# SARTURIUS

# Sartocheck® 5 Plus Universal

Combined Filter Integrity
Testing and Bag Testing

New Software Release O3 2025 - Version 3.1.1

New Hardware Release Q4 2025 - Accessory Kit for Bag Testing



## **Product Information**

The Sartocheck® 5 comes in 3 versions: Sartocheck® 5 Filter Tester, Sartocheck® 5 Plus Filter Tester and Sartocheck® 5 Plus Universal. The latest software version 3.1.1 is valid for all three Sartocheck® 5 versions and brings a rebranded interface with new features and improved reactivity.

The brandnew Sartocheck® 5 Plus Universal combines the filter testing performance of the Sartocheck® 5 Plus Filter Tester together with low pressure testing capacity of single-use systems from a few mL to over 2,000 L. The Sartocheck® 5 Plus Universal represents the ideal intersection point of today's most relevant industry requirements for filter integrity testing and single-use system testing within demanding GMP environments. A combination of a unique approach to Quality Risk Management (QRM) as well as optimal data integrity, intuitive usability, and minimized risk factors for Occupational Safety and Health (OSH) set a new standard for filter integrity and single-use systems' testing.

#### Surpass the Requirements of Quality Risk Management

The regulatory focus on quality risk management (QRM)—as outlined in ICH Q9 and the new Annex 1, developed by the EMA in collaboration with the US FDA, WHO, and PIC/S—also extends to filter integrity and single-use system testing as fundamental components of sterility assurance.

The Sartocheck® 5 Plus Filter Tester and Sartocheck® 5 Universal use program-specific parameters to support the automatic identification of testing anomalies before or during the test. This prevents time-consuming and costly variations, potential drug recalls, and 483 warning letters.

#### Experience the Comfort of Intuitive Usability

An optimal user experience speeds up process workflows due to intuitive guidance and ease of use. The high-quality touchscreen of the Sartocheck® 5 provides a unique viewing angle, an intuitive user interface, a logical menu structure, and simple data entry options. This allows straightforward programming of tests and QRM enhancement features, as well as error-free operation in GMP production environments.

#### Reach the Ultimate Level of Data Integrity

Filter integrity test values are part of the batch protocol and are used to justify the drug release. Long-term reliable data is crucial to avoid quality deviations and potential 483 warning letters.

The integrity and security of filter integrity test data must not be seen only as an IT problem, but also as a potential global business risk. Low standards of data integrity and security may not only jeopardize the activities of the drug manufacturing company, but more critically, endanger the health of patients.

# Discover the Simplicity of Occupational Safety and Health (OSH)

Integrity testing may involve the use of chemicals and hazardous materials, e.g., isopropanol for retesting of filters. The Sartocheck® 5 is certified for use in explosion-hazardous areas (ATEX) and is compatible with all current cleaning agents and VHP. This ensures maximum safety for operators and manufacturing facilities.



# QRM With Sartocheck® 5 Plus Filter Tester and Sartocheck® 5 Plus Universal

- Automatic detection of incorrect test setups
  - Program-specific min. and max. values for volume determination
  - Program-specific min. diffusion | intrusion values
  - Program-specific min. flow at pressure end during a bubble point test
  - Program specific min and max filling time for bag testing
- Automatic detection of abnormal test conditions
  - Detection of abnormal pressure increase
  - Detection of environmental temperature outside prerequisite conditions and temperature changes (implemented for bag testing - roadmap for filter testing)
  - Detection of unstable test values (roadmap - patent pending)
- Self-test at booting and before each test
- Comprehensive failure mode and effects analysis (FMEA), including instructions for setting program-specific QRM values to avoid false pass and fail test results
- Calculation tool for the impact of unlikely calibration offsets

#### Usability

- Intuitive iF-design-rewarded human machine interface (HMI)
- 12.1" bright touchscreen with a ± 88° viewing angle
- Large digital keypad that does not require a pen, compatible with glove use
- 10 system languages
- LDAP: log on with network user credentials
- Automatic test time for faster testing
- Data transfer
- Automation by OPC UA or Modbus TCP
- LDAP group-based role management
- Filtering of displayed audit trail events
- Audit trail export in a digitally signed write-protected PDF
- Remote administration via OPC UA
- Memory management (21CFR Part 11)
- Printing via printer server
- DNS name support
- Scheduled export of the audit trail in PDF format
- Improved program parameters for large crossflow (TFF) systems
- Bag testing when using the Accessory Kit for Bag Testing

