### Re-usable, 13 mm Syringe Filter Holders

For the Ultracleaning of Small Volumes Up to About 10 mL



#### **PTFE Holder for Solvents and Chemicals**

Made completely of PTFE, this holder is unaffected by chemicals and contains no trace elements which could be released into the liquid being filtered. It is therefore extremely well suited for particle removal from samples and reagents for analytical methods, such as NMR samples. Other benefits of this application are the low hold-up volume, the easy cleaning and the drying at a temperature of 180°C. The construction of the holder ensures leak proof sealing without a sealing ring, and avoids twisting of the membrane filter when the top is tightened onto the base.



### Specifications

Connectors	Female Luer Lock inlet, luer slip outlet
Chemical compatibility	As for PTFE
Filtration area	0.5 cm <sup>2</sup>
Materials	PTFE top and bottom parts
Max. operating pressure	5 bar   500 kPa   72.5 psi
Membrane filter diameter	13 mm
Sterilization	By autoclaving (max. 134°C) or by dry heat (max. 180°C)
Hold-up volume	Less than 0.03 mL after overcoming the

bubble point (0.3 mL before)

### Ordering Information

Description	Order No.
13 mm PTFE Syringe Filter Holder	16574

### Polycarbonate Holder for Aqueous Solutions

This inexpensive filter holder is made of clear, autoclavable polycarbonate. The silicone gasket enables a leak-free filtration at pressures of up to 7 bar by simply screwing it together manually. Filter supports in the top and bottom parts allow filtration in either direction.

### Specifications

Connectors	Female Luer Lock inlet, luer slip outlet
Chemical compatibility	As for polycarbonate and silicone
Filtration area	0.5 cm <sup>2</sup>
Materials	Polycarbonate top and bottom part, silicone gasket
Max. operating pressure	7 bar   700 kPa   101.5 psi
Membrane filter diameter	13 mm
Sterilization	By autoclaving at 121℃
Hold-up volume	Less than 0.2 mL after overcoming the bubble point (0.3 mL before)

Description	Order No.
13 mm Polycarbonate Syringe Filter Holder, pack of 12	16514E
Silicon gasket, $10 \times 14.9 \times 0.5$ mm, pack of 10	6980569

### Re-usable 25 mm Syringe Filter Holders

For the Ultracleaning and Sterilizing Filtration of Volumes of Up to About 100 mL



### Stainless Steel Holder for Solvents and Chemicals

Made of stainless steel, this holder is heatresistant, and the chemical compatibility depends only on the inserted filter type. The top part can easily be mounted on the bottom part using the enclosed tightening tool. Filter supports in the top and bottom parts allow filtration in either direction.

### Specifications

Connectors	Female Luer Lock inlet, luer slip outlet
Chemical compatibility	As for stainless steel
Filtration area	3 cm <sup>2</sup>
Materials	Stainless steel (1.4305) top and bottom parts
Max. operating pressure	7 bar   700 kPa   101.5 psi
Membrane filter diameter	25 mm
Sterilization	By autoclaving (max. 134°C) or by dry heat (max. 180°C)
Hold-up volume	Less than 0.1 mL after overcoming the bubble point (0.3 mL before)

### Ordering Information

Description	Order No.
25 mm Stainless Steel Holder	16214
Tightening tool, Polyman 24/5	6980595



#### Polycarbonate Holder for

**Aqueous Solutions** This inexpensive filter holder is made of clear, autoclavable polycarbonate. The silicone gasket enables a leak-free filtration at pressures of up to 7 bar by simply screwing it together manually. Filter supports in the top and bottom parts allow filtration in either direction.

### Specifications

Connectors	Female Luer Lock inlet, luer slip outlet
Chemical compatibility	As for polycarbonate and silicone
Filtration area	3 cm <sup>2</sup>
Materials	Polycarbonate top and bottom parts, silicone gasket
Max. operating pressure	7 bar   700 kPa   101.5 psi
Membrane filter diameter	25 mm
Sterilization	By autoclaving at 121°C
Hold-up volume	Less than 0.3 mL after overcoming the bubble point (0.6 mL before)

Description	Order No.
25 mm Polycarbonate Syringe Filter Holder, pack of 12	16517E
Silicone gasket, $20.5 \times 26.5 \times 0.5$ mm, pack of 10	6980570

