SARTORIUS

Quickseal®

Aseptic Disconnections

Product Information

Installed on an array of tube materials including platinum-cured and thermoplastic elastomers such as C-Flex® and Tuflux® TPE, Quickseal® is the quickest aseptic tube-separation technique available today. Extensively tested, Quickseal® is proven aseptic and the seal stronger than the tubing it is part of.

Applications

Quickseal® aseptic disconnections are used after fluid transfer to disconnect single-use transfer lines and bag or bottle assemblies used in biopharmaceutical applications. Quickseal® aseptic disconnections provide aseptic disconnection in non-classified and classified environments. It can be applied to multiple types and sizes of tubing.

Description

Quickseal® can be installed on a variety of tube materials across a range of tube sizes. The tubing runs continuously through the collar for an uninterrupted fluid path.

The Quickseal® collar is bonded to the outside of the tubing. The cut collar holds the walls of the tubing together to create the aseptic seal.
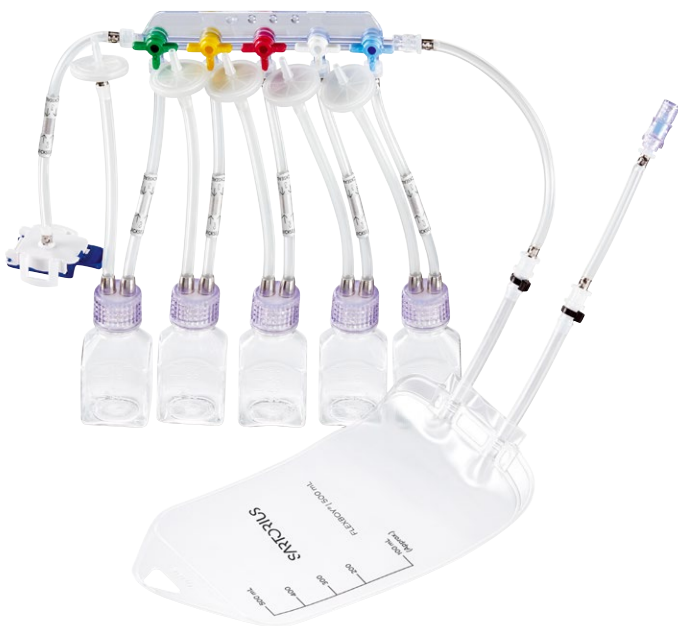
Quickseal® can be included as a component on single-use tube, bag or bottle assemblies, sampling manifolds, single-use bioreactors and more.

Quickseal® reduces operating time and improves reliability for biopharmaceutical and other high-purity fluid handling industries.

Collar is uncut	Collar has been cut and filter removed

Quickseal® collars on inlet line to each Mycap® bottle assembly

Technical Data

Specifications

Quickseal® Aseptic Disconnections

Tubing Dimensions	
OD inch	⅛" | ¼" | ⅜" | ⁷⁄₁₆" | ½" | ⅝" | ¾" | 1" | 1⅛"
OD mm	3.2 | 6.4 | 9.6 | 11.1 | 12.7 | 15.9 | 19.0 | 25.4 | 28.6
Tubing Material	Silicone (Liveo PHARMA® 50 STHT-C®, Pumpsil®) | TPE (C-Flex®, Tuflux® TPE) Ask about other tube materials
Quickseal® Position	Variable
Tubing Length	
inch	6" | 12" | 18" | 24" | 36"
mm	~150 | 305 | 460 | 610 | 915 Other tube lengths available on request
Sealing Time	<4 seconds
Operating Steps	1
Seal Type	Mechanical
Fluid Contact Material	Tubing Material
Component Material	Aluminum (3003)
Validation Testing	Container Closure (Ambient) Container Closure (Freeze | Thaw) Burst Test Tensile Pull Test

⅛" \| 3.2 mm   1⅛" \| 28.6 mm

Please note:
Mycap® and Tuflux® TPE are registered trademarks of Sartorius Stedim Biotech C-Flex® and STHT-C® is a registered trademark of St. Gobain Liveo. Pharma® is a registered trademark of Dupont Polymers Inc.

