

BOROSIL®

Laboratory
Filtration Solutions



Your
All-in-One
Filtration Partner!

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01

Glass Filtration Assemblies

The Ultimate Toolkit for Crystal Clear Results



Glass Filtration Assembly is a comprehensive collection of precision-engineered products designed to revolutionize laboratory filtration. From ground joint to GL45 universal adapters, this essential range ensures effortless, high-quality filtration, meeting the needs of various applications with utmost ease and efficiency.

- Made of 3.3 borosilicate glass and sintered glass
- Compatible with most of the organic solvents
- Easy to clean,
- 100% autoclavable and reusable
- An environment friendly and cost-effective



Products

- Glass Filtration assembly, with ground joint,
- Glass Filtration assembly, with silicone stopper
- Glass Micro-Filtration assembly
- Glass Filtration assembly, with Glass adapter for continuous filtration



Glass Filtration Assembly (Conical Flask Set-up)

- Effective filtration area - 9.6 cm for 47 mm and 45.5 cm for 90 mm
- The filter support base design has an integral vacuum connection located above the filtrate drip to prevent contamination of the vacuum line from droplets
- Aluminum spring clamp is anodised for longer life
- Ideal for filtration of HPLC solvents and aqueous mobile phase solutions and buffers

Entire assembly consists of:

1. Glass Funnel - Capacity: 300 ml / 1000 ml
2. Filter Support Base with sintered glass filter - 47 mm/ 90 mm
3. Glass Receiver Flask - 500 ml/1000 ml/2000 ml/5000 ml
4. Aluminum Clamp - 47 mm / 90 mm



5350	5360
With ground joint	With silicone stopper
Vacuum connection located above the filter drip	Vacuum connection located on the receiver flask



Glass Micro Filtration Assembly, with Conical Flask

- Supplied with a conical flask for filtrate collection.
- Vacuum connection located on the receiver flask
- Filter base provided with a silicone stopper
- Anodised aluminium spring clamp for longer life
- **Ideal for small volume vacuum filtration for biological analysis particulate contamination analysis**

Product	5370017
Funnel	3.3 Borosilicate glass
Fiter support base	3.3 Borosilicate glass with sintered glass
Receiver flask	3.3 Borosilicate glass
Clamp	Aluminium (anodised)
Stopper	Silicone
Funnel capacity	15 ml
Fiter support base size	25 mm
Receiver flask capacity	125 ml
Clamp size	25
Stopper size	#5
Effective filtration area	2.2 cm ²



Tired of repeatedly pouring solvents during filtration process?

Try Borosil Glass Adapter for continuous filtration

Simply attach the glass adapter on top of the Filter Support Base to achieve continuous flow of solution from the reservoir. Avoid the tedious steps of refilling the funnels multiple times



Product Code- MISC530
Universal Filtration Adapter, Glass



Vacuum Pump

- Piston powered oil-free pump designed with innovative electronic and mechanical technology
- Compact and light weight for comfortable handling
- Lubricant and regular oil changes not required
- Equipped with filter cartridge in the air intel, to filter particles and moisture
- Provided with vacuum regulator to adjust vacuum
- Motor with built in thermal protection device which shuts off the pump automatically when overheated, resumes working when temperature cools down

Product	BORO-017
Max. vacuum	100 mbar
Max. flow rate	17 L /min
Motor rotation	1450 rpm
Port thread	50 dB
Noise level	4.4 kg
Dimension (WXDXH)	(272 x 142 x 165) mm
Electrical Requirement	0.3A
Power Consumption	60 A
Ordering Information	100VP300017

02

Stainless Steel Filtration Assemblies

The Resilient Choice for Uncompromising Results



The Stainless Steel category offers a range of robust filtration solutions designed for durability and efficiency. Explore Vacuum Filtration Assemblies and other sturdy products, carefully crafted to redefine your filtration experience. With compatibility for various applications and exceptional reliability, our Stainless Steel collection ensures superior filtration results you can rely on.

Vacuum Filtration Assemblies made of Stainless Steel that are compatible with most organic solvents.

