

FILTER HOLDERS

Filter Holders for Membranes

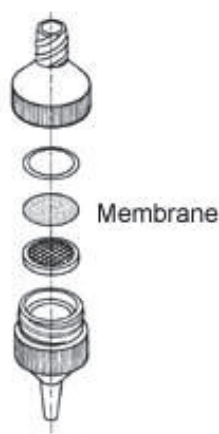
GVS offers a selection of filtration holders and apparatus that are designed to ensure precise filtration work with GVS membranes. In most applications, the filter holder is just as important as the filter for accurate results every time. Filter holders are available for a wide variety of applications including air analysis, chemotaxis, tissue culturing and general aqueous and solvent filtration.

Available products are: 13, 25, and 47 mm Filter Holder, and 47 mm Gravi-Seal.

Product Selection Guide: Filter Holders

Specifications	13 mm	25 mm	47 mm
Materials	Celcon (acetal copolymer)	Polypropylene - body & support	Polypropylene - body & support
O-rings	PTFE	Silicone	Silicone
Filter Size	13 mm	25 mm	47 mm
Prefilter Cap size	10 mm	21 mm	42 mm
Filtration Area	0.8 cm ²	3.5 cm ²	13.5 cm ²
Diameter	16 mm (0.6 in)	30 mm (1.2 in)	65.0 mm (2.6 in)
Height	35 mm (1.4 in)	30 mm (1.2 in)	50 mm (2.0 in)
Maximum Liquid Temperature	80°C (176°F)	80°C (176°F)	80°C (176°F)
Differential Pressure	2.8 bar (40 psi)	2.9 bar (42 psi)	4.9 bar (71 psi)
Autoclaving	15 minutes at 121°C (250°F) and 15 psi	20 minutes at 121°C (250°F) and 15 psi	20 minutes at 121°C (250°F) and 15 psi
Connections, Inlet	Female Luer Lock	Female Luer Lock	1/4 inch NPTM, Female Luer Slip
Connections, Outlet	Male Luer Slip	Male Luer Slip	1/4 inch NPTM, Female Luer Slip

13 mm Filter Holder, Swinney



The GVS Swinney 13 mm filter holder is optimized for small volume (1-5 mL) particulate removal from fluids dispensed with a syringe. The holder is resistant to alcohols, esters, ethers, glycols, aromatic hydrocarbons, halogenated hydrocarbons, ketones, oils, photoresists and many other chemicals. Although suitable for most weak acids and bases, we recommend that you test for compatibility with acids.

Features & Benefits

- ◆ High resistant organic components
- ◆ No need for specific tools
- ◆ Quick efficient assembly

Typical Applications

- ◆ Biofluids
- ◆ Ophthalmics
- ◆ Gas chromatography samples
- ◆ Lubricants

Ordering information

Product Code	Quantity	Description
1220950	5/pk	Filter Holder, Swinney, 13 mm diameter

MICROFILTRATION

25 mm Filter Holder, Polypropylene



The GVS polypropylene 25 mm filter holders are very useful for ultra cleaning and sterilizing small volumes of liquids from a syringe. Due to the polypropylene construction, they can be used over a wide temperature range with excellent chemical compatibility. In the case of the syringe, the inlet cap locks into the base to prevent twisting damage to the membrane as the cap is tightened. Projection lugs on the base and the cap allow these units to be assembled and sealed quickly and efficiently.

Ordering information

Product Code	Quantity	Description
1214250	10/pk	Filter Holder Polypropylene: 25 mm diameter
1214526	10/pk	Filter Holder Polypropylene Support Screen: 25 mm

Typically, the 25 mm is used to filter up to 50 mL of sample. With the syringe holder type, dual support screens prevent membrane rupture in case back pressure is applied.

It also allows for bi-directional sample flow. The polypropylene holder has a broad chemical compatibility range. It can withstand temperatures up to 121°C. and be autoclaved.

Features & Benefits

- ◆ Excellent chemical compatibility
- ◆ Quick, efficient assembly
- ◆ No need for special tools
- ◆ Excellent temperature and chemical resistance
- ◆ Several filter holders can be attached together for serial filtration

Typical Applications

- ◆ Point of use sampling
- ◆ Particulate removal
- ◆ Used in filtering chromatography solvents
- ◆ General filtration

47 mm Filter Holder, Polypropylene



The GVS polypropylene 47 mm filter holder is designed especially for ultra cleaning and sterilizing liquids under positive pressure. In addition this holder can be used for aseptic sampling of liquids or gases at point-of-use or when samples must be collected and processed on-site.

The polypropylene material allows these holders to be used over a wide temperature range with excellent chemical compatibility. Sealing is achieved by simple hand tightening of the locking

ring. The 47 mm In-Line holder has dual support screens, which allow for flow in either direction. The inlet cap design and exterior locking ring allow the unit to be assembled quickly and efficiently without tearing the membrane. 3 O-rings help to prevent leaks with all membranes. The 47 mm can filter up to 1 liter depending upon the viscosity of the sample. The polypropylene holder can withstand temperatures up to 121°C and be autoclaved.

Features & Benefits

- ◆ Easy to use - unique lock ring design assures proper sealing without damage to the membrane
- ◆ Easy to clean
- ◆ Conforms with EPA Method 1311 for Toxicity Characteristic Leaching Procedure, 40 CFR, Part 261, 1991 Hazardous Waste Compliance Guide

Typical Applications

- ◆ Point of use sampling
- ◆ Particulate removal
- ◆ Used in filtering chromatography solvents
- ◆ General filtration

Ordering information

Product Code	Quantity	Description
1262579	1/pk	Filter Holder Polypropylene: 47 mm
1214260	10/pk	Filter Holder Polypropylene: 47 mm

47 mm Filter Holder - Gravi-Seal™



The GVS polysulfone 47 mm autoclavable filter holder combines a number of key features and benefits, making it a tremendous value. To begin with, the funnel has only two pieces. There are no clamps or locking devices to manipulate. A unique gravity sealing design allows for one-handed operation with no danger

of filter by-pass or sample leakage when using depth filters. And it is stable and very solid with no costly replacement parts. It all adds up to the easiest and most cost-efficient analytical funnel available. GVS analytical funnels are available in polysulfone for aqueous samples. The polysulfone unit is autoclavable and chemically resistant for cell culture and microbiological applications. There are graduations up to 350 mL with 50 mL intervals. The No. 8 stopper mounts in a standard 1-liter filtering flask for individual tests or in three- and six-place stainless steel manifolds for multiple tests to run concurrently.

Features & Benefits

- ◆ Durable - break resistant, no extra parts to break or wear out
- ◆ Uses a 47 mm depth filter disc
- ◆ One-handed operation
- ◆ Only two parts
- ◆ No clamps, wheel locks, or magnets to wear out
- ◆ Solid, stable and easy to use

Typical Applications

- ◆ Filtering liquids for sterility
- ◆ Particle removal
- ◆ General filtration
- ◆ Autoclavable

Ordering information

Product Code	Description	Quantity
1213865	Gravi-Seal PS Analytical Filter Holder (complete unit): 47 mm	1/pk
1214124	Gravi-Seal PS Analytical Filter Holder (complete unit): 47 mm	3/pk
1213883	Gravi-Seal PS Analytical Filter Holder, Base Only	1/pk
1213882	Gravi-Seal PS Analytical Filter Holder, Funnel Only	1/pk

Gravi-Seal can be used with GVS Manifold, (see page 29).

