



Directions for Use | Bedienungsanleitung | Instructions d'utilisation |
Instrucciones para el uso | Istruzioni per l'uso di apparecchi

16309

All-Glass Vacuum Filter Holder | für Ganzglas-Vakuumfiltrationsgerät |
Dispositif de filtration sous vide entièrement en verre |
del aparato de filtración al vacío, hecho completamente de vidrio |
interamente in vetro per filtrazione sottovuoto



English – page 3

Before reading these instructions, fold out the last page showing the photos.

Deutsch – Seite 8

Bitte klappen Sie vor dem Lesen die letzte Seite mit den Abbildungen auf.

Français – page 13

Les instructions décrites ci-après se réfèrent aux photos en dernière page.

Español – página 18

Antes de leer estas instrucciones, le rogamos desplegar la última página que contiene las fotos.

Italiano – pagina 23

Prima di leggere le istruzioni, aprite l'ultima pagina con le illustrazioni.

DOMINIQUE DUSSCHER SAS

Contents

1. Specifications
2. Equipment Supplied
3. Cleaning and Care of the Filter Holder
4. Assembling the Filter Holder and
Inserting the Membrane Filter
5. Clarifying Filtration
6. Recommended Accessories
7. Spare Parts

DOMINIQUE DUTSCHER SAS

All-Glass Vacuum Filter Holder

The all-glass vacuum filter holder is suitable for membrane filters with a diameter of 50 mm (or 47 mm). It comes complete with a vacuum-resistant glass flask, which you can use to retain the filtrate.

A 6 mm wide, non-ground glass rim, located above the ground glass neck of the filtrate flask, prevents contamination of the filtrate by contact with the ground glass area (e.g., by grease) while it is being poured out. The filter support consists of a glass frit in a PTFE ring. All other parts of the filter holder that come in contact with filtration medium are made of glass.

The glass funnel and glass base are held together securely by a metal clamp. A centering rim on the filter support makes it easy to position the funnel and prevents the inserted membrane filter from being displaced.

1. Specifications

Glass funnel:	Borosilicate glass 3.3; capacity: 250 ml
Filter support:	Sintered glass frit in a PTFE ring, fluoroelastomer O-ring (45×3 mm) underneath
Glass base:	Borosilicate glass 3.3; polypropylene connector with fluoroelastomer gasket and nipple for DN 8 hose (8 mm)
Clamp:	Anodized aluminum
Filtrate flask:	Borosilicate glass 3.3 with exterior ground glass area; vacuum-resistant; capacity: 1 liter
Filter diameter:	50 mm or 47 mm; prefilter: 40 mm
Filtration area:	12.5 cm ²
Maximum operating pressure:	Vacuum only
Sterilization:	Autoclaving (134 °C max.); dry heat (180 °C max.) The sterilization conditions depend on the type of membrane filter used.

Typical Flow Rates for Water

Pore size (membrane filter)	Flow rate (90% vacuum)
0.2 µm	200 ml/min.
0.45 µm	600 ml/min.
0.8 µm	2,200 ml/min.

2. Equipment Supplied

Remove the filter holder from the packaging and check the list below to make sure you have all parts of the equipment:

Equipment Supplied	Photo No.
1 Filtrate flask	1a
1 Glass base with connector	1b
1 Filter support with glass frit and fluoroelastomer O-ring	1c
1 Glass funnel	1d
1 Clamp	1e

3. Cleaning and Care of the Filter Holder

To ensure a long service life and proper functioning of your filter holder, it is necessary to clean it before initial use and after each filtration run.

To clean the filter holder, proceed as follows:

- 3.1 Completely disassemble the holder.
- 3.2 Using a commercially available detergent (for metal, glass, plastic) and a soft brush, clean all parts with warm water.
- 3.3 Rinse all parts with hot water first, then with distilled water.
- 3.4 Dry parts with compressed air or drip-dry. Do not use towels or cloth to dry since they may leave lint on the filter holder.

4. Assembling the Filter Holder and Inserting the Membrane Filter

You will need the following additional equipment to assemble your vacuum filtration system:

- 1 Source of vacuum (e.g., 16612/15)
- 1 Vacuum hose (16623)
- 1 Woulff's bottle (16610)
- 1 Vacusart (17804-M)
- 1 Pair of forceps for handling the membrane (see Fig. 4)

4.1 Place the filtrate flask on the table (Fig. 1a), and set the glass base on the filtrate flask (Fig. 2).

4.2 Place the filter support with the fluoroelastomer O-ring facedown on the glass base (Fig.3).

4.3 Using forceps, remove the membrane filter from the packaging and center it on the filter support (Fig. 4). If a prefilter is additionally required for your filtration run, center it on top of the membrane filter (Fig. 5). The diameter of the prefilter may not exceed the dimensions listed under section 1, "Specifications."

