F8S	3/8	х	1/2
PI0116F8S	1/2	х	1/2
PM0108C5S	5/16	х	1/2 - 16 UN
PI0112C5S	3/8	x	1/2 - 16 UN



#### OUTLET ADAPTOR Parallel Thread

C Chill	1	
PART NO.	TUBE OD	THREAD BSP
NC128/I12	3/8	x 1/4

EQUAL ELBOW

50		
PART NO.	TUBE	
PM0304S		
	5/32	
PI0306S	3/16	
PI0308S	1/4	
PM0308S	5/16	
PI0312S	3/8	
PI0316S	1/2	
PI0308S-B	1/4	Blue Collet

**RIGID ELBOW** 

NPTF Thread



PART NO.	TUBE OD	Т	HREAD
PI480821S	1/4	x	1/8
PI480822S	1/4	х	1/4
PI480823S	1/4	х	3/8
PI481022S	5/16	х	1/4
PI481023S	5/16	х	3/8
PI481222S	3/8	х	1/4
PI481223S	3/8	х	3/8
PI482024S	5/8	х	1/2

#### EQUAL STRAIGHT CONNECTOR

	()
PART NO.	TUBE
	OD
PM0404S	5/32
PI0406S	3/16
PI0408S	1/4
PM0408S	5/16
PI0412S	3/8
PI0416S	1/2

#### **REDUCING ELBOW**

PART NO.	TUBE		TUBE	
	OD		OD	
PM210804S	5/16	-	5/32	
PI211006S	5/16	-	3/16	
PI211008S	5/16	-	1/4	
PI211206S	3/8	-	3/16	
PI211208S	3/8	-	1/4	
PI211210S	3/8	-	5/16	
PI211610S	1/2	-	5/16	
PI211612S	1/2	-	3/8	

#### REDUCING STRAIGHT CONNECTOR

0			
TUBE		TUBE	
00		00	
1/4	-	3/16	
5/16	-	5/32	
5/16	-	3/16	
5/16	-	1/4	
3/8	-	3/16	
3/8	-	1/4	
3/8	-	5/16	
1/2	-	1/4	
1/2	-	5/16	
1/2	-	3/8	
	OD 1/4 5/16 5/16 5/16 3/8 3/8 3/8 3/8 1/2 1/2	OD 1/4 - 5/16 - 5/16 - 5/16 - 3/8 - 3/8 - 3/8 - 3/8 - 1/2 - 1/2 -	OD         OD           1/4         -         3/16           5/16         -         5/32           5/16         -         3/16           5/16         -         1/4           3/8         -         1/4           3/8         -         1/4           3/8         -         1/4           3/8         -         5/16           1/2         -         1/4

#### **STEM ELBOW**

5			
PART NO.	STEM		TUBE
	OD		OD
PM220404S	5/32	-	5/32
PI220606S	3/16	-	3/16
PI220808S	1/4	-	1/4
PM220808S	5/16	-	5/16
PI221206S	3/8	-	3/16
PI221208S	3/8	-	1/4
PI221210S	3/8	-	5/16
PI221212S	3/8	-	3/8
PI221616S	1/2	-	1/2

#### EQUAL TEE

6	()	
PART NO.	TUBE	
	OD	
PM0204S	5/32	
PI0206S	3/16	
PI0208S	1/4	
PM0208S	5/16	
PI0212S	3/8	
PI0216S	1/2	

#### **REDUCING TEE**







### **JG** John Guest® daptabilitv

#### SWIVEL ELBOW **BSPT Thread**



PART NO.	TUBE OD	T	HREAD BSPT
PI090601S	3/16	х	1/8
PI090801S	1/4	х	1/8
PI090802S	1/4	х	1/4
PM090801S	5/16	х	1/8
PM090802S	5/16	х	1/4
PM090803S	5/16	х	3/8
PI091202S	3/8	х	1/4
PI091203S	3/8	х	3/8
PI091603S	1/2	х	3/8
PI091604S	1/2	x	1/2

#### SWIVEL BRANCH TEE BSPT Thread

TUBE OD	1	HREAD BSPT
2/16	~	1/8
	~	1/8
., .	~	
., .	~	1/4
5/16	Х	1/8
5/16	Х	1/4
5/16	х	3/8
3/8	х	1/4
3/8	х	3/8
1/2	х	3/8
1/2	x	1/2
	OD 3/16 1/4 1/4 5/16 5/16 5/16 5/16 3/8 3/8 1/2	OD 3/16 x 1/4 x 1/4 x 5/16 x 5/16 x 5/16 x 3/8 x 3/8 x 1/2 x

