

# Virus Filter Transfer Units (Gamma)

Pre-Assembled,  
Sterile & Ready to Use,  
Single-use  
Virosart® Filtration Units



## Product Information

Virus Filter Transfer Units (Gamma) are pre-assembled, pre-sterilized and fully pre-qualified ready to use filtration units for connection to single-use processing solutions. The smart Virosart® capsule design with low footprint, minimal flushing volumes and sterile delivery secures ease of use as well as fast installation of the filtration units.

## What?

Virus Filter Transfer Units (Gamma) allow an easy integration of any gamma-stable Sartorius virus filter (Virosart® HF and Virosart® Media) into a single-use setup.

A secure connection of the Virus Filter Transfer Unit can be realized in the following ways:

- Sterile connection using sterile connectors, such as Opta® and AseptiQuik®
- Aseptic connection (under laminar flow) using a TriClamp

## How?

Through years of experience with single-use technologies, Sartorius Stedim Biotech has qualified a wide range of components and connections commonly used for Virus Filter Transfer Units. With this portfolio (see details on p. 3 and 4) a Virus Filter Transfer Unit can be configured easily by our team. Contact your local sales representative or application specialist for an instant quote and technical drawing of a configurable Virus Filter Transfer Unit.

## Why?

### **Flexibility and Ease of Use**

Whether designing a new single-use process facility or integrating disposable technology step-by-step to your existing equipment Sterile Virus Filter Transfer Sets provide:

- Various tubing diameters & lengths
- Broad choice of connectors
- Sterilization by gamma-irradiation
- Ready to use solutions

### **Modularity**

By splitting your assemblies into modules, e.g. Filter Transfer Sets, bags, Sensor Transfer Sets you can:

- Produce several products with the same pool of equipment
- Reduce the total amount of part numbers
- Optimize the warehousing footprint

### **Safety**

- Sartorius Stedim Biotech follows strict regulatory compliance standards.
- The filter elements are 100% integrity tested.
- 100% visual inspection and batch record review.
- All connections are pre-qualified according to Sartorius Stedim Biotech quality standards.

# Technical Data

## Virosart® HF – Downstream Virus Filter

### Available virus filter



2.4 m<sup>2</sup> | 25.8 ft<sup>2</sup>

0.8 m<sup>2</sup> | 8.6 ft<sup>2</sup>

0.2 m<sup>2</sup> | 2.15 ft<sup>2</sup>

**Tubing types** Sani-Tech® STHT® -R (reinforced)

**Tubing diameters (ID × OD)**

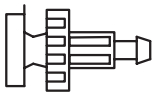
**Inlet** 1/2" × 7/8"  
**Outlet 1** 1/4" × 1/2"\*  
**Outlet 2** 1/2" × 7/8"  
**Venting** 1/2" × 7/8"

3/8" × 5/8"  
 1/4" × 1/2"\*  
 3/8" × 5/8"  
 1/2" × 7/8"

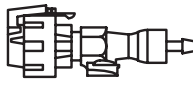
1/4" × 1/2"  
 1/4" × 1/2"  
 1/4" × 1/2"  
 1/2" × 7/8"

