Microsart® Manifolds

The filtration stand that adapts to your need

Features & Benefits

100% Stainless steel for minimized cleaning effort
• full autoclavability without disassembly

Sterile venting in critical applications
• reduced risk of secondary contamination

Quick connection adapters
• for fast connection of tubing and fast interconnection
  of 2 manifolds

Low working height
• for ergonomic working in laminar flow

Product Information

The ability to accurately detect and quantify microorganisms in liquid samples is of prime importance for any quality control laboratory. This is why membrane filtration is the established method of choice for liquid testing as it provides reliable and reproducible results. A suitable and thoughtful filtration equipment is at least as important as high quality membrane filters and reliable media plates. Facilitate your daily microbiological testing procedures with the new Microsart® Manifold: select the proper manifold for your individual microbiological testing procedure, choose between reusable and single use funnels or filtration units, and decide between different sizes of manifolds and enjoy the manifold that adapts to your needs.

Applications
Microbiological quality control of liquid samples:
• Beverages (beer, wine, soft drinks, bottled water)
• Pharmaceutical analysis (WFI, purified water, microbial limit testing of non-sterile products, bioburden testing)
• Environmental water testing (water monitoring)
• Cosmetics

The manifold that adapts to daily needs
Depending on the number of daily tests you can choose between different sizes of manifolds, from single branch to multi-branch. The different Manifold sizes are connectable with each other by

quick connection to enable the manifold to adapt to your daily workload. Standardized quick connectors at both sides of the manifolds enable fast connections of either tubing, another manifold or end caps. Depending on your application and criticality of product to be tested, choose between different funnel and filtration units, from complete reusable to single sterile solutions. Simply connect the filter onto the manifold by using the correct adaptor. Simply push the filter adapter into the manifold to fix it and choose your favorite between 3 different working positions. This new and fast way to connect the respective filter adapter (base support) to the manifold eliminates the need of additional tools.

Minimized risk of secondary contamination by design
The Manifold is made of 100% stainless steel. For sterilization of your working equipment, no disassembly is needed – simply put the complete manifold including the filter adapters into the autoclave for reliable sterilization. The easy to clean, compact design of the manifold allows quick and easy cleaning using standard disinfectants.

The higher quality of the stainless steel material and the consequence in using one material type ensures a long working life of the manifold in your lab.

During filtration, residual remaining liquid below the filter could potentially cross-contaminate the filter and therefore your results. The newly designed and integrated sterile venting step enables full drainage of liquid below the filter when using the Microsart® base support (Microsart® base). This integrated venting step eliminates the risk of secondary contamination and ensures a secure working procedure.

Safe and stable ergonomic working procedures
The Manifolds rubber feet providing better stability at the workplace. The low height ensures efficient and ergonomic working under the laminar flow.

Intuitive handling of the valves is given by clear start│stop feedback when turning the valves and indications on the manifold. Venting is automatically occurring when turning the valves to the stop position at the end of the filtration.

Technical Specifications

Materials of construction:	
Manifold and base supports	Stainless Steel 316L (1.4404)
Valves	Monel
O-rings	Silicon
Feet	Silicon
Dimensions (L × H × W) in mm (without Funnels and Tubing)	1 branch: 176 × 120 × 98 2 branch: 246 × 130 × 118 3 branch: 474 × 120 × 98 6 branch: 924 × 120 × 98
Weight in kg	1 branch (for Microsart® products): 0,275 kg 2 branch (for Microsart® products): 0,675 kg 3 branch (for Microsart® products): 0,725 kg 6 branch (for Microsart® products): 1,400 kg
Autoclaving conditions	121°C for 30 min

Ordering Information

Recommended Manifold setups according to the application

Pharmaceutical Application, Cosmetics: Manifold for Single Use Filtration Units

Microsart® Manifold for Microsart® @filter
- add single sterile consumables: Microsart®@filter and Microsart®@media
- for minimized risk of cross contamination by integrated venting and by touch free membrane transfer
- Microsart®@media EP and USP conform

Microsart® Manifold with Microsart®@filter units and Microsart® e.jet Pump (Pump and Filtration units are not included in the delivery content)