## 25 mm Glass Vacuum Filter Holder

For Hybridization Tests, Particle Testing and Clarification

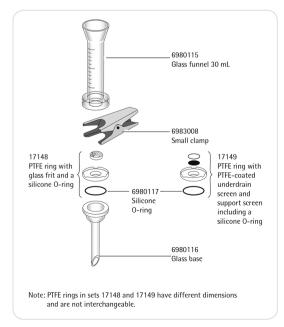


This filter holder is available in two versions differing from each other only in the type of the filter support. The filter with glass frit ensures uniform distribution of retained particles and is therefore recommended when the residue on the filter surface is of interest. Because it is easy to clean, the device with the PTFE-coated screen support is preferable when the filtrate is required, or when liquids difficult to remove from glass frits must be examined. The PTFE ring, which holds the glass frit and the screen support, allows for the autoclaving of the devices with a filter in position and protects the edge of the glass frit from breakage and potential leakage. It has a rim around the upper edge to simplify the positioning of the membrane filter when inserted and a silicone O-ring in the underside for a leak-proof seal on the filtrate side. The funnel-shaped top part simplifies filling in the sample.



#### Specifications

Outlet spout	12 mm dia.
Parts and materials	Borosilicate glass funnel and base PTFE   glass filter support (type 16306) or PTFE   stainless steel filter support, coated with PTFE (type 16315) Silicone O-ring 25 × 3 mm Anodized Aluminium clamp
Chemical compatibility	As for glass, PTFE and silicone. The silicone O-ring can be replaced by a fluoroelastomer O-ring (order no. 00118)
Funnel capacity	30 mL
Filtration area	3 cm <sup>2</sup>
Max. operating pressure	Only for vacuum
Suitable membrane filter diameter	25 mm (or 24 mm)
Sterilization	By autoclaving (max. 134°C) or by dry heat (max. 180°C)



### Ordering Information

Description	Order No.
Glass vacuum filtration holder for 25 mm (or 24 mm) membrane filter, with glass frit filter support	16306
Glass vacuum filtration holder for 25 mm (or 24 mm) membrane filter, with PTFE-coated screen filter support	16315

# 50 mm Glass Vacuum Filter Holder

For Particle Testing or Clarification and Sterile Filtration

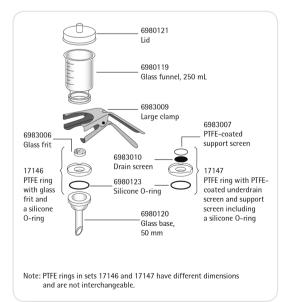


This filter holder is available in two versions differing from each other only in the type of the filter support. The device with glass frit ensures uniform distribution of retained particles and is therefore recommended, when the residue on the filter surface is of interest. Because it is easy to clean, the device with the PTFE-coated screen support is preferable when the filtrate is required, or when liquids difficult to remove from glass frits must be examined. The PTFE ring, which holds the glass frit and the screen support, allows the autoclaving of the devices with a filter in position and protects the edge of the glass frit from breakage and potential leakage. It has a rim around the upper edge to simplify the positioning of the membrane filter when inserted and a silicone O-ring in the underside for a leak-proof seal on the filtrate side.



### Specifications

Outlet spouts	15 mm dia.
Parts and materials	Borosilicate glass funnel and base Silicone caoutchouc lid PTFE   glass filter support (type 16307) or PTFE   stainless steel filter support, coated with PTFE (type 16316) Silicone O-ring 45 × 3 mm Anodized Aluminium clamp
Chemical compatibility	As for glass, PTFE and silicone. The silicone O-ring can be replaced by a fluoroelastomer O-ring (order no. 00124).
Funnel capacity	250 mL
Filtration area	12.5 cm <sup>2</sup>
Max. operating pressure	Only for vacuum
Suitable membrane filter diameter	50 mm (or 47 mm)
Sterilization	By autoclaving (max. 134°C) or by dry heat (max. 180°C)



### Ordering Information

Description	Order No.
Glass vacuum filtration holder for 50 mm (or 47 mm) membrane filter, with glass frit filter support	16307
Glass vacuum filtration holder for 50 mm (or 47 mm) membrane filter, with PTFE-coated screen filter support	16316

# All-Glass Vacuum Filter Holder

For Analytical Determinations, Particle Removal from Solvents

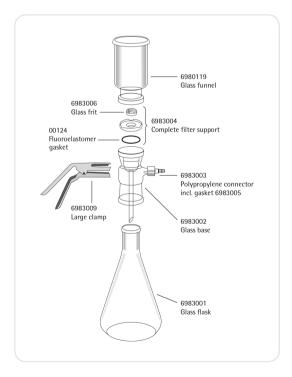


All areas, where liquid and device can come into direct contact, are made of glass or PTFE. The device, in combination with solvent-resistant, hydrophilic RC-membranes, is therefore ideal for ultracleaning and degassing solvents and solvent mixtures for HPLC, GC and AA. Convenience of handling is ensured by several beneficial features. A 6 mm wide non-ground rim above the ground glass neck of the suction flask prevents the filtrate from contacting grease on the ground glass surface and so avoids its contamination while being poured out of the flask. The hose nipple connector is made of polypropylene for safe connection of the vacuum hose. The filtrate outlet spout ends well below the entrance to this hose nipple.