4.4 Center the glass funnel on the glass base (Fig. 6), and secure both parts using the clamp (Fig. 7).

4.5 Connect the filtrate flask to the source of vacuum using the vacuum hose.

If you are using an electric pump as a source of vacuum, you must interconnect a Woulff's bottle between the filtrate flask and the pump to prevent any filtrate overflow from entering the pump. When used with a water jet pump, Midisart 2000 prevents water from flowing back into the filtrate flask (Fig. 8).

If the filtrate flow rate decreases, we recommend that you use compressed air to drain any remaining water out of the Midisart 2000 (in the direction opposite to filtration), or that you allow the Midisart 2000 to dry overnight in a drying oven at 105 °C.

5. Clarifying Filtration

5.1 Assemble the filter holder and insert the membrane filter as described in section 4.

5.2 Pour the filtration medium into the glass funnel (Fig. 9), and turn on the vacuum pump.

Important Note

If you are additionally using a prefilter for your filtration run, we recommend that you turn on the vacuum pump before pouring the filtration medium into the glass funnel (otherwise, the prefilter could float to the top).

5.3 The filtration run is completed when the filtration medium is no longer visible on the membrane filter. At this point, disconnect the source of vacuum from the filter holder (if you are using a water jet pump, just detach the hose from the nipple on the suction flask). If you are using a Woulff's bottle and a vacuum pump, turn off the pump and release the pressure in the Woulff's bottle.

5.4 Remove the glass funnel.

5.5 There are two possibilities for removing the filtrate:

a) After detaching the vacuum hose and removing the filter support, you can pour out the filtrate from the side connector (Fig. 10).

b) After removing the glass base, you can pour out the filtrate (Figs. 11/12).

6. Recommended Accessories

1. Pumps:

16611	Water jet pump
16673	Hand-operated vacuum pump
16692	Vacuum pump, 220 V, 50 Hz
16695	Vacuum pump, 110 V, 60 Hz
16612	Vacuum pump, 220 V, 50 Hz
16615	Vacuum pump, 110 V, 60 Hz

2. Overspill Barriers:

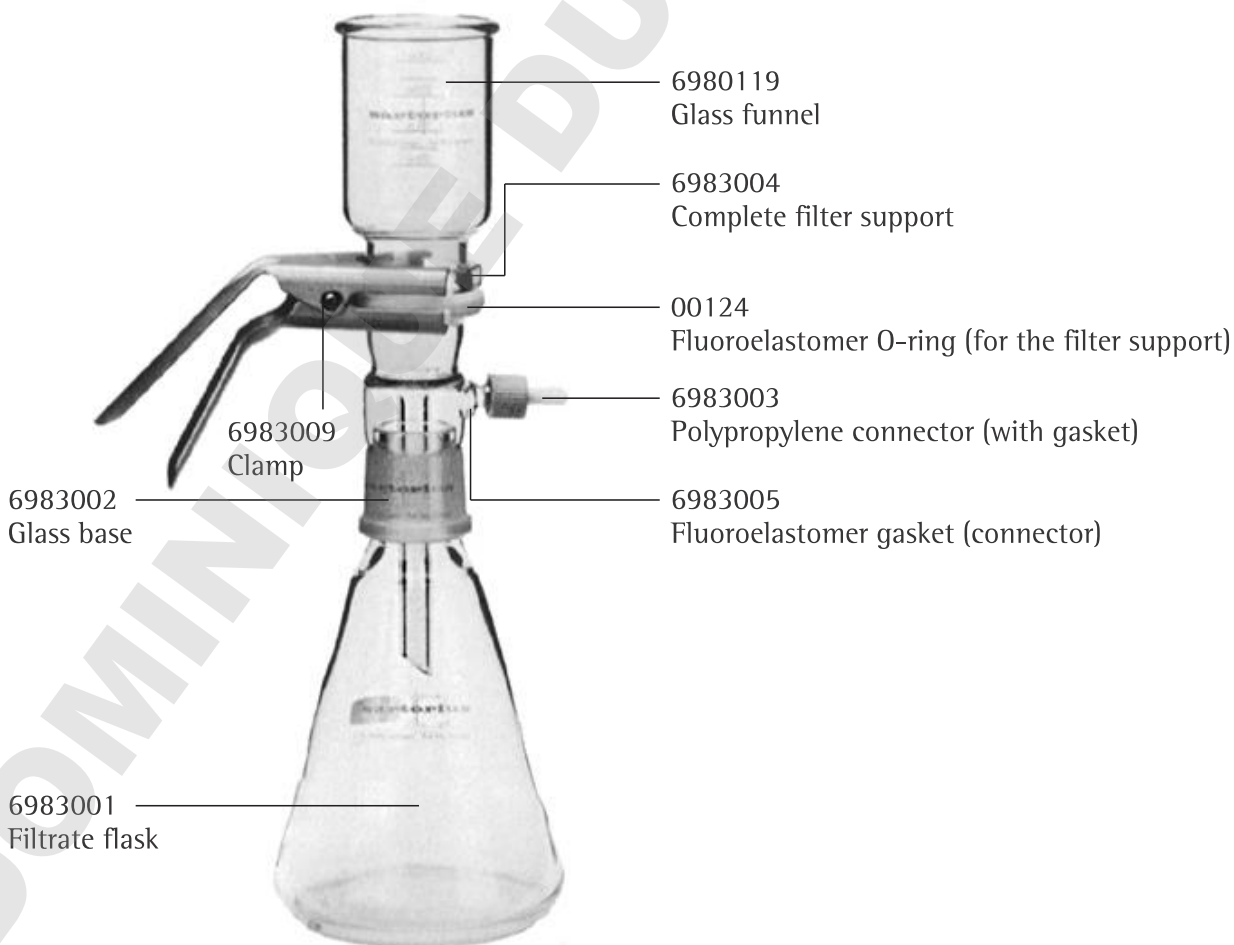
(to protect the system from liquid)