**Tubing lengths\*\*** 150 mm, 300 mm, 500 mm, 1000 mm

**Connectors\*\*\***



Opta®



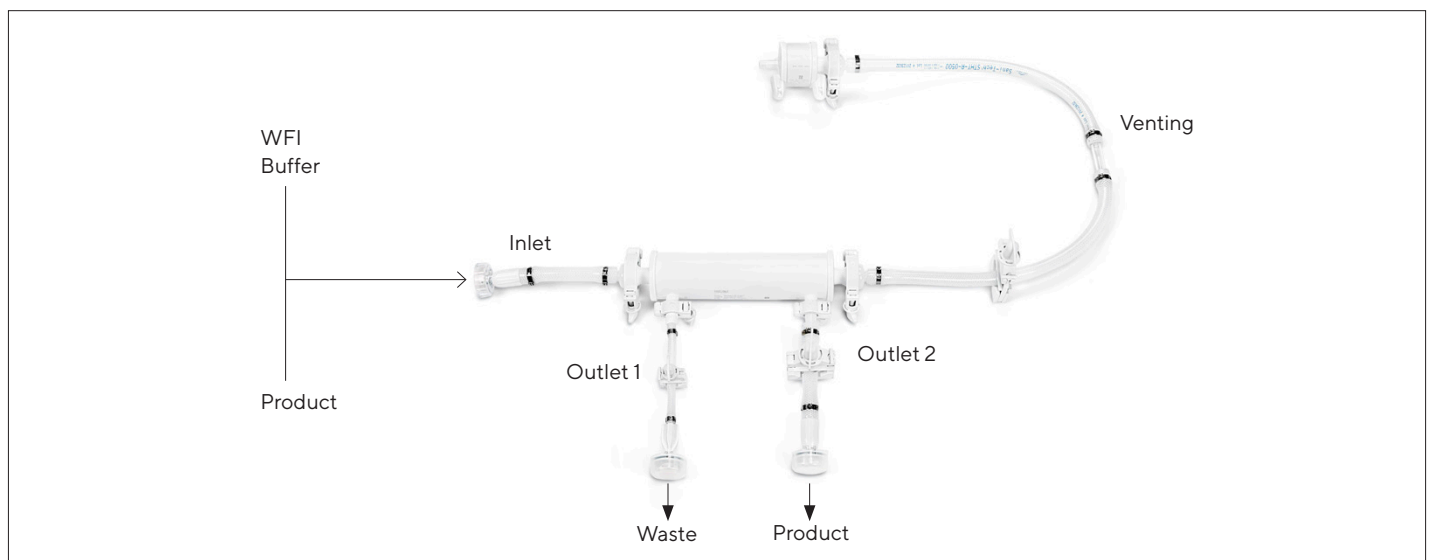
AseptiQuick®



TriClamp

**Technical parameters**

- Max. allowable operating pressure: 3.0 bar | 43.5 psi
- Sterilization method: Gamma irradiation. Re-sterilization is not permitted!



\* IT Wetting Kit for Virosart® HF process modules is integrated to ensure a defined back pressure without the need for manual or automated valve control and thus optimal wetting conditions.

\*\* Outlet 1 & 2 have the same tubing length

\*\* Venting line is fixed

\*\*\* Identical connector is used for one configuration

# Virosart® Media – Upstream Virus Filter

## Available virus filter



1 m<sup>2</sup> | 10.8 ft<sup>2</sup>

0.3 m<sup>2</sup> | 3.2 ft<sup>2</sup>

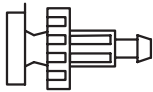
**Tubing types** Sani-Tech® STHT® -R (reinforced)

**Tubing diameters (ID × OD)**

<b>Inlet</b>	1/2" × 7/8"	3/8" × 5/8"
<b>Outlet 1</b>	1/2" × 7/8"	1/4" × 1/2"
<b>Outlet 2</b>	1/2" × 7/8"	1/4" × 1/2"
<b>Venting</b>	1/2" × 7/8"	3/8" × 5/8"

