





Your All-in-One Filtration Partner!



### Your All-in-One Filtration Partner!



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## 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

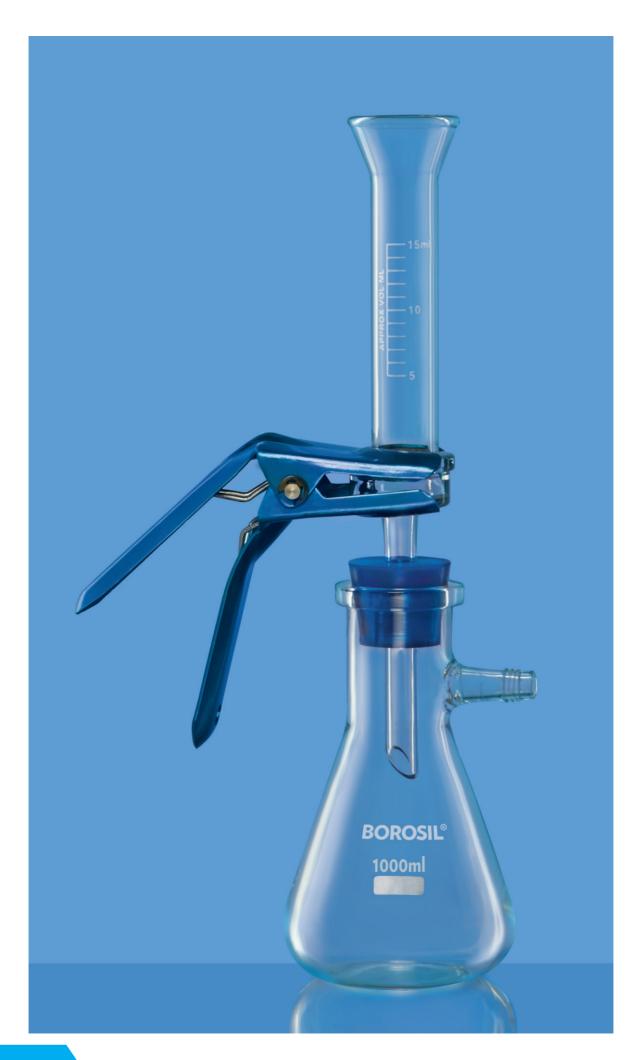
#### Entire assembly consists of:

- 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 <sup>2</sup>                        |



# 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          |

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# 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

ROROSIL







# 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                    |
|---------------------------|-------------------------|-------------------------|-------------------------|
| Туре                      | With Inbuilt<br>Clamp.  | With External<br>Clamp  | Spin Lock Type          |
|                           | М                       | ОС                      |                         |
| Funnel                    | SS316                   | SS316                   | SS316                   |
| Filter Holder             | SS316                   | SS316                   | SS316                   |
| Support Screen            | SS316L                  | SS316L                  | SS316L                  |
| Clamp                     | Inbuilt SS316           | Anodized<br>Aluminium   | No Clamp                |
| Lid                       | Silicone                | Silicone                | Silicone                |
| Cork                      | Silicone                | Silicone                | Silicone                |
|                           | Capac                   | ity/Size                |                         |
| Funnel Capacity           | 300ml, 500ml,<br>1000ml | 300ml, 500ml,<br>1000ml | 300ml, 500ml,<br>1000ml |
| Filter Holder<br>Diameter | 47mm                    | 47mm                    | 47mm                    |
| Filtration Area           | 9.6cm <sup>2</sup>      | 9.6cm <sup>2</sup>      | 9.6cm <sup>2</sup>      |

<sup>\*</sup> 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      |





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<br>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                    |

<sup>\*</sup> Funnels and adapters are not a part of the assembly, to be purchased separately.

Contact the local sales representative for enquiries for PP funnels

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## 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



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, garvimetric 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.



Glass Fibre Filters

for specific applications in environmental analysis



#### 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.



Cellulose and Glass Microfiber thimbles

for applications involving extraction or collection of dust particles, etc

### Cellulose Filter Papers

| Туре                     | Grade  | Sample                                      | Speed of<br>Filtration | Retention<br>Rate | Filtration<br>Herzberg | Thickness<br>(mm) | Weight<br>[g/m²] | Avg ash content |
|--------------------------|--------|---|------------------------|-------------------|------------------------|-------------------|------------------|-----------------|
|                          | B59501 | Medium fine precipitates                    | Medium<br>fast, thin   | 4 – 7             | 160                    | 0.15              | 68               | 0.08%           |
|                          | B59702 | Medium-fine,<br>crystalline<br>precipitates | Medium<br>fast         | 4 – 7             | 155                    | 0.18              | 85               | 0.08%           |
| Qualitative              | B59303 | Fine<br>precipitates                        | Medium<br>slow         | 2 – 5             | 450                    | 0.17              | 84               | 0.08%           |
|                          | B60404 | Coarse<br>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<br>crystalline<br>precipitates    | Slow                   | <2                | 750**                  | 0.16              | 84               | 0.004%          |
|                          | B58943 | Coarse<br>precipitates                      | Medium<br>Fast         | 4-12              | 140                    | 0.18              | 85               | 0.004%          |
|                          | B58944 | Fine crystalline precipitates               | Slow thin              | 2                 | 900                    | 0.15              | 74               | 0.004%          |
| Hardened<br>Quantitative | B15540 | Fine crystalline precipitates               | Medium                 | 4-12              | 170                    | 0.16              | 90               | 0.003%          |
|                          | B15541 | Coarse<br>crystalline<br>precipitates       | Fast                   | 12-25             | 50                     | 0.17              | 88               | 0.003%          |
|                          | B15542 | Very fine<br>crystalline<br>precipitates    | Slow                   | ≤2                | 600**                  | 0.14              | 90               | 0.003%          |

#### Filter Membranes:

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

#### **Glass Fibre Filters**

| Туре   | Air<br>permeability*<br>(Resistance **<br>mbar) [L/m2 s] | Retention rate %<br>NaCI-particle<br>size <1 µm *** | Filtration<br>Gurley [s] | <b>Weight</b><br>[g/m²] | Thickness<br>[mm] | Max T<br>[°C] | Retention<br>range<br>[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<br>(mm) | <b>Weight</b><br>[gsm] | Air<br>Permeatibility<br>(L/m2sec) |
|---------------------|---------------------------------------|------------------------|------------------------|------------------------------------|
| 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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