



Products

Single Check Valve – Imperial

Part No.	TUBE OD
1/4SCV	1/4"
5/16SCV	5/16"
3/8SCV	3/8"

Description

Produced at the request of leading companies in the Drinks Dispense Industry, the Super Speedfit Acetal Single Check Valve ensures protection against reversal of flow. The low headloss design and fast installation time make the valve the ideal selection. The valve is designed for use with liquids, it is not suitable for air and vacuum applications.



Working Pressures and Temperatures

10 Bar at 20°C
7 Bar at 65°C intermittent hot water

Minimum temperature 1°C
Typical 'crack open' pressure 0.02 Bar

Packaging

Part No.	Bag	Box
1/4SCV		300
5/16SCV		300
3/8SCV		80

- Accreditations

Accepted by almost all the world's beer and beverage producers and by the manufacturers of drinks dispense equipment, John Guest products have quality and performance approvals from leading testing and acceptance authorities.



NOTE: For information on approvals and accreditations pertaining to an individual product or product range please refer to our Technical Support department.

- Technical Specification

Technical Specification – Super Speedfit Acetal Single Check Valves

NOTE: This specification refers exclusively to Super Speedfit acetal Single Check Valves. Other fittings, valves, tube and ancillary products have their own Technical Specification.

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 all relevant technical information about John Guest products it supplies them. If you have any questions about our technical specifications, please contact us.

For use with chemicals or other potentially aggressive liquids, please refer to our Customer Services Department.

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

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.

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.

Working Pressure and Temperature Range

Super Speedfit acetal Single Check Valves are suitable for the following pressures and temperatures.

	Pressure
Liquids	
+20°C	10 Bar
+65°C intermittent hot water	7 Bar

Minimum temperature 1°C.

Typical 'crack open' pressure 0.02 Bar.

Note: 1 Bar = 14.5 PSIG.

Valves with low fixed cracking pressure (i.e. 10cm water column) that have not been activated for some time may take several seconds to re-seal.

It is the responsibility of the end user to verify that the product is suitable for his specific application.

It is also recommended that the non-return valve is regularly checked and maintained.

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 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 tubes or chromium plated tubes.

For stainless steel and other polished metal tubes we recommend the use of SuperSeal fittings.

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

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.

Food Quality

All these fittings are produced in Food and Drug Administration (FDA) compliant materials and are therefore recommended for food quality applications.



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
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.

The maximum torque figures quoted for use with Speedfit fittings are dependent on the mating thread conforming to the relevant British or International thread standard.

Cleaners and Sanitising of Acetal Fittings

John Guest Full Cartridges and Half Cartridges incorporate acetal parts. Our advise 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.

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.

- Installation Advice

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.

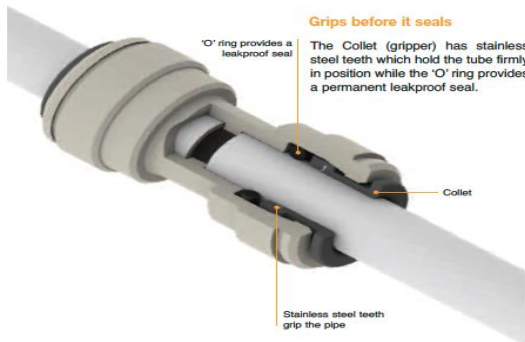
Materials of construction

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.



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.

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.

TYPICAL BAR INSTALLATION

Super Speedfit push-in fittings have been designed for a wide range of industrial applications. They provide a fast and secure way of connecting tubes and offer considerable advantages over conventional fittings.

Complex tubing systems can be assembled more rapidly than with traditional methods and because Super Speedfit fittings are easy to disconnect, fault finding and maintenance become a much easier operation.