### Specifications

•	
Parts and materials	Borosilicate glass funnel, base and flask, sintered glass frit in a PTFE ring and fluoroelastomer O-ring (45×3 mm) underneath, anodized aluminium clamp
Chemical compatibility	As for glass and PTFE
Funnel capacity	250 mL
Capacity of the filtrate flask	1 liter
Filtration area	12.5 cm <sup>2</sup>
Max. operating pressure	Only for vacuum
Suitable membrane filter diameter	50 mm (or 47 mm), 40 or 42 mm prefilter
Sterilization (without connector)	By autoclaving (max. 134°C) or by dry heat (max. 180°C)



### Ordering Information

DescriptionOrder No.All-glass vacuum filter holder16309for 50 mm (or 47 mm) membrane filter,<br/>with vacuum-resistant flask, capacity 1 liter

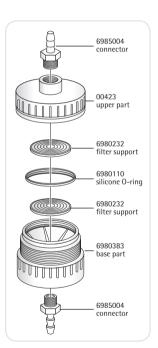
# Polycarbonate In-Line Filter Holder

For the Filtration of Liter Volumes of Aqueous Solutions



This holder is made of stable, autoclavable polycarbonate. This practical holder is suitable for many simple laboratory filtrations. It can be connected to a peristaltic pump or a pressure container. The bell-shaped base protects the filtrate from repeated contamination while flowing in a receiver. The holder is characterized by an excellent resistance to pressure and density setting by simple hand-tightening. The transparent top part allows the visual control of the correct fit of the O-ring. The hose nipples can be replaced by luer connectors to use it as a large area syringe filter holder.





### Specifications

Chemical compatibility	As for polycarbonate, polypropylene and silicone
Filtration area	12.5 cm <sup>2</sup>
Weight	83 g
Threads for connectors	M 12 $\times$ 1 female thread
Materials	Polycarbonate top part, base part and hose nipple, polypropylene filter support, silicone O-ring (40×5 mm)
Max. operating pressure	7 bar   700 kPa   101.5 psi
Suitable membrane filter diameter	50 mm (40 or 42 mm prefilter)
Sterilization	By autoclaving at 121°C The material withstands repeated cycles, provided aggressive cleaning agents are completely washed off and that the boiler water does not contain anti-corrosive or anti-scaling additives.

### Ordering Information

Description	Order No.
Polycarbonate in-line filter holder for 50 mm membrane filter,	16508B
pack of 5.	

### 25 mm Stainless Steel Filter Holder

For In-Line Filtration

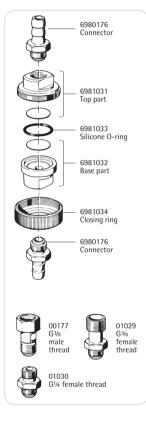


The G<sup>1</sup>/4 connection threads with density barrel, guarantee leak-proof sealing of the hose nipple and the holder without sealing rings. Other connectors, available as accessories, fit the holder onto reducing valves or pumps with  $G_{3/8}$  female thread order no. 01029) or onto pressure tanks with  $G_{3/8}$  male thread (order no. 00177).

Connectors	Hose nipples DN10
Filtration area	3 cm <sup>2</sup>
Weight	ca. 170 g
Materials	Stainless steel, except silicone O-ring (21 × 2 mm) and aluminium closing ring
Max. operating pressure	5 bar   500 kPa   72.5 psi
Suitable membrane filter	25 mm (20 mm prefilter for the filtration of liquids only)
Sterilization	By autoclaving (max. 134°C) or by dry heat (max. 180°C)

### Ordering Information

Description	Order No.	
Stainless steel pressure filter holder for 25 mm dia.	16251	
membrane filter.		



# 47 mm Stainless Steel Filter Holder

For In-Line Filtration



The filter holder is suitable for a pressure of up to 20 bar. The inlet side valve is convenient for the intermittent run-off of waste water. Other connectors, available as accessories, fit the holder onto reducing valves or pumps with  $G_{3/8}$  female thread (order no. 17089) or onto pressure tanks with  $G_{3/8}$  male thread (order no. 17069) or on taps with  $G_{3/4}$  male thread (order no. 17068).