#### SWIVEL BRANCH TEE NPTF Thread

THREAD

NPTF



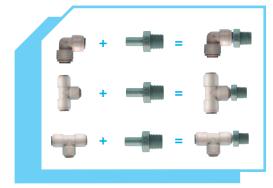
**SWIVEL ELBOW** 

PART NO.	TUBE OD	THREAD NPTF		
PM090421S	5/32	x	1/8	
PM090422S	5/32	х	1/4	
PI090621S	3/16	х	1/8	
PI090821S	1/4	х	1/8	
PI090822S	1/4	х	1/4	
PM090821S	5/16	х	1/8	
PM090822S	5/16	х	1/4	
PM090823S	5/16	х	3/8	
PI091222S	3/8	х	1/4	
PI091223S	3/8	х	3/8	
PI091623S	1/2	х	3/8	
PI091624S	1/2	х	1/2	

#### John Guest Adaptability

Standard Super Speedfit products can be coupled together to form integral new fittings.

NPTF Thread





PM100422S	5/32	х	1/4	
PI100621S	3/16	х	1/8	
PI100821S	1/4	х	1/8	
PI100822S	1/4	х	1/4	
PM100821S	5/16	х	1/8	
PM100822S	5/16	х	1/4	
PM100823S	5/16	х	3/8	
PI101222S	3/8	х	1/4	
PI101223S	3/8	х	3/8	
PI101623S	1/2	х	3/8	
PI101624S	1/2	х	1/2	

#### SWIVEL MALE RUN TEE BSPT Thread

8				
PART NO.	TUBE OD	1	THREAD BSPT	
PI110601S	3/16	Х	1/8	
PI110801S	1/4	х	1/8	
PI110802S	1/4	х	1/4	
PM110801S	5/16	х	1/8	
PM110802S	5/16	х	1/4	
PM110803S	5/16	х	3/8	
PI111202S	3/8	х	1/4	
PI111203S	3/8	х	3/8	
PI111603S	1/2	х	3/8	
PI111604S	1/2	х	1/2	

#### SWIVEL MALE RUN TEE NPTF Thread

6				
PART NO.	TUBE OD		READ PTF	
PM110421S	5/32	x 1	/8*	
PM110422S	5/32	x 1	/4*	
PI110621S	3/16	x	1/8	
PI110821S	1/4	x	1/8	
PI110822S	1/4	x	1/4	
PM110821S	5/16	x 1	/8*	
PM110822S	5/16	x	1/4	
PM110823S	5/16	х 3	/8*	
PI111222S	3/8	x	1/4	
PI111223S	3/8	x ;	3/8	
PI111623S	1/2	х 3	/8*	
PI111624S	1/2	x 1	/2*	

\* Obtained by using an Equal Tee shown on page 3 and a Stem Adaptor, shown on page 11.

#### **STRAIN RELIEF BOOT**



To suit most 3/8" or 1/2" fittings.

The Strain Relief Boot has been developed to reduce the potential strain on the tubing. The Boot limits the bend radius of the tube, preventing it from kinking.



# Female Adaptors 4 Tube Sizes 5 Thread Forms 10 Thread Sizes



FEMALE ADAPTOR BSP Thread - Flat End	FEMALE ADAPTOR British Whitworth Thread	TAP ADAPTOR BSP Thread
		PART NO. TUBE THREAD
PART NO. TUBE THREAD OD BSP	PART NO. TUBE THREAD OD BSW	OD BSP
PI451014FS       5/16       x       1/2         PI451015FS       5/16       x       5/8         PI451213S       3/8       x       3/8         PI451214FS       3/8       x       1/2         PI451215FS       3/8       x       5/8         PI451613S       1/2       x       3/8         PI451613F       1/2       x       3/8	PM4508E5S 5/16 x 1/2 - 24 Pl4512E6S 3/8 x 9/16 - 24	Cl320814S 1/4 x 1/2 Cl320816S 1/4 x 3/4 Cl321214S 3/8 x 1/2 Cl321216S 3/8 x 3/4 Not suitable for air
PI451615FS 1/2 x 5/8	FEMALE ADAPTOR UNS Thread	TAP ADAPTOR BSP Thread - Flat End
	PART NO. TUBE THREAD OD UNS	PART NO. TUBE THREAD OD BSP
FEMALE ADAPTOR BSP Thread - Cone End	PM4508C5S 5/16 x 1/2 - 16	CI320816FS 1/4 x 3/4 CI321216FS 3/8 x 3/4
	Pl4512C5S 3/8 x 1/2 - 16 Pl4516C5S 1/2 x 1/2 - 16	Not suitable for air
PART NO. TUBE THREAD		TAP ADAPTOR UNS Thread
Pl451014CS 5/16 x 1/2	FEMALE ADAPTOR NPTF Thread	
PI451015CS 5/16 x 5/8 PI451214CS 3/8 x 1/2		PART NO. TUBE THREAD OD UNS
PI451215CS         3/8         x         5/8           PI451614CS         1/2         x         1/2           PI451615CS         1/2         x         5/8           PI451616CS         1/2         x         5/8	PART NO. TUBE THREAD OD NPTF	CI3208U7S         1/4         x         7/16 - 24           CI3210U7S         5/16         x         7/16 - 24           CI3212U7S         3/8         x         7/16 - 24
	PI450822S 1/4 x 1/4	Not suitable for air
	PI451222S 3/8 x 1/4	KEG BEER OUTLET ADAPTOR
	S	
FEMALE ADAPTOR BSP Thread - Small Cone End	FEMALE ADAPTOR FFL Thread	PART NO. TUBE THREAD OD BSP
		PI561214CS 3/8 x 1/2
	PART NO. TUBE THREAD	KEG GAS INLET ADAPTOR
PART NO TUBE THREAD OD BSP		0
NCPI451214CS 3/8 x 1/2	PM4508F4S 5/16 x 1/4 PI4512F4S 3/8 x 1/4	
Typically used on beer outlet/gas inlet of keg couplers. Cone supports 'Top Hat' type Duck Bill Valve.	PI4512F6S 3/8 x 3/8 1/4 (FFL) corresponds to a 7/16 UNF 3/8 (FFL) corresponds to a 5/8 UNF	PART NO. TUBE THREAD OD BSP PI561214CS-NRV 3/8 x 1/2
iop nat type Duck bill valve.		

