

# Filter & Sensor Transfer Sets

Pre-Assembled, Pre-Sterilized  
& Ready to Use



## Product Information

Sterile Filter & Sensor Transfer Sets are pre-assembled, pre-sterilized and fully pre-qualified ready to use assemblies for connection and integration to Single-Use processing solutions. They consist of a filter or pressure | flow pipe with tubing and connector for immediate connection to Single-Use or hybrid stainless steel systems. Our configurable assemblies are shipped within only a few weeks.

## Flexibility

Sartorius offers options according to your requirements:

- Pre-Designed Solutions (PDS)  
Standardized assemblies that are quickly available
- Configure-to-order (CTO)  
Configurable solutions with a broad range of options
- Engineer-to-order (ETO)  
Customized solutions for your specific needs

## Easy Integration

Filter & Sensor Transfer Sets allow an easy integration of any Sartorius filter, pressure or flow measurement into a Single-Use set up.

A secure connection of the Filter & Sensor Transfer Set can be realized in the following ways:

- Sterile connectors, such as Opta®, AseptiQuik® and others
- Connection to stainless steel equipment using Steam-Thru® connector
- Aseptic connection (under laminar flow) using a TriClamp, MPX or MPC quick coupler
- Sterile welding of TPE Tubing (C-Flex®) using the Biowelder® TC

Filter & Sensor Transfer Sets are intended for Single-Use. They can be easily configured by our team according to your needs.

Multi-Use components like the pressure transducer and the clamp-on for flow pipes can be connected to any control devices.

## Complete Process Control

By combining the Sensor with a Filter Transfer Set you can monitor for example the pressure upstream of the filter and enable immediate shut-off of the pumps in the event of critical pressure increase.

Please contact your local sales representative or application specialist for an instant quote and technical drawing of a configurable Sterile Filter or Sensor Transfer Set.

## Safety

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

## 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 amount of part numbers
- Optimize the warehousing footprint

# Technical Data

	Filter Transfer Set Autoclave	Filter Transfer Set Gamma	Virus Filter Transfer Set Gamma	Sensor Transfer Set Gamma
Tubing types   Tube diameter ID x OD	Pharma-50   3/8" x 5/8", 1/2" x 3/4" Pharma-80   1/2" x 3/4" Tuflux® Silicone   3/8" x 5/8", 1/2" x 3/4" Sani-Tech® SHTHT®-R   1/2" x 7/8"	Pharma-50   3/8" x 5/8", 1/2" x 3/4" Tuflux® Silicone   3/8" x 5/8", 1/2" x 3/4" C-Flex® 374   3/8" x 5/8", 1/2" x 3/4"	Sani-Tech® SHTHT®-R   3/8" x 5/8", 1/2" x 7/8"	Pharma-50   3/8" x 5/8", 1/2" x 3/4" Pharma Advanced Pump Tubing   1/2" x 7/8" Tuflux® Silicone   3/8" x 5/8", 1/2" x 3/4" C-Flex® 374   3/8" x 5/8", 1/2" x 3/4"
Tubing length Inlet	100, 300 [mm] 3.94, 11.81 ["]	150, 300, 500, 1000 [mm] 5.91, 11.81, 19.69, 39.37 ["]	150, 300, 500, 1000 [mm] 5.91, 11.81, 19.69, 39.37 ["]	150, 300, 500, 750, 1000, 1500 [mm] 5.91, 11.81, 19.69, 29.53, 39.37, 59.06 ["]
Tubing length Outlet	100, 300 [mm] 3.94, 11.81 ["]	150, 300, 500, 1000, 1500, 3000, 5000 [mm] 5.91, 11.81, 19.69, 39.37, 59.06, 118.11, 196.85 ["]	150, 300, 500, 1000 [mm] 5.91, 11.81, 19.69, 39.37 ["]	150, 300, 500, 750, 1000, 1500, 2000, 2500 [mm] 5.91, 11.81, 19.69, 29.53, 39.37, 59.06, 78.74, 98.43 ["]
Connectors Inlet & Outlet	AseptiQuik® G KPC Opta® SFT Quick Coupler MPX   MPC TriClamp 1 1/2" TriClamp 3/4" Steam-Thru® (STCII) Presto	AseptiQuik® G KPC Opta® SFT Quick Coupler MPC TriClamp 1 1/2" TriClamp 3/4" Steam-Thru® (STCII) Plug-in	AseptiQuik® G Opta® SFT TriClamp 1 1/2"	AseptiQuik® G KPC Opta® SFT Quick Coupler MPC TriClamp 1 1/2" TriClamp 3/4" Stream-Thru® (STCII) Plug-in
Venting line Tubing type Tubing diameter ID x OD Tubing length	-	-	Virosart® HF Sani-Tech® SHTHT®-R 1/2" x 7/8"	Virosart® Media Sani-Tech® SHTHT®-R 3/8" x 5/8", 1/2" x 7/8"
Filter Connector			300 [mm] 11.81 ["] Sartopore® Air 0.2 µm 1/2" hose barb	- AseptiQuik® G, Opta® SFT
Option Valve Inlet Maxicaps® Connector Tubing type Tubing diameter ID x OD Tubing length		-	-	-
	AseptiQuik® G Opta® SFT Quick Coupler MPC Tuflux® Silicone Pharma-50 1/4" x 7/16"			
Option Valve Outlet Maxicaps® Filter Tubing type Tubing diameter ID x OD Tubing length		-	-	-
	Midisart® 2000 Tuflux® Silicone Pharma-50 1/4" x 7/16"			
	100 [mm]			