### Specifications

Connectors	Hose nipples DN10
Connection thread	M12×1
Filtration area	13 cm <sup>2</sup>
Weight	ca. 490 g
Materials	Stainless steel, except silicone O-ring (42 × 3 mm), PTFE and fluoroelastomer valve seals
Max. operating pressure	20 bar   2,000 kPa   290 psi
Suitable membrane filter	47 mm (40 or 42 mm prefilter)
Sterilization	By autoclaving (max. 134°C) or by dry heat (max. 180°C)

### Ordering Information

Description	Order No.
Stainless steel filter holder for 47 mm membrane filter (with adapter M12×1 male thread to hose barb DN10, Mat. 316, ref. 6980801) – Replacement parts are shown in the diagram	16254
Stainless steel filter holder for 47 mm membrane filter (with adapter M12×1 male thread to hose barb DN 4 to 5, Mat. 316, ref. 6981132)	16278
Stainless steel back pressure screen	69807211
Stainless steel filter support screen	69801801
Stainless steel underdrain screen	00181
Stainless steel connector M12×1 male thread to hose barb DN 4-5	6981132
Adapter Quick connect nipple length 60 mm male part to male thread M12×1, Mat 316	170901

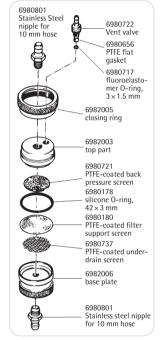


Diagram for 16254

### Stainless Steel Pressure Filter Holder

For the Filtration of Up to 5 Liter Volumes



A practical filter holder for many laboratory filtrations. It can be attached to a tripod with the help of a steel rod which can be screwed in. The hose nipple is screwed into the side of the top part, leaving room for a large filling opening. This makes pouring in the sample easier, and the sample can be refilled without removing the tube connection to the pressure source. Leak-proof sealing is achieved by hand-tightening the closing ring. For the filtration of small volumes (up to about 200 ml of soil samples or viscous liquids, such as oils), the holder is connected directly to a pressure source. For the filtration of up to 5 liter volumes of relatively easily filterable liquids (e.g. buffer solutions, solutions for cell counters and tissue culture solutions), it is used in combination with a pressure tank.



### Specifications

Specifications	
Chemical compatibility	As for stainless steel, PTFE and silicone. If required, the silicone O-ring in the filter support can be replaced by a fluoroelastomer O-ring 00179 or a PTFE O-ring 17038 (by reducing the max. operating pressure to 4 bar 58 psi); the silicone O-ring in the top part can be replaced by a fluoroelastomer O-ring 17145.
Filtration area	13 cm <sup>2</sup>
Weight	960 g
Threads for connectors	M 12 $\times$ 1 female thread
Materials	Top part, barrel, base part, corrugated iron, closing ring, closure cap, back pressure screen and stainless steel hose nipples 1.4401 (AISI 316), PTFE-coated stainless steel filter support, silicone O-rings, 41 × 2 mm (top part) and 42 × 3 mm (filter support), PTFE-sealing (cap).
Max. operating pressure	10 bar   1,000 kPa   145 psi
Suitable membrane filter diameter	47 mm (40 or 42 mm prefilter)
Sterilization	By autoclaving (max 134°C) or by dry heat (180°C)

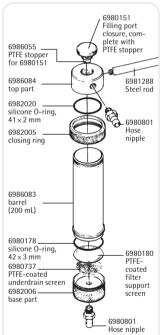
### Ordering Information

Description	Order No.
Stainless steel pressure filter holder	16249
Stainless steel pressure filter holder with double jacket	162493

#### **Replacement Parts**

Description	Order No.
Fluoroelastomer O-ring, 42 × 3 mm	00179
PTFE O-ring, 42×3 mm	17038
Fluoroelastomer O-ring for upper part, 41 × 2 mm	17145

Other replacement parts are shown in the diagram or on page 2.



### Chemical-resistant PTFE Filter Holder

For the Filtration of Aggressive Liquids



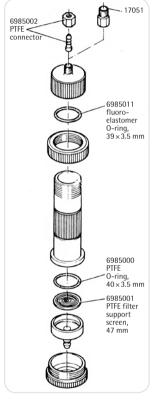
The holder hinders the release of trace elements into the filtrate and is resistant to almost all chemicals. The fluoroelastomer O-ring in the top part allows easy hand tightening, and can be replaced by a PTFE O-ring, order no. 17039. The 6 mm outlet nipple is an integral part of the base, the 10 mm inlet hose nipple can be replaced by a  $G_{38}$  connector, order no. 17051.