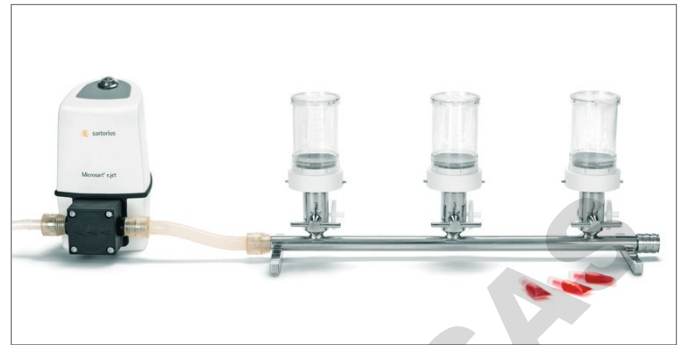| Microsart® Manifold for Microsart® Consumables	Article code
Manifolds including filter base support with sinter frit, blind coupling, 20 cm tubing and venting filter	
1 branch Microsart® Manifold for Microsart® consumables, interconnectable	168M1-MS
2 branch Microsart® Manifold for Microsart® consumables, stand alone	168M2-MS
3 branch Microsart® Manifold for Microsart® consumables, interconnectable	168M3-MS
6 branch Microsart® Manifold for Microsart® consumables, interconnectable	168M6-MS

Recommended Consumables	Article code
Microsart®@filter 100 ml, sterile, in bags of 60 units	
Microsart@filter, Cellulose Nitrate, 0.2 µm, white with black grid	16D01--10-07--BL
Microsart@filter, Cellulose Nitrate, 0.45 µm Highflow, white with black grid	16D01--10-H6--BL
Microsart@filter, Cellulose Nitrate, 0.45 µm, green with dark green grid	16D02--10-06--BL
Microsart@filter, Cellulose Nitrate, 0.45 µm Highflow, black with white grid	16D03--10-H6--BL
Microsart@filter, Polycarbonate, 0.4 µm, white	16D06--10-06--BL
Microsart®@filter 250 ml, sterile, in bags of 48 units	
Microsart@filter, Cellulose Nitrate, 0.2 µm, white with black grid	16D01--25-07--BK
Microsart@filter, Cellulose Nitrate, 0.45 µm Highflow, white with black grid	16D01--25-H6--BK
Microsart@filter, Cellulose Nitrate, 0.45 µm, green with dark green grid	16D02--25-06--BK
Microsart@filter, Cellulose Nitrate, 0.45 µm, black with white grid	16D03--25-05--BK
Microsart@filter, Cellulose Nitrate, 0.45 µm Highflow, black with white grid	16D03--25-H6--BK
Microsart®@filter 100, individually sterile packed, 100 ml capacity, with covers, 27 pieces	
Microsart@filter, Cellulose Nitrate, 0.2 µm, white with black grid	16D01--10-07-ACG
Microsart@filter, Cellulose Nitrate, 0.45 µm Highflow, white with black grid	16D01--10-H6-ACG
Microsart@filter, Cellulose Nitrate, 0.45 µm Highflow, black with white grid	16D03--10-H6-ACG
Microsart®@filter 250, individually sterile packed, 250 ml capacity, with covers, 18 pieces	
Microsart@filter, Cellulose Nitrate, 0.2 µm, white with black grid	16D01--25-07-ACF
Microsart@filter, Cellulose Nitrate, 0.45 µm Highflow, white with black grid	16D01--25-H6-ACF
Microsart@filter, Cellulose Nitrate, 0.45 µm Highflow, black with white grid	16D03--25-H6-ACF

Please find more information about Microsart®@media in the data sheet: SM-2010-e, Order No.: 850 37-539-94

Beverage and Environmental Water testing: Manifold for Single Use Filtration Units

Microsart® Manifold for Biosart® 100 Monitors
- add consumables: Biosart® 100 Monitor and Biosart® 100 media
- for minimized risk of cross contamination by integrated venting and by touch free inoculation
- Media is conform to international regulations

Microsart® Manifold with Biosart® 100 Monitors and Microsart® e.jet Pump
(Pump and Monitors are not included in the delivery content)

Microsart® Manifold for Biosart® 100 Monitors	Article code
Manifolds including filter base support with sinter frit, Biosart® adapter, blind coupling, 20 cm tubing and venting filter	
1 branch Microsart® Manifold for Biosart® 100 (interconnectable)	168M1-BS100
2 branch Microsart® Manifold for Biosart® 100 (stand alone)	168M2-BS100
3 branch Microsart® Manifold for Biosart® 100 (interconnectable)	168M3-BS100
6 branch Microsart® Manifold for Biosart® 100 (interconnectable)	168M6-BS100