	Filter Transfer Set Autoclave	Filter Transfer Set Gamma	Virus Filter Transfer Set Gamma	Sensor Transfer Set Gamma
Filter   Sensor Options	Sartofluor®   0.2 [µm] Sartolon   0.45 + 0.2 [µm]	Sartopore® Platinum   0.45 + 0.2 [µm]	Virosart® HF   20 nm Virosart® Media   20 nm	BioPAT® Pressure BioPAT® Flow
Pore Size   Retention Rate	Sartobran® P   0.45 + 0.2, 0.45 + 0.1, 0.65 + 0.45 [µm] Sartoclean® CA   3.0 + 0.8, 0.8 + 0.65 [µm] Sartoclean® GF   3.0 + 0.8, 0.8 + 0.65 [µm] Sartoguard GF   0.2 + 0.1, 0.8 + 0.2 [µm] Sartopure® GF Plus   1.2, 0.65 [µm] Sartopure® PP3   0.45, 0.65, 1.2, 3, 5, 8, 20, 50, 100 [µm] Virosart® Max   0.1 [µm]	Sartopore® 2   0.45 + 0.2 [µm] Sartopore® 2 XLG   0.8 + 0.2 [µm] Sartopore® 2 XLM   0.2 + 0.1 [µm] Sartopore® 2 XLI   0.35 + 0.2 [µm] Sartopore® Air   0.2 [µm] Sartoguard NF   0.8 + 0.2, 0.2 + 0.1 [µm] Sartoguard PES   1.2 + 0.2, 0.8 + 0.1 [µm]		
Sterilization Method	Autoclave	Gamma irradiation	Gamma irradiation	Gamma irradiation
Max. operation pressure   IT pressure (Depending on filter, sensor, tubing, connector combination)	0.5*, 1, 1.5, 2, 3   3, 4 [barg] 7.3, 14.5, 22, 29, 43.5   43.5, 58 [psig] * open Maxicaps® valve	1, 1.5, 2 [barg] 14.5, 22, 29 [psig]	3   2.5 [barg] 43.5   29 [psig]	1, 1.5, 2 [barg] 14.5, 22, 29 [psig]
Packaging	Double Tyvek bags	Double PA   PE bags	Double PA   PE bags	Double PA   PE bags
Min. order quantities	8	4	1	4

## Oetiker® Metal Clamp

All Filter and Sensor Transfer Sets use Oetiker® clamps. The metal clamps are wrapped with an innovative silicone rubber band to protect the user and the packaging.



## Closed System Configuration for Autoclavable Maxicaps® Filter Capsules

Filter Transfer Sets with autoclavable Maxicaps® filter capsules are available in a closed system configuration which enables safe operation even for critical applications.



## Combine Sensor and Filter Transfer Sets

Design a complete single-use functional unit!



Single-Use Pressure or Flow Pipe + Multi Use Transmitter

Single-Use Filter Transfer Set

## Technical Reference

Validation Guide	2630981
Datasheet for Pressure Sensor & Transducer	2475299-000
Datasheet for Flow Pipes & Clamp-On	SBT2017-e
Datasheet for Virus Filter Transfer Units	1000048434

## Regulatory Compliance

All Filters & Sensors as well as tubing meet the requirements of the current USP Biological Reactivity test <88> and all other product contact materials have passed USP <87> or ISO10993 as a minimum requirement.

Sterile Filter & Sensor Transfer Sets are in compliance with the European guidance on minimizing the risk of transmitting animal spongiform encephalopathy agents via human and veterinary product (EMA/410/01).

Sterile Filter & Sensor Transfer Sets are subject to bioburden, endotoxin and particulate matter control on a regular basis.

All Sterile Transfer Sets are sterilized using a validated process in accordance with DIN EN ISO 11137 or ISO 17665 regulations.

100% of the products undergo visual inspection and are subject to batch record.

## Ordering Information

### For Pre-Designed Solutions (PDS)

Filter Format	Part Number				Lot size	Tubing & Outlet Connector
	Sartopore® 2 0.45   0.2 µm	Sartopore® 2 XLM 0.2   0.1 µm	Sartopore® Platinum 0.45   0.2 µm	Sartopore® 2 XLG 0.8   0.2 µm		
Midicaps® size 7	FFU500214	FFU500268	FFU500235	FFU500220	8	½" ID Clear C-Flex® 500 mm Opta® male ½"
Midicaps® size 8	FFU500215	FFU500269	FFU500236	FFU500221	8	
Midicaps® size 9	FFU500216	FFU500270	FFU500237	FFU500222	8	
Midicaps® size 0	FFU500217	FFU500271	FFU500238	FFU500223	8	
Maxicaps® T-Style 10"	FFU500249	FFU500272	FFU500239	FFU500259	4	½" ID Clear C-Flex® 500 mm MPX male + sealing cap
Maxicaps® T-Style 20"	FFU500250	FFU500273	FFU500240	FFU500260	4	
Maxicaps® T-Style 30"	FFU500251	FFU500274	FFU500241	FFU500261	4	
Midicaps® size 7	FFU500252	FFU500275	FFU500242	FFU500262	8	
Midicaps® size 8	FFU500253	FFU500276	FFU500243	FFU500263	8	
Midicaps® size 9	FFU500254	FFU500277	FFU500244	FFU500264	8	
Midicaps® size 0	FFU500255	FFU500278	FFU500245	FFU500172	8	
Maxicaps® T-Style 10"	FFU500256	FFU500226	FFU500246	FFU500265	4	
Maxicaps® T-Style 20"	FFU500257	FFU500279	FFU500247	FFU500266	4	
Maxicaps® T-Style 30"	FFU500258	FFU500225	FFU500248	FFU500267	4	


\* C-Flex® is a registered trademark of Saint-Gobain Performance Plastics Corporation. AseptiQuik® and Steam-Thru® are registered trademarks of the Colder Product Company. Oetiker® is a registered trademark of the Oetiker Group.

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