#### **Data Integrity**

- Custom Linux-based OS with SSB custom architecture
- Audit trail with time zone-synchronized (NTP) events
- Write-protected and constantly monitored root file system
- Encrypted double data backup | redundant data storage
- 4 eyes principle | electronic signatures
- Comprehensive and flexible role management
- Locking out user after X number of unsuccessful login attempts
- Serial number of the device in every audit trail entry
- Easy to read audit trail on the screen
- Harmonized time representations
- A major update of the root file system of the Sartocheck®
   5 in the Q2 2022 release further strengthened the data security aspects of the software
- Mandatory "Why" comment when modifying program parameters
- Blocking of abusive test attempts

Request the Data Integrity statement for more details.

### Contamination Control Strategy | OSH

- Splash-proof (IP64)
- Ex-proof (ATEX IECEx & FM certified)
- Safe testing and re-testing of alcohol-wetted filters
- Continuous and clear visualization of pressure status
- Resistant to all current cleaning agents
- H<sub>2</sub>O<sub>2</sub>-vapor-resistant (VHP)
- High-quality tubings (FDA 21 CFR 177 and USP Class VI compliant)
- Optional kit for automated cleaning of the pneumatics with up to 0.5 M NaOH at 50 °C (use at least software version 2.2.1 for full compatibility). See the Contamination Control Strategy documentation for additional information
- Optional accessory kit for backflow protection (26787---AK---EV)

# Technical Data

oportionality)
int
50.0-6,600.0 mbar   0.725-95.725 psi
0.011-4,800.000 mL/min.
0.006-60.000 mL/min.
24,000 mL/min. (5 times the max. programmable value)
300 mL/min. (5 times the max. programmable value)
250.0-6,550.0 mbar   3.626-95.000 psi
0.5-6,600.0 mbar   0.007-95.725psi
14 L 150 L
1,000 L
sory Kit for Bag Testing
20.0 - 50.0 mbar (0.290 - 0,725 psi
20.0 - 360.0 mbar (0.290 - 5.220 psi
20.0 - 360.0 mbar (0.290 - 5.220 psi)
2,000 L
100-240 V AC at 50   60 Hz
74 W
66 W

A country-specific cable is delivered with each device.

### **Internal Battery**

The Sartocheck® 5 is equipped with an internal battery. This battery (CR2032) contains less than 0.3 g lithium.

Pneumatics	
Max. inlet pressure	8,000 mbar   116 psi
Overpressure protection	Max. inlet pressure + 4,000 mbar
Min. inlet pressure	4,000 mbar   58 psi
Internal reference volume	1,023 mL conforming to Pressure Equipment Directive 2014/68/EU max. Pressure = 12 bar pressure certificate

Measuring Accuracies	
Measured pressure	± 0.1% full scale (± 7.2 mbar   ± 0.104 psi)
Measured pressure drop	0.2% of the measured value before rounding
Volume determination	± 4%
Diffusion	±5% or 0.05 mL/min, whichever is higher
Intrusion	± 5% or 0.05 mL/min, whichever is higher
Bubble point	± 50 mbar   0.73 psi, can be improved to ± 25 mbar   0.36 psi (configurable pressure steps)
Accelerated bubble point	$\pm$ 50 mbar   $\pm$ 0.73 psi from the starting pressure to one pressure step above the min. bubble point

Measured pressure	±0.05% full scale
Measured pressure drop	0.1% before rounding

Dimensions, Weight, and Noise	
Dimensions (W × D × H)	348 × 379 × 286 mm
Weight	16.8 kg
Weight of the packaging	2.2 kg
Cargo   gross weight	20.6 kg
Cargo volume	95,304 cm <sup>3</sup>
Cargo dimensions	570 × 440 × 380 mm
Max. noise at 1 m during depressurization with venting tubings	68 dB(A) at 6,600 mbar (95.7 psi) 51 dB(A) at 3,000 mbar (47.9 psi)

### Manufacturing Site

Designed, developed, and manufactured in Germany Otto-Brenner Strasse 20, Goettingen, Germany

### **End-User Training**

The Sartocheck® 5 comes with end-user training.

#### Materials of Construction and Roughness

All materials used for the external surfaces and the fluid paths are animal free.

