

Inch Acetal Shut-Off Valves

Lead Free

The PISV Range of Inch-size Shut-Off Valves is available in 3/8" and 1/2" tube O.D. size. The Valve is manufactured in gray acetal copolymer with a nitrile o-ring.

The valves are available with long and short handles to operate a 1/4 turn off action.

Specifically designed for compressed air and potable liquids, the valves are ideal for CO₂ lines in beverage dispensing and for pneumatic applications.

Working Pressures and Temperatures

Air	150 psi at -4°F (10 bar at -20°C)
Air/Potable Liquids	Max. 150 psi at 33°F (10 bar at 1°C)
	Max. 150 psi at 73°F (10 bar at 23°C)
	Max. 100 psi at 150°F (7 bar at 65°C)

Detailed technical information is shown on page 29.

Prices are subject to change without notice.



It is the customer's responsibility to ensure that the installation of John Guest fittings in CO₂ applications is performed in accordance with the relevant industry and government safety guidelines.

SHUT-OFF VALVE • SHORT HANDLE



PART NO.	TUBE OD	BAG QTY	BOX QTY
PISV0412CS	3/8	10	100

SHUT-OFF VALVE • LONG HANDLE



PART NO.	TUBE OD	BAG QTY	BOX QTY
PISV0412S	3/8	10	100
PISV0416S	1/2	10	50

MOUNTING CLIP



PART NO.	SIZE CTS	BAG QTY	BOX QTY
SVMC-10	3/8"	10	100

The mounting clip is designed to give a very firm grip. A twisting action is needed to remove the valve. The clip can be used with either shut-off valve. When used with the short handle version, valves can be banked together.

Available for 3/8" O.D. valves.

NEW ACETAL ANGLE STOP VALVE •



PART NO.	TUBE OD	BAG QTY	BOX QTY
NC2555	3/8	25	25

Features double O rings in every Speedfit port.

- **1/4 Turn Valves.** These valves have been designed to allow temporary servicing of downstream equipment and must only be used in the fully open or fully closed position.

DO NOT USE THESE VALVES:

- In a partially open position to control flow.
- To provide a permanent termination.
- Without tubing assembled or plugged (or threaded connections sealed).
- As a tap or "faucet".

1/4 Turn Valve are indicated by this marker '●'

Acetal Shut-Off and By-Pass Valves

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. 34°F/1°C

Specifically manufactured in white acetal with EPDM 'O'-rings, these valves have been developed to satisfy the requirements of the US Recreational Vehicle (RV) and Mobile Home (MH) markets. The valves are for hot and cold water only.

Not IAPMO Listed

STRAIGHT SHUT-OFF VALVE •



PART NO.	SIZE CTS	BAG QTY	BOX QTY
NC2390	1/2	1	25

BY-PASS VALVES •



PART NO.	SIZE CTS	BAG QTY	BOX QTY
*NC2391-RH	1/2	1	25
**NC2391-LH	1/2	1	25

*RH: Gray Handle

**LH: Black Handle

John Guest® Technical Specifications

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

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

Temp.	Pressure	
	5/32" - 5/16"	3/8" - 1/2"
Air	4mm - 8mm	10mm - 22mm
- 4°F	230 psi	150 psi
Potable Liquids and Air		
+33°F	230 psi	150 psi
+68°F	230 psi	150 psi
+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 12 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	2ft lbs	3ft lbs
	1.5Nm	3.0Nm	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.

John Guest USA, Inc. is not responsible for misprints or typographical errors.