



# Diamond® PureFlow™ Syringe Filters

A line of efficient and reliable filtration options for discerning laboratory professionals.



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Diamond® PureFlow™ syringe filters from Globe Scientific provide high-quality, cost-effective filtration systems that improve the reliability of experimental results and decrease instrument downtime.

All Diamond PureFlow syringe filters are constructed of a durable polypropylene housing secured around the membrane with a molded polypropylene sealing ring. This double injection molding process yields a robust filter built to withstand pressures higher than most industry alternatives.

## **Get the Diamond PureFlow Advantage:**

- **Performance** – High flow rates and low absorption membranes for minimal sample loss
- **Simplicity** – Color coded outer ring allows easy identification of membrane and filter media type. Each unit is clearly marked with an identifying code to denote pore size and membrane material
- **Strength**– Bonded outer ring on housing provides strength under higher working pressures for high performance needs
- **Efficiency** - Integral PP pre-filter for high flow rates and fast filtration
- **Quality** - Manufacturing process certified to ISO 9001 standards

## **Sterile Syringe Filters:**

Sterile