- 100% Autoclavable and reusable
- Sturdy to use
- Easy to clean
- An environment friendly and cost-effective alternative



Products

- Stainless Steel Funnels, 47mm filter holder with external clamp, inbuilt clamp, spin-lock mechanism
- Stainless Steel Filtration Manifold and Sterility Testing Manifold



5330- With Inbuilt Clamp



5331- With External Clamp



5332- Spin Lock Type

Stainless Steel Filter Assembly with 47mm Filter holder

- Stainless steel funnels for vacuum filtration made of SS 316.
- Support screen made of SS316L to ensure zero interaction with solvents.
- Zero Reaction

	5530	5531	5532
Type	With Inbuilt Clamp.	With External Clamp	Spin Lock Type
MOC			
Funnel	SS316	SS316	SS316
Filter Holder	SS316	SS316	SS316
Support Screen	SS316L	SS316L	SS316L
Clamp	Inbuilt SS316	Anodized Aluminium	No Clamp
Lid	Silicone	Silicone	Silicone
Cork	Silicone	Silicone	Silicone
Capacity/Size			
Funnel Capacity	300ml, 500ml, 1000ml	300ml, 500ml, 1000ml	300ml, 500ml, 1000ml
Filter Holder Diameter	47mm	47mm	47mm
Filtration Area	9.6cm ²	9.6cm ²	9.6cm ²

* Filter membranes to be purchased separately



Stainless Steel Vacuum Filtration Manifold

The Vacuum filtration manifold aids in a rather faster filtration through multiple funnels at the same time. Generally used for Solvent filtration in Analytical Labs.

- Body and branches made of SS 316L that come in contact with sample
- Valves made of PTFE
- To be used with a 12mm tubing
- Can be connected to all 3 types of funnels

Product Code	Description	Stages
5333003	3 Place manifold SS Filtration Manifold	3
5333006	6 Place manifold SS Filtration Manifold	6



5330
With Inbuilt Clamp



5331
With External Clamp



5332
Spin Lock Type



Product Code- 5335003
3 Place Filtration Manifold Assembly with Inbuilt pump

Sterility Testing Manifold

Compact, sturdy and easy to use Filtration Assembly with inbuilt pump for your Sterility Testing Applications that can be used with Stainless Steel, Reusable PP or Disposable funnels with appropriate adapters.

Each stage is connected with its individual inbuilt pump to increase the overall efficiency of the filtration process.

- Flow rate of 1.5L/min per valve
- Vacuum of 300mbar per valve
- Tubing connection: 8mm hose
- Material in contact with the filtering liquid: SS 316L, PTFE, Silicon

Adapters

Product Code	Description	Quantity per case
5335ARF	Adaptor C1 (for reusable PP funnel)	1
5335ARB	Adaptor C2 (for Rubber stopper filter holder)	1
5335ADF	Adaptor C3 (for disposable sterile funnel)	1
5335AST	Adaptor C4 (for silicon tube)	1

* Funnels and adapters are not a part of the assembly, to be purchased separately.

Contact the local sales representative for enquiries for PP funnels

03

Borosil Filter Media

Your Laboratory's Partner in Precise Filtration!

Any laboratory filtration requires a porous filter media to facilitate the separation and filtration of particles.

Filter papers



made in collaboration with

Hahnemühle

pioneers in speciality
papers since 1883!

The papers contain upto 98% alpha cellulose, the most stable form of cellulose in paper pulp, hence making the papers highly stable and durable. Very low ash content (Lowest value 0.004%) aid the laboratory professionals in accurate quantitative analysis with minimal errors. Made in Germany, the manufacturing processes and product specifications are compliant to the stringent European QC standards, guaranteeing the users finest quality filter papers for Laboratory Filtration

Filter membranes



Membrane Filtration is a technique to separate particles in any liquid. Filter membranes from Borosil which includes membrane for applications such as HPLC mobile phase filtration, analysis of particulate or biological contaminants, small volume filtration and sterile filtration of media and buffer.