Recommended Consumables	Article code
Biosart® 100 Monitors, 100 ml, 47 mm, Individually Packaged, Sterile, 48 Units	
Biosart® 100 Monitors, Cellulose Nitrate, 0.2 µm, white with black grid	16401-47-07--ACK
Biosart® 100 Monitors, Cellulose Nitrate, 0.45 µm, white with black grid	16401-47-06--ACK
Biosart® 100 Monitors, Cellulose Nitrate, 0.45 µm, green with dark green grid	16402-47-06--ACK
Biosart® 100 Monitors, Cellulose Nitrate, 0.45 µm, black with white green grid	16403-47-06--ACK
Biosart® 100 Monitors, 100 ml, 47 mm, Packaged on Trays, Sterile, 48 Units	
Biosart® 100 Monitors, Cellulose Nitrate, 0.2 µm, white with black grid	16401-47-07----K
Biosart® 100 Monitors, Cellulose Nitrate, 0.45 µm Highflow, white with black grid	16401-47-H6----K
Biosart® 100 Monitors, Cellulose Nitrate, 0.45 µm, white with black grid	16401-47-06----K
Biosart® 100 Monitors, Cellulose Nitrate, 0.45 µm, green with dark green grid	16402-47-06----K
Biosart® 100 Monitors, Cellulose Nitrate, 0.45 µm, black with white grid	16403-47-06----K
Biosart® 100 Monitors, Cellulose Nitrate, 0.8 µm, black with white grid	16403-47-04----K
Biosart® 100 Monitors, Regenerated Cellulose, 0.45 µm, black with white grid	16404-47-06----K
Biosart® 100 Monitors, 100 ml, 47 mm, Sterile, 48 Units	
Biosart® 100 Monitors, Cellulose Nitrate, 0.45 µm Highflow, white with black grid	16401-47-H6-V--K
Biosart® 100 Monitors, Cellulose Nitrate, 0.45 µm, white with black grid	16401-47-06-V--K
Biosart® 100 Monitors, Cellulose Nitrate, 0.45 µm, black with white grid	16403-47-06-V--K
Biosart® 100 Monitors, Cellulose Nitrate, 0.8 µm, black with white grid	16403-47-04-V--K
Biosart® 100 Monitors, 100 ml, 47 mm, Sterile, 48 Units, Membrane Fixed available only in the U.S. and Canada	
Biosart® 100 Monitors, Cellulose Nitrate, 0.45 µm Highflow, white with black grid	16401-47-H6-VWMK
Biosart® 100 Monitors, Cellulose Nitrate, 0.45 µm, white with black grid	16401-47-06-VWMK
Biosart® 100 Monitors, Cellulose Nitrate, 0.45 µm Highflow, black with white grid	16403-47-H6-VWMK
Biosart® 100 Monitors, Cellulose Nitrate, 0.45 µm, black with white grid	16403-47-06-VWMK

Please find more information about Biosart® 100 media in the data sheet: SL-2063-e, Order No.: 85034-538-85

Option Beverage & Environmental:
Manifold for sterile Funnels

Microsart® Manifold for single use sterile Microsart® Funnels
- add Microsart® Funnels and Membrane Filters or Nutrient
  Pad Sets
- for minimized risk of cross contamination by integrated venting
  (no residual liquid), forceps needed
- media according to international regulations

Microsart® Manifold with 100ml Microsart® Funnels and Microsart® e.jet Pump
(Pump and Funnels are not included in the delivery content)

Microsart® Manifold for Microsart® Consumables	Article code
Manifolds including filter base support for 47 mm Membrane filter, with sinter frit, blind coupling, 20 cm tubing and venting filter	
1 branch Microsart® Manifold for Microsart® consumables, interconnectable	168M1-MS
2 branch Microsart® Manifold for Microsart® consumables, stand alone	168M2-MS
3 branch Microsart® Manifold for Microsart® consumables, interconnectable	168M3-MS
6 branch Microsart® Manifold for Microsart® consumables, interconnectable	168M6-MS

Recommended Consumables	Article code
Microsart® Funnels, sterile, single use	
Microsart® Funnels, 100 ml, sterile	16A07--10------N
Microsart® Funnels, 250 ml, sterile	16A07--25------N

Please find more information about our Nutrient Pad Sets (NPS) in the following brochure: SM-4017-e, Order No.: 85030-503-99