PI561214CS-NRV 3/8 x 1/2



#### THREE WAY DIVIDER

PART NO.	TUBE ODTUBE OD INLET OUTLET
PI491612S	1/2 - 3/8
PI491616S	1/2 - 1/2

#### THREE WAY DIVIDER

PART NO.	TUBE OD INLET	TUBE OD OUTLET	
PI491212S-R 3/8" - 3/8"			

#### TWO-WAY DIVIDER

5		
PART NO.	TUBE OD	
PI2308S	1/4	
PM2308S	5/16	
PI2312S	3/8	
PI2316S	1/2	

#### UNEQUAL TWO-WAY DIVIDER

8		
PART NO.	TUBE OD TUBE OD INLET OUTLET	
PI241210S	3/8 - 5/16	-

#### BULKHEAD CONNECTOR

PART NO.	TUBE	
	00	
PM1204S	5/32	
1 10112040	0/02	
PI1206S	3/16	
PI1206S	3/16	
PI1206S PI1208S	3/16 1/4	

#### REDUCING BULKHEAD CONNECTOR

C	0	
PART NO.	TUBE OD	TUBE OD
PI121208S NC2429	3/8 1/4"	- 1/4 - 6mm

STEM AD	ΑΡΤΟ	R		BSPT Thread
-				
PART NO.	STEM OD	т	HREAD BSPT	
PI050601S	3/16	x	1/8	
PI050801S	1/4	х	1/8	
PI050802S	1/4	х	1/4	
PM050801S	5/16	х	1/8	
PM050802S	5/16	х	1/4	
PM050803S	5/16	х	3/8	
PI051202S	3/8	х	1/4	
PI051203S	3/8	х	3/8	
PI051603S	1/2	х	3/8	
PI051604S	1/2	х	1/2	

STEM AD	APTO	R		BSP Thread
-0	•			
PART NO.	STEM OD	1	THREAD BSP	
PM050812S	5/16	х	1/4	_
PI051212S	3/8	х	1/4	
PI051213S	3/8	x	3/8	

STEM AD	ΑΡΤΟ	R		NPTF Thread
-				
PART NO.	STEM OD		THREAD NPTF	
PM050421S	5/32	х	1/8	
PM050422S	5/32	х	1/4	
PI050621S	3/16	х	1/8	
PI050821S	1/4	х	1/8	
PI050822S	1/4	х	1/4	
PI050823S	1/4	х	3/8	
PM050821S	5/16	х	1/8	
PM050822S	5/16	х	1/4	
PM050823S	5/16	х	3/8	
PI051222S	3/8	х	1/4	
PI051223S	3/8	х	3/8	
PI051623S	1/2	х	3/8	
PI051624S	1/2	х	1/2	