Cutting Tool Specifications: Large Diameter Cutter

Materials of Construction (Cutting Head)	Both jaws: 420 SS Cutter guard assembly: 304 SS
Weight	4 lbs (2.2 kg)
Width	2" (60 mm)
Depth	4 ¼" (108 mm)
Length	14 ¾" (375 mm)
Sound	< 80 dB at 1 meter
Vibration	< 2.5 m/s²
Cutting Time	4 seconds
Closing Speed	6 mm/s
Cuts per Charge	≈300
Battery Voltage	18 V
Charging Time	20 min

Cutting Tool Specifications: Small Diameter Cutter

Quickseal® Collar Size Range	<¼" (6.4 mm)
Materials of Construction	Body: 420 SS | Jaws: Carbide inserts
Weight	¾ lbs (345g)
Width	½" (13 mm)
Depth	1 ⅛" (27 mm)
Length	8 ⅛" (206 mm)

Ordering Information

Quickseal® can be included on a Sartorius single-use assembly or can be ordered as standalone component. Build the part number according to the instructions below to order Quickseal® as a standalone component.

| QS | | | 01 | | |

- Box 1
- Box 2
- Box 3
- Box 4
- Box 5
- Box 6
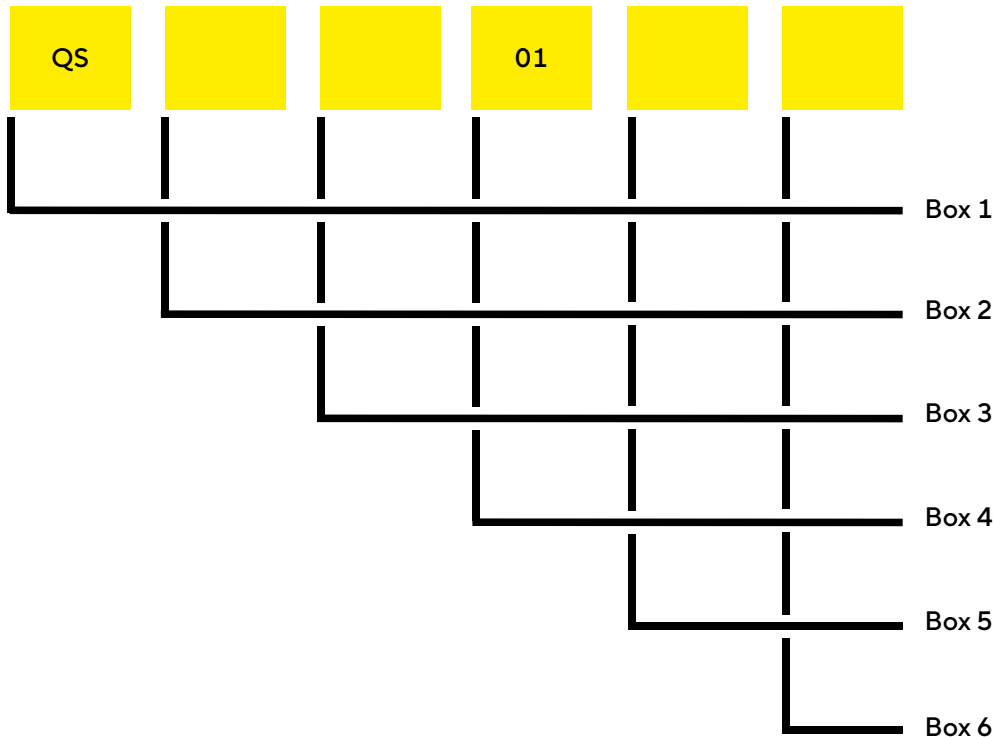
Explanation

Box 1
Fixed Value (QS). Indicates Quickseal® product family.