#### External Surfaces Sartocheck® 5

- Ra 1.6 µm or better
- Stainless steel 304 L
- Heat strengthened glass (see "Screen and Protective Glass")
- Plastic polymer (Edistir® polystyrene PBBE free) painted with chemical resistant Alexit finishing coat B412
- Aluminum painted with chemical resistant Alexit finishing coat B412
- Rubber feet: Taber H-18 abrasion resistant (ASTM-501C)

#### Pneumatic Fluid Path of the Sartocheck® 5

- Ra 1.6 µm or better
- Aluminum (inlet valve block, no potential product contact)
- Stainless steel 304 L (process valve block)
- Stainless steel 316 L (connectors)
- EPDM (connector gaskets), FDA 21 CFR 177 and USP Class VI (A)
- PFA tubings, FDA 21 CFR 177 and USP Class VI (A)
- PTFE (valve block membrane FDA 21 CFR 177 and USP Class VI (A)

# Pneumatic Fluid Path of the Accessory Kit for External Venting and the Accessory Kit for Bag Testing

- Ra 1.6 µm or better
- Stainless steel 304 L (valves)
- Stainless steel 316 L (connectors)
- $\,\blacksquare\,$  EPDM (connector gaskets) FDA 21 CFR 177 and USP Class VI (A)

### External Tubings (Inlet and Test Tubing)

- PFA tubing, FDA 21 CFR 177 and USP Class VI (A)
- PUR tubing (for bag testing), FDA 21 CFR 177
- Stainless steel 316L (connectors)
- $\,\blacksquare\,$  EPDM (connector gaskets) FDA 21 CFR 177 and USP Class VI (A)
- Sintered Polyethylene (inlet filter)
- Polypropylene (inlet filter housing)
- Stainless steel 316L Parker nipple

Screen and Protective Glass	
Size	12.1" (Format 16:10; 262.6 × 164.7 mm   10.34 × 6.48 inch)
Туре	TFT LED-Backlit color
Resolution	1,280 × 800 pixels
Luminosity	400 CD/m <sup>2</sup>
Viewing angle vertical and horizontal	± 88° (total 176°)
Shock resistance	Thermally-toughened glass DIN EN 12150-1; IEC 60068-2-75
Antiglare	LS Touch Gloss 85 ± 10   60° on front side

#### Connectors and Ports

All connectors on the device are specifically defined in order to avoid mix up between different connections. E.g., the test tubing can only be connected to the outlet of the device.

Pneumatic Connectors	
Inlet tubing towards pressurized line	Parker nipple (Parker reference 26SFAW13MXN)
Inlet tubing towards device	Staubli RBE03 female
Test tubing towards filter sample to be tested	Staubli RBE03 female
Test tubing towards 2D bag to be tested	Staubli RBE03 female
Test tubing towards 3D bag to be tested	Sanitary clamp 50.5 mm (2")

#### **Pneumatic Tubings**

All pneumatic tubings have been leak tested at the end of manufacturing.

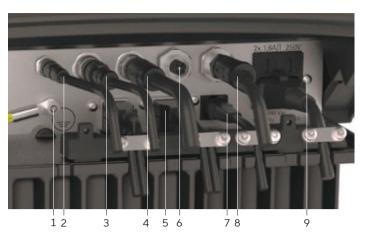
Use only original test tubings of original length with original connectors to avoid any mix-up.

#### **Communication Ports**

- Industrial automation for OPC UA and Modbus TCP
- $\,\blacksquare\,$  Ethernet RJ45 for networking and data transfer
- USB (4 ports) for software upgrades, barcode reader, and USB printer

Operating Conditions	
Environmental temperature and humidity according to IEC 61010-1	0-40 °C (32-104 °F) From 0-31 °C 80% RH From 31-40 °C linearly decreasing to 50% RH
Altitude	100 m below sea level to 3,000 m above sea level
Ingress protection rating of the device as per EN 60529   IEC 60529	IP64 under normal conditions IP4X for use in potentially explosive atmospheres
Ingress protection of the Accessory Kit for External Venting as per EN 60529   IEC 60529	IP65
Explosion-prone areas (device only)	Zone 2, Groupe II-B (IECEx, ATEX)   Class 1 Zone 2 Group II-B (USA)
Explosion-prone areas (Accessory Kit for Venting)	Zone 1 Group II-B (IECEx, ATEX)   Class 1, Div. 1, Zone 1 Group II-B (USA)

#### Connectors on the Backside



- 1 Earth
- 2 Environmental temperature sensor (bag testing)
- 3 External pressure sensor
- 4 External valves
- 54 × USB (e.g, printer)
- 6 Not in use
- 7 RJ45
- 8 Industrial automation
- 9 Power

#### Back Cover Closed



- 1 Device cleaning
- 2 Outlet | test tubing
- 3 Sample vent
- 4 Device vent

- 5 Ext. reference tank
- 6 Inlet pressure, max. 8 barg,
- 7 External valves pressure supply

#### Operating System and Memory

- Custom Linux Distribution made by Sartorius
- Flash memory 4 GB
- RAM 2 GB
- Internal inaccessible SD card 8 GB
- CPU MSC NanoRISC i.MX6 D 800 MHz

#### **Memory Capacity**

The memory can hold approximately 21,900 test results. At a rate of 10 tests per day, 365 days per year, the memory will be full after approximately 6 years.