16610	Woulff's bottle
17804-M	Vacusart

3. Miscellaneous:

16623	Rubber hose, 1 m
16625	Forceps

7. Spare Parts (please refer to the diagram):

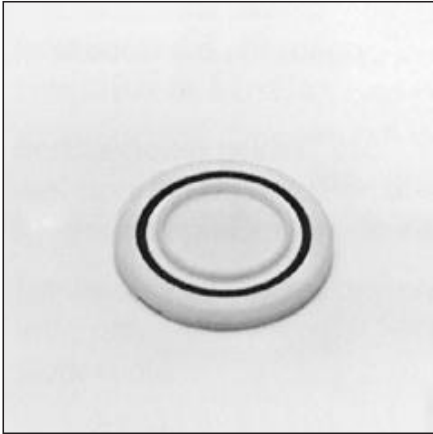




1a



1b



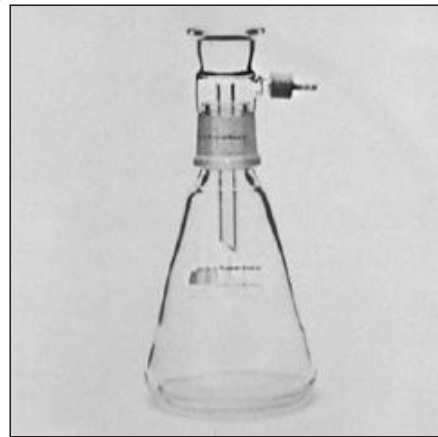
1c



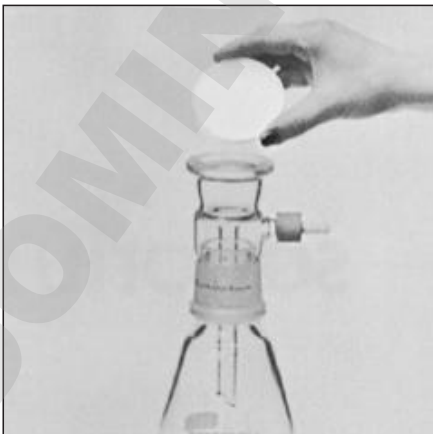
1d



1e



2



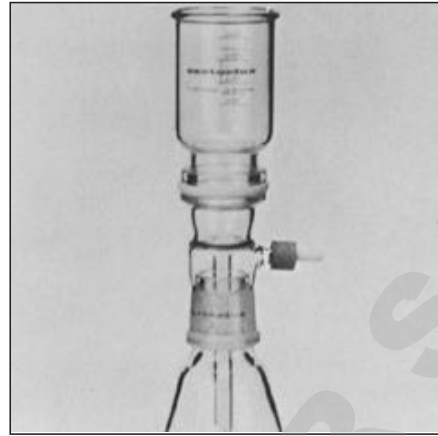
1a



1b



5



6



7



8



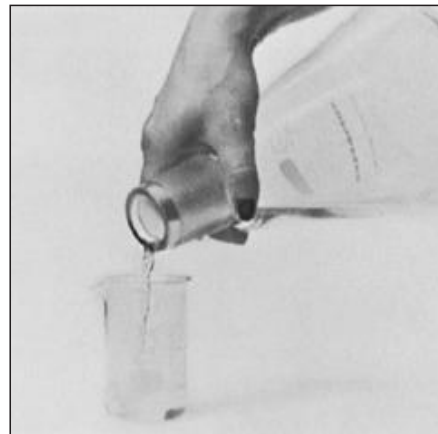
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10



11



12

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