## STEM ADAPTOR British Nipple Type

PART NO.	STEM THREAD OD BSW
PM0508E6S	5/16 x9/16 - 24
PI0512E5S	3/8 x 1/2 - 24
PI0512E6S	3/8 x 9/16-24

#### TUBE TO HOSE STEM

PART NO.	STEM OD		HOSE ID	
PI250806S	1/4	-	3/16	
PI250808S	1/4	-	1/4	
PI250810S	1/4	-	5/16	
PI251006S	5/16	-	3/16	
PI251008S	5/16	-	1/4	
PM250808S	5/16	-	5/16	
PI251012S	5/16	-	3/8	
PI251208S	3/8	-	1/4	
PI251210S	3/8	-	5/16	
PI251212S	3/8	-	3/8	
PI251216S	3/8	-	1/2	
PI251612S	1/2	-	3/8	
PI251616S	1/2	-	1/2	

#### TUBE TO HOSE STEM Long Version

-6	(			
PART NO.	STEM OD		HOSE ID	
PI251012SL PI251212SL	5/16 3/8	-	3/8 3/8	

#### TUBE TO HOSE ELBOW

PART NO.	STEM		HOSE
	OD		ID
PI290808S	1/4	-	1/4
PI290810S	1/4	-	5/16
PI291008S	5/16	-	1/4
PM290808S	5/16	-	5/16
PI291208S	3/8	-	1/4
PI291210S	3/8	-	5/16





#### ENLARGER

-	()	
PART NO.	TUBE OD	STEM OD
PI131012S PI131216S	3/8 1/2	- 5/16 - 3/8

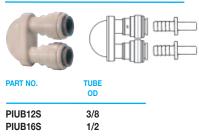
#### REDUCER

	()		
PART NO.	STEM OD		TUBE OD
PI060605S	3/16	-	5/32
PI061006S	5/16	-	3/16
PI061008S	5/16	-	1/4
PI061206S	3/8	-	3/16
PI061208S	3/8	-	1/4
PI061210S	3/8	-	5/16
PI061610S	1/2	-	5/16
PI061612S	1/2	-	3/8

#### **OFFSET CONNECTOR**



#### **U-BEND**



The photograph shows 1/2" size. Existing 1/2 inch ID lines can be accommodated by using a standard Tube to Hose Connector.



#### **DISPENSING VALVE ELBOW**



#### DISPENSING VALVE STEM

	0	
PART NO.	STEM OD	
NC730-02	3/8	

## PLUG PART NO. STEM OD PM0804S 5/32 PI0806S 3/16 PI0808S 1/4 PM0808S 5/16

1 11100000	0/10	
PI0812S	3/8	
PI0816S	1/2	

#### END STOP

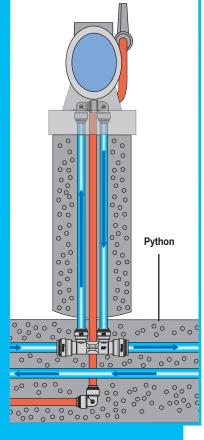




Intended for use on a 15mm Water Recirculation System.

A 4mm restriction between the two 15mm ports directs a proportion of recirculation water around a 3/8" looped spur.

Performance characteristics are dependent on a number of variables so it is recommended that suitability is assessed against the customer's own criteria.







#### Accessories

#### **COLLET COVERS**



The slip-on Collet Cover shown in the illustration prevents accidental removal or tampering with tubing. Tubing 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
n – neu	S – Grey	

#### **INCH SIZE**

PART NO.	TUBE OD	
PM1904S	5/32	
PI1906S	3/16	
PI1908S	1/4	
PM1908S	5/16	
PI1912S	3/8	
PI1916S	1/2	

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

#### **METRIC SIZE**

PART NO.	TUBE OD	
PM1904E	4	
PM1905E	5	
PM1906E	6	
PM1908E	8	
PM1910E	10	
PM1912E	12	
PM1915E	15	
PM1918E	18	
PM1922E	22	

15mm to 22mm sizes available in black as standard, white red or blue

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

#### FLOW BEND CLIP

W.	
PART NO.	TUBE OD
PM2608S	8mm/5/16
PM2610S	10mm/3/8
PM2612S	12mm/1/2

Designed to support tube and eliminate kinking.

#### 

#### **TUBE INSERT**



	OD	ID	
TSM10N	10	7	
TSM1209S	12	9	
TSM15N	15	11.5	

TUBE

#### PLUG PART NO. STEM OD PM0804R 4 PM0805R 5 PM0806R 6 PM0808R 8 PM0810R 10 PM0812R 12 PM0815E 15 PM0818E 18 PM0822E 22

4mm - 12mm sizes in red.

15mm - 22mm sizes in black.

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

#### **COLLET LOCKING TOOL**



#### **TUBE CUTTER**



#### **PIPE CUTTER**



Suitable for up to 22mm tube.

#### LOCKING CLIP

TUBE OD	
1/4	
5/16	
3/8	
1/2	
15mm	
	1/4 5/16 3/8 1/2



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