Cellulose and Glass micro-fibre Thimbles



Cellulose and Glass micro-fibre Thimbles made of highest quality raw material to ensure utmost accuracy during extraction and analysis. Thimbles are used widely in applications requiring extraction, gravimetric collection of dust particles from air etc



Nylon-66 Filter Membranes

Recommended for applications involving clarification of aqueous and organic HPLC mobile phase solvent, HPLC sample preparation



Gridded Cellulose Nitrate Filter Membranes

Recommended for applications like sterility testing, water testing, microbiological analysis



Plain Cellulose Nitrate Filter Membranes

Recommended for applications like clarification and sterilization of media, reagents, buffers, sterility testing, water testing, microbiological analysis



Qualitative Filter Papers

recommended for routine qualitative analyses in laboratories.



Quantitative Filter Papers

(avg ash content 0.004 %) for quantitative analysis, routine gravimetric tests and sample preparation for instrumental analyses.



Hardened ashless filters

(ash content approx. 0.003%), especially recommended for filtration applications requiring vacuum and pressure filtration, and for the use of acidic and alkaline solutions.



Glass Fibre Filters

for specific applications in environmental analysis



Cellulose and Glass Microfiber thimbles

for applications involving extraction or collection of dust particles, etc

Cellulose Filter Papers

Type	Grade	Sample	Speed of Filtration	Retention Rate	Filtration Herzberg	Thickness (mm)	Weight [g/m ²]	Avg ash content
Qualitative	B59501	Medium fine precipitates	Medium fast, thin	4 – 7	160	0.15	68	0.08%
	B59702	Medium-fine, crystalline precipitates	Medium fast	4 – 7	155	0.18	85	0.08%
	B59303	Fine precipitates	Medium slow	2 – 5	450	0.17	84	0.08%
	B60404	Coarse precipitates	Fast	12 – 25	50	0.19	79	0.08%
Quantitative	B58940	Fine crystalline precipitates	Medium	2-4	450	0.17	84	0.004%
	B58941	Coarse and gelatinous precipitates	Fast	12-25	50	0.19	79	0.004%
	B58942	Very fine crystalline precipitates	Slow	<2	750**	0.16	84	0.004%
	B58943	Coarse precipitates	Medium Fast	4-12	140	0.18	85	0.004%
	B58944	Fine crystalline precipitates	Slow thin	2	900	0.15	74	0.004%
Hardened Quantitative	B15540	Fine crystalline precipitates	Medium	4-12	170	0.16	90	0.003%
	B15541	Coarse crystalline precipitates	Fast	12-25	50	0.17	88	0.003%
	B15542	Very fine crystalline precipitates	Slow	≤ 2	600**	0.14	90	0.003%

Filter Membranes:

Product Code	Description	Pore size (micron)	Diameter	Tested for
5147	Cellulose Nitrate Membrane, non sterile	0.22, 0.45	47mm	Membrane integrity, Flow rate, Membrane thickness, Heat stability and Microbial Challenge Test
5247	Gridded Cellulose Nitrate Membrane, non sterile	0.22, 0.45	47mm	Membrane integrity, Flow rate, Membrane thickness, Heat stability, Microbial Challenge Test and Growth Inhibition
5347	Nylon-66 Membrane, Non sterile	0.22, 0.45	47mm	Membrane integrity, Flow rate, Membrane thickness, Heat stability, Fibre/ particle release and Extractables

Glass Fibre Filters

Type	Air permeability* (Resistance ** mbar) [L/m ² s]	Retention rate % NaCl-particle size <1 µm ***	Filtration Gurley [s]	Weight [g/m ²]	Thickness [mm]	Max T [°C]	Retention range [µm]
BGF50A	25	99.97	19	56	0.29	500	1-3
BGF52C	54**	99.995	25	54	0.28	500	1-3

Thimbles

Product	Material	Wall Thickness (mm)	Weight [gsm]	Air Permeability (L/m ² sec)
Cellulose Thimble	100% cellulose without binder	16	2.7	25
Glass Fibre Thimble	100% Micro-glass fibre without binder	13	3	15

Note: For product codes, prices, sizes etc please contact our local sales representative

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