#### Test Result Calculation, Evaluation, and Rounding

diffusion value is set to  $4.400 \, \text{mL/min}$ . The test result rounding is done according to the tie-breaking rule called "round half to even". This is the default rounding mode used in IEEE 754 computing functions and operators.

#### **Storage and Transportation Conditions**

From -10 °C to +60 °C (14 – 140 °F) at 90% RH noncondensing humidity.

The original cardboard box is single-use shipping only. For subsequent shipping, please use the solid transportation box 26787---ST (see accessories).

#### Language Options

- English
- German
- French
- Spanish
- Italian
- Mandarin (simplified)
- Portuguese (Brazilian)
- Japanese
- Korean
- Russian

## Fixation of Cables



# Cleaning and Chemical Compatibility of External Surfaces of Sartocheck® 5 and Accessory Kit for External Venting (Based on Alexit Lacquer Compatibility)

Do not use any abrasive cloth.
Only smooth cloths or towels are allowed.

- Spor-Klenz® Ready-To-Use Cold Sterilant\*\*
- 3% Hydrogen Peroxide WFI Sterile Solution\*
- Septihol® Sterile Alcohol Solution 70% IPA\*
- Water for injection\*
- Sodium hydroxide (NaOH) 10%\*
- Hydrochloric acid (HCL) 20%\*
- Sulfuric acid (H2SO4) 20%\*
- Acetic acid 10%\*
- Ammoniac 10%\*
- Quaternary ammonium compounds 0.2%\*\*
- Cleansinald (Quaternary ammoniums blended with alkyl amines)
- Bacterianos (Glutaraldehyde 0.5 mg/g and didecyldimethylammonium chloride 1.2 mg/g; pH 3 - 5, contact time > 15 min.)
- Aniospray (Ethanol 226 mg/g, Chlorure de didécyldiméthylammonium 0.53 mg/g, chlorhydrate de polyhexaméthylène biguanide 0.64 mg/g contact time > 15 min.)
- Amphospray (Ethanol 327.4 mg/g, N-(3-aminopropyl)-Ndodé-cylpropane- 1,3-diamine 0.33 mg/g), chlorure de didécyldiméthylammonium 1.09 mg/g), chlorhydrate de polyhexaméthylène biguanide 0.96 mg/g)
- Formaldehyde 37%
- Sodium hypochlorite 6%
- Ethanol (60%, 70%, and pure)
- Acetone (pure)
- Ethyl acetate (pure)
- Minncare Cold Sterilant
- Vaporized Hydrogen Peroxide (VHP) at 1400 ppm\*

#### Cleaning of Internal Pneumatics

Use only the original Accessory Kit for Cleaning

#### Warning!

Inflammable or explosion-prone liquids must not be used for internal cleaning because the Accessory Kit for Cleaning is not compliant to hazardous areas or liquids.

The internal pneumatics of the Accessory Kit for Bag Testing cannot be cleaned with software version 3.1.1. Please contact Sartorius for information on a free upgrade.

Use the following cleaning agents:

- Sodium hydroxide up to 0.5 M at 25 °C (77 °F)
- Citric acid 10% at 25 °C (77°F)
- Sodium hypochlorite 10% at 25 °C (77 °F)
- 3% Hydrogen Peroxide at 25 °C (77 °F)

# Comparison of Sartocheck® 5 Versions

Feature	Sartocheck® 5 Filter Tester	Sartocheck® 5 Plus Filter Tester	Sartocheck® 5 Universal
Filter Testing (methods and accuracy)	Identical	Identical	Identical
Bag testning with the Accessory Kit for Bag Testing	No	No	Yes
Automation (OPC UA, PAS-X and Modbus TCP	No	Yes**	Yes**
QRM-related program parameters	No	Yes	Yes
Data Integrity	Identical	Identical	Identical
OSH - ATEX   IECEx   FM***	Identical	Identical	Identical
Accessory kits: External venting Cleaning Bag testing	Compatible Compatible Not compatible	Compatible Compatible Not compatible	Compatible Compatible Compatible
Software maintenance	Included	Included	Included
Roadmap of additional features	No	Yes	Yes

<sup>\*</sup> Also compatible with the Accessory Kit for Bag Testing

 $<sup>^{\</sup>star\star}$  Spore Klenz and Quarternary compounds are being investigated for compatibility to the Accessory Kit for Bag Testing.