Box 2
Indicates tubing material

P Platinum-cured silicone. Pumpsil® when ⅛" ID × ¼" OD, STHT-C otherwise

PG Platinum-cured silicone. STHT-C when ⅛" ID × ¼" OD

PD Platinum-cured silicone. Liveo® Pharma 50

C Thermoplastic Elastomer. C-Flex®

T Thermoplastic Elastomer. Tuflux® TPE inquire for other tubing materials.

Box 3
Indicates internal diameter (ID) and outer diameter (OD) of tubing

0204	⅛" ID × ¼" OD
0406	¼" ID × ⅜" OD
0407	¼" ID × ⁷⁄₁₆" OD
0408	¼" ID × ½" OD
0610	⅜" ID × ⅝" OD
0812	½" ID × ¾" OD
1216	¾" ID × 1" OD
1218	¾" ID × 1-⅛" OD

Box 4
Fixed Value (01). Indicates number of collars on tube.
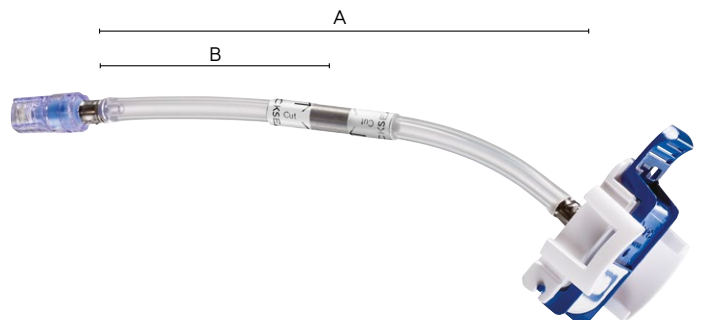
Box 5
Length from edge of tubing to center of Quickseal® collar. Dimension B on illustration.

Box 6
Overall Length (inches). Dimension A on illustration. Selections available as 6 inch increments.

Example:
QST0204010612 is ⅛" ID x ¼" OD Tuflux® TPE, 12" overall length with Quickseal® centered at 6"

Quickseal® Protective Caps

The Quickseal® protective caps can be installed after collars are cut. The caps are made from flexible and durable silicone. They are suitable for a wide range of temperatures.

Installation is simple:

1. Grasp the cap near the open end between index finger and thumb
2. Squeeze the cap until the opening is wide enough for the cut Quickseal® collar
3. Insert the Quickseal® collar and release

Order Code	Description
QS04CAPSILNT	Silicone protection caps for ¼" (6.4 mm) OD Quickseal® collars (pack of 50)
QS06CAPSILNT	Silicone protection caps for ⅜" (9.6 mm) OD Quickseal® collars (pack of 50)
QS07CAPSILNT	Silicone protection caps for ⁷⁄₁₆" (11.1 mm) OD Quickseal® collars (pack of 50)
QS08CAPSILNT	Silicone protective caps for ½" (12.7 mm) OD Quickseal® collars (pack of 50)
QS10CAPSILNT	Silicone protection caps for ⅝" (16 mm) OD Quickseal® collars (pack of 50)
QS12CAPSILNT	Silicone protection caps for ¾" (19.0 mm) OD Quickseal® collars (pack of 50)
QS18CAPSILNT	Silicone protection caps for 1.125" (28.5 mm) OD Quickseal® collars (pack of 50)

Quickseal® Cutting Tools

The Quickseal® cutting tools were designed for single-person operation with safety, simplicity and portability in mind. Place the collar in the cutting and cut the Quickseal® collar.

Order Code	Description
QSCUTTERSD	Small diameter Quickseal® cutter for tubes up to 0.25" (6.4 mm) OD
QSCUTTERLD	Large diameter Quickseal® cutter for tubes up to 1.125" (28.6 mm) OD; 120V battery charger and two 18V batteries
QSCUTTERLD230V	Large diameter Quickseal® cutter for tubes up to 1.125" (28.6 mm) OD; 230V battery charger and two 18V batteries
QSCUTTERREADER	Electronic reader for battery-powered large diameter Quickseal® cutter