**Tubing lengths\*\*** 150 mm, 300 mm, 500 mm, 1000 mm

**Connectors\*\*\***



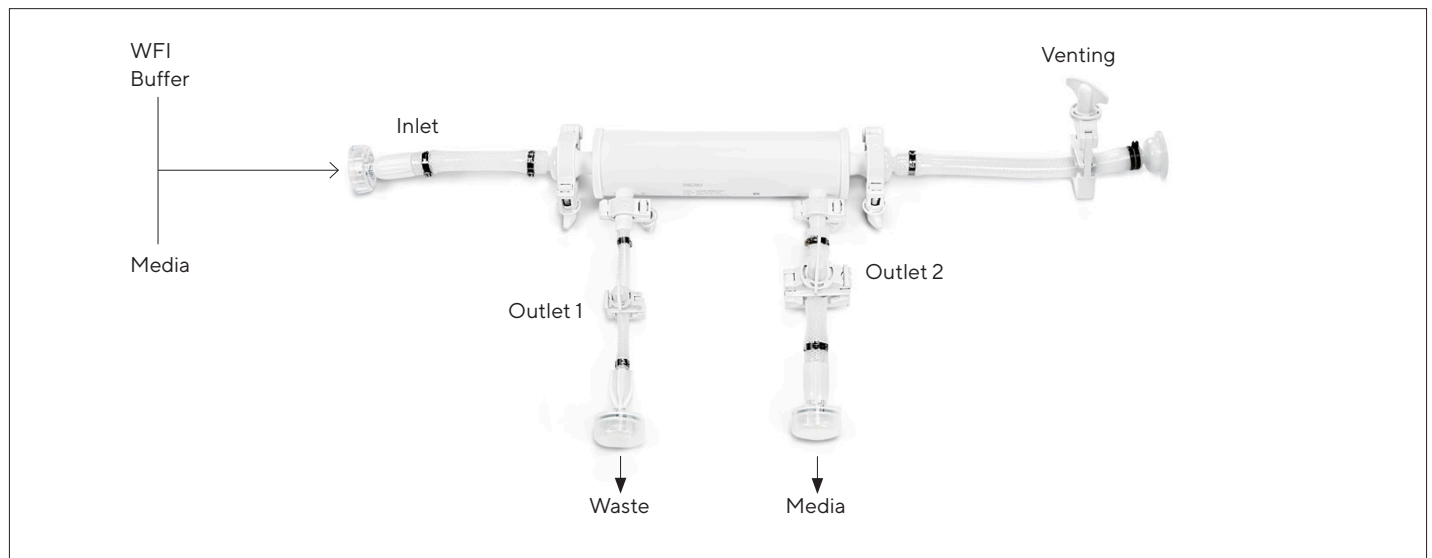
Opta®



AseptiQuick®

**Technical parameters**

- Max. allowable operating pressure: 3.0 bar | 43.5 psi
- Sterilization method: Gamma irradiation. Re-sterilization is not permitted!



\*\* Outlet 1 & 2 have the same tubing length

\*\* Venting line is fixed

\*\*\* Identical connector is used for one configuration

# Materials

Component	Material
Product Contact	
<b>Connectors:</b>	
Opta®	Acrylate/PC/PP/PSU/TPV
AseptiQuick®	PC/SI/PES/PTFE
TriClamp	PEHD
<b>Tube:</b>	
Sani-Tech® STHT® -R	Silicon (Reinforced)
<b>Connecting pieces:</b>	
Flow Reducer	PP
Sight glass	PET
Non-Product Contact	
Oetiker® clamp	Stainless Steel
Gasket	Silicon
Clamp	PA GLASS REINFORCED
Valve	PSU

## Regulatory Compliance

- All filters and tubing meet the requirements of the current USP Biological Reactivity tests <88> and all other product contact materials have passed USP <87> or ISO10993 as a minimum requirement.
- The Virus Filter Transfer Sets are in compliance with the European guidance on minimizing the risk of transmitting animal spongiform encephalopathy agents via human and veterinary products (EMA/410/01).
- The Virus Filter Transfer Sets are subject to bioburden, endotoxin and particulate matter control on a regular basis.
- Meet or exceed the requirements for WFI quality standards set by the current USP.
- USP Plastic Class Test VI.
- Designed, developed and manufactured in accordance with an ISO 9001 certified Quality Management System.
- The Virus Filter Transfer sets are produced in a cleanroom class ISO 7.
- The Virus Filter Transfer Sets (Gamma) are sterilized using a validated process in accordance with DIN EN ISO 11137 regulations.
- 100% of the products undergo visual inspection and are subject to batch record.

## Technical References

Validation Guide Filter Transfer Set	SPK5815-e
Validation Guide Virosart® HF	SPK5801-e
Validation Guide Virosart® Media	SPK5812-e
Extractable Guide Virosart® HF	SPK5804-e
Extractable Guide Virosart® Media	2494649-000


AseptiQuick® is a registered trademark of the Colder Product Company.

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