Option Beverage & Environmental:
Manifold for autoclavable Funnels

Microsart® Manifold for Biosart® 250 Funnels

- add autoclavable Biosart® 250 Funnels and Membrane filter
- flexible easy quick connect setup to adapt to variable numbers of tests per day
- easy cleaning procedure, fully autoclavable manifold, no material mix

Microsart® Manifold with Biosart 250 Funnels and Microsart® e.jet Pump
(Pump and Funnels are not included in the delivery content)

Microsart® Manifold for Biosart® 250 Funnels	Article code
Manifolds including filter base support for 47 and 50 mm Membrane filter, with sinter frit, blind coupling, 20 cm tubing and plug for venting holes	
1 branch Microsart® Manifold for Biosart® 250 funnels (47 and 50 mm filter), interconnectable	168M1-BS250
3 branch Microsart® Manifold for Biosart® 250 funnels (47 and 50 mm filter), interconnectable	168M3-BS250
6 branch Microsart® Manifold for Biosart® 250 funnels (47 and 50 mm filter), interconnectable	168M6-BS250

Recommended Consumables	Article code
Biosart® 250 Funnels, Polypropylene, sterile	16407--25----ALK

Option Beverage & Environmental:
Microsart® Manifold with Stainless Steel Funnels

- add Membrane filter
- flexible easy quick connect-setup to adapt to variable numbers of tests per day
- easy cleaning by no disassembly, fully autoclavable manifold, no material mix
- flammable stainless steel Funnels (100 ml or 500 ml)

Microsart® Manifold with 100 ml Stainless Steel Funnels and Microsart® e.jet Pump (Pump is not included in the delivery content)

Microsart® Manifold including Stainless Steel Funnels	Article code
Manifolds including filter base support with sinter frit for 47 and 50 mm Membrane filter, blind coupling, 20 cm tubing and plug for closing the venting hole	
1 branch Microsart® Manifold with 100 ml Stainless Steel Funnel, interconnactable	168M1-SS100
3 branch Microsart® Manifold with 100 ml Stainless Steel Funnel, interconnactable	168M3-SS100
6 branch Microsart® Manifold with 100 ml Stainless Steel Funnel, interconnactable	168M6-SS100
1 branch Microsart® Manifold with 500 ml Stainless Steel Funnel, interconnactable	168M1-SS500
3 branch Microsart® Manifold with 500 ml Stainless Steel Funnel, interconnactable	168M3-SS500
6 branch Microsart® Manifold with 500 ml Stainless Steel Funnel, interconnactable	168M6-SS500

Accessories and Replacement Parts for the Microsart® Manifolds	Article code
Silicone vacuum grease	BB-34090207
Venting filter*	17575--------ACK
Plug, conical, to close the venting hole, if sterile venting is not required**	6980225
Microsart® e.jet Liquid Transfer Pump	166MP-4
Silicone tubing, for connection with Microsart® e.jet Pump, pressure-sided, 1 m	1ZAS--0007
Silicone tubing with Quick Connection Coupling, 20 cm, vacuum-sided, for connection between Microsart® manifold and Microsart® e.jet pump (spare part)	1ZA---0006
Blind coupling for 1, 3 and 6 place Microsart® Manifold*, Stainless Steel (spare part)	168SP-A0001
Quick Connection Coupling for Silicon Tubing*, PSU, 2 units	168SP-B0001
Quick Connection Coupling for Microsart® 2 place Manifold, PVDF, 1 unit	1EAS--0022
Biosart Adapter*, Polypropylen, 1 unit	16424
100 ml Stainless steel funnel with closure clamp*	6981065
Lid, stainless steel, for 100 ml Funnel*	6981063
Lid seal, silicone, for 100 ml Funnel*	6981064
500 ml Stainless steel funnel with closure clamp*	6981002
Lid, stainless steel, for 500 ml Funnel*	6981001
Lid seal, silicone, for 500 ml Funnel*	6981003
Base support for Microsart® Manifold, stainless steel, for use of 47 mm Filter with Microsart® Funnels, Microsart®@filter, Biosart 100 Monitors (spare part)	168ZA-A0001
Base support for Microsart® Manifold, stainless steel, for use of 47 or 50 mm Filter with Biosart® 250 Funnels or 100 ml/500 ml Stainless Steel Funnels (spare part)	168ZA-B0001
Double Coupling for Connection of 2 Manifolds, Stainless Steel	168ZA-C0001

* only for Microsart® Manifolds 168Mx-MS and 168Mx-BS100
** only for Microsart® Manifolds 168Mx-BS250 and 168Mx-SSxxx

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