<sup>\*\*</sup>PAS-X requires software version 3.2.0

<sup>\*\*\*</sup>Does not apply to the Accessory Kit for Bag Testing

# Ordering Information

## Sartocheck®5 Filter Tester

Description	Article No.
Sartocheck® 5 Filter Tester	26787FT
Equipment included in 26787FT	
Sartocheck® 5 Filter Tester	
Inlet tubing for compressed gas 2m (26787IT)	
Test tubing 2 m (26787TT02)	
Test certificate	
Calibration certificate	
Installation and operating instructions	
Power cord (region-specific)	
Screw driver (T20 × 100) for fixation of cables	
Networking cable (RJ45)	
Printer cable (USB)	

## Sartocheck®5 Plus Universal

Description	Article No.
Sartocheck® 5 Plus Universal	26787UNP
Equipment included in 26787UNP	
Sartocheck® 5 Plus Universal	
Inlet tubing for compressed gas 2 m (26787IT)	
Test tubing 2 m (26787TT02)	
Test certificate	
Calibration certificate	
Installation and operating instructions	
Risk assessment for integrity testing   FMEA (PDF)	
Power cord (region-specific)	
Screw driver (T20 × 100) for fixation of cables	
Networking cable (RJ45)	

# Sartocheck®5 Plus Filter Tester

Description	Article No.
Sartocheck® 5 Plus Filter Tester	26787FTP
Equipment included in 26787FTP	
Sartocheck® 5 Plus Filter Tester	
Inlet tubing for compressed gas 2 m (26787IT)	
Test tubing 2 m (26787TT02)	
Test certificate	
Calibration certificate	
Installation and operating instructions	
Risk assessment for integrity testing   FMEA (PDF)	
Power cord (region-specific)	
Screw driver (T20 × 100) for fixation of cables	
Networking cable (RJ45)	
Printer cable (USB)	

# Services

Printer cable (USB)

## Sartocheck® 5 | 5 Plus Filter Tester

Description	Article No.
Validation documentation for Sartocheck® 5 (all 3 versions)	26787VDSC
Sartocheck® 5   5 Plus installation	S872QINST
Sartocheck® 5   5 Plus installation pack (incl. travel exp.)	S872QINSTP
Valve Kit installation	S873IINST
Valve Kit installation pack (incl. travel exp.)	S873IINSTP
Sartocheck® 5   5 Plus IQ   OQ	S872QIQOQ
Sartocheck® 5   5 Plus IQ   OQ service pack (incl. travel exp.)	S872QIQOQP
Valve Kit IQ   OQ	S873IIQOQ
Valve Kit IQ   OQ service pack (incl. travel exp.)	S873IIQOQP
Service level agreement Advanced	S872QSLAA
Service level agreement Comprehensive	S872QSLAC
Service level agreement Essential	S872QSLAE

## Sartocheck® 5 Plus Universal

Description	Article No.
Validation documentation for Sartocheck® 5 (all 3 versions)	26787VDSC
Sartocheck® 5 Plus Universal installation	S876ZINST
Sartocheck® 5 Plus Universal installation pack (incl. travel exp.)	S876ZINSTP
Sartocheck® 5 Plus Universal IQ   OQ	S876ZIQOQ
Sartocheck® 5 Plus Universal IQ   OQ service pack (incl. travel exp.)	S876ZIQOQP
Service level agreement Advanced	S876ZSLAA
Service level agreement Comprehensive	S876ZSLAC
Service level agreement Essential	S876ZSLAE

## Accessory Kit for Bag Tester

Description	Article No.
Validation documentation for the AKBT	26787VDBT
Installation Accessory Kit for Bag Tester	S877AINST
Installation pack Accessory Kit for Bag Tester (incl. travel exp.)	S877AINSTP
IQ   OQ Accessory Kit for Bag Tester	S877AIQOQ
IQ   OQ pack Accessory Kit for Bag Tester (incl. travel exp.)	S877AIQOQP
Service level agreement Advanced	S877ASLAA
Service level agreement Comprehensive	S877ASLAC
Service level agreement Essential	S877ASLAE