### Specifications

Chemical compatibility	As for PTFE and fluoroelastomer
Filtration area	12.5 cm <sup>2</sup>
Thread for inlet connector	M 14 $\times$ 1.5 male thread
Materials	Top part, barrel, base part: corrugated iron, hose nipples and filter support with 40 × 3.5 mm O-ring: PTFE, locking rings: aluminium 39 × 3.5 mm fluoroelastomer O-ring (top part)
Max. operating pressure	5 bar   500 kPa   72.5 psi
Suitable membrane filter diameter	47 mm
Sterilization	By autoclaving (max 134°C) or by dry heat (180°C)

### Ordering Information

Description	Order No.
PTFE pressure filter holder, 47 mm, with 200 mL capacity.	16579
Replacement Parts	
Description	Order No.
PTFE O-ring, 39×3.5 mm	17039



# Combisart<sup>®</sup> Manifolds

1-, 3- and 6-Branch



Made of high-grade stainless steel (B.S. 304S3 | AISI 304); accommodates any type of vacuum funnel. Stainless steel three-way valves (taps) allow the vacuum for each filter holder to be individually controlled and each holder to be sterilely vented. The low height of the manifold ports is particularly advantageous for working on a clean bench.

### Ordering Information

Combisart® Manifolds, without Base Support and Frit	Order No.
Combisart <sup>®</sup> 1-branch manifold	16844
Combisart® 3-branch manifold	16842
Combisart <sup>®</sup> 6-branch manifold	16843

Combisart <sup>®</sup> Sets, Stainless Steel Capacity	Order No.
1-branch 1 × 100 mL	16844-CS
1-branch 1 × 500 mL	16845-CS
3-branch 3 × 100 mL	16824-CS
3-branch 3 × 500 mL	16828-CS
6-branch 6×100 mL	16832-CS
6-branch 6×500 mL	16831-CS

In each set stainless steel funnels with lids are preassembled.

#### **Accessories and Replacement Parts**

Description	Pack Size	Order No.
Plug, conical, to close the venting hole beside the 3-way valve	10	6980225
Silicone O-ring for manifold female threads	3	6980235
Rubber tubing, 1 m	1	16623

### Glass Filter Holders; 30, 250 mL

For Particle Counting



#### **Glass Filter Holders**

Two compact vacuum filter holders for easy particulate analysis. Both the top and bottom part of the filter holders are easily and securely fastened together using the metal clamp. The centering rim on the filter support ensures correct positioning of the membrane filter. The glass frit filter support guarantees uniform distribution of retained particles on the filter surface.

### Ordering Information

Description		Order No.
Glass filter holder	30 mL	16306
Filter diameter	25 mm (or 24 mm)	
	Prefilter, 20 mm	
Filtration area	3 cm <sup>2</sup>	
Capacity	30 mL	
Outlet	12 mm outer diameter	
Glass filter holder	250 mL	16307
Filter diameter	47 mm (or 50 mm)	
	Prefilter, 40 mm	
Filtration area	12.5 cm <sup>2</sup>	
Capacity	250 mL	
Outlet	15 mm outer diameter	



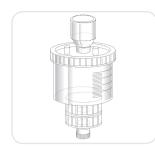
#### Adapter, 16836 Adapter, 16837

For use of a glass filter holder, 16306 or 16307, on a Combisart<sup>®</sup> stainless steel manifold.

Description	Order No.
Adapter with 11 mm opening in stopper; for using filter holder 16306 on a Combisart <sup>®</sup> manifold	16836
Replacement stopper for 16836	00280
Adapter with 14 mm opening in stopper; for using filter holder 16307 on a Combisart <sup>®</sup> manifold	16837
Replacement stopper for 16837	00281

### Polycarbonate Filter Holders

For Particle Counting



#### Polycarbonate Filter Holder, 250 mL

This reusable, practical filter holder made of autoclavable plastic is ideal for analytical testing outside the laboratory. For use with 47 mm membrane filters.

Outlet: TR 20×2 mm male thread

Description	Order No.
Polycarbonate filter holder without receiver flask	16511
Polycarbonate filter holder with receiver flask	16510
Hand vacuum pump with gauge and 60 cm PVC tubing	16673





Pricing on any accessories shown can be found by keying the part number into the search box on our website. The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

# www.wolflabs.co.uk

Tel : 01759 301142 Fax : 01759 301143 sales@wolflabs.co.uk

Please contact us if this literature doesn't answer all your questions.