## Accessory Kit for External Venting

Description	Article No.
Validation documentation for the AKEV	26787VDEV
Installation Accessory Kit for External Venting	S877BINST
Installation Pack Accessory Kit for External Venting (incl. travel)	S877BINSTP
IQOQ Accessory Kit for External Venting	S877BIQOQ
IQOQ Pack Accessory Kit for External Venting (incl. travel)	S877BIQOQP
Service level agreement Advanced	S877BSLAA
Service level agreement Comprehensive	S877BSLAC
Service level agreement Essential	S877BSLAE

# Accessories and Spare Parts

Description	Article No.
USB printer (without paper)	YDP30
Archivable paper 90 m and ink ribbon	69Y03285
Archivable self-adhesive paper 90 m and ink ribbon	69Y03286
Thermal paper 5 rolls of 24 m	69Y03287
Self-adhesive thermal paper 5 rolls of 13 m	69Y03288
Inlet tubing for compressed gas 2 m	26787IT
Test tubing 2 m	26787TT02
Test tubing 5 m	26787TT05
Test tubing 15 m	26787TT15
Test tubing for 2D bags 1.2 m	26787TB01
Test tubing for 3D bags 5 m	26787TB05
Test tubing for 3D bags 8 m	26787TB08
Test tubing for external venting	26787TT-AKEV
Complete tubing-cable wrap for AKEV 2 m	2678702-AKEV
Complete tubing-cable wrap for AKEV 5 m	2678705-AKEV
Accessory Kit for External Venting	26787AKEV (max. 10 accessory kits in total per device due to calibration data, regardless of accessory kit type)
Accessory Kit for Bag Testing	26787AKBT (max. 10 accessory kits in total per device due to calibration data, re- gardless of accessory kit type)
Tubing for "device vent"	26787VTDE
Tubing for "sample vent"	26787VTSA

### Accessory Kit for Cleaning of the Pneumatics\*

Description	Article No.
Germany (German manual)	26787AKDE-CL
UK, India & US   Canada (English manual)	26787AKEN-CL
France (French manual)	26787AKFR-CL
Italy (Italian manual)	26787AKIT-CL
Spain & Argentina (Spanish manual)	26787AKES-CL
Portugal & Brazil (Portuguese manual)	26787AKPT-CL
China (Chinese manual)	26787AKCN-CL
Japan (Japanese manual)	26787AKJP-CL
Korea (Korean manual)	26787AKKR-CL
Russia (Russian manual)	26787AKRU-CL
Switzerland, Belgium & Canada (English, German, French & Italian manuals)	26787AKVA-CL
South Africa , Australia   New Zealand, Israel and Denmark (English manual)	26787AKVB-CL

 $<sup>^{\</sup>star}$  For more details, please refer to the Contamination Control Strategy (CCS) datasheet.

Description	Article No.
10 L pressure vessel including safety valve and manometer, certified for EU	26787AKPV-EU
Additional waste vessel for the accessory kit for cleaning	26787AKWV-CL
Barcode Scanner (None ATEX)	26787BS
External reference volume	26787ER
Additional tubing for the external reference volume	26787TE-RV
Solid transportation box for the Sartocheck® 5   5 Plus FT   5 Plus Universal	26787ST
Midisart® Test Manifold for parallel bubble point of up to 10 filters	1Z-LB-0002
Triclamp 25 mm - Staubli nipple RBE03 open	7ZML0009
Triclamp 25 mm - Staubli nipple RBE03 closed	7ZML0015
Triclamp 50.5mm - Staeubli-nipple (closed) RBE03.7	7ZML0012
Alternative adapter with EPDM gasket	7ZML0055
Triclamp 50.5 mm - Staeubli-coupling (closed) RBE03	7ZML0019
Alternative adapter with EPDM gasket	7ZML0056
Luer lock male – Staubli nipple RBE03 open	7ZV0115
Temperature sensor with 2 m cable	26787ES02
Temperature sensor with 5 m cable	26787ES05
Temperature sensor with 15 m cable	26787ES15

### Germany

Sartorius Stedim Biotech GmbH August-Spindler-Strasse 11 37079 Goettingen Phone +49 551 308 0



⊕ For more information, visit

sartorius.com

### **USA**

Sartorius Stedim North America Inc. 565 Johnson Avenue Bohemia, NY 11716 Toll-Free +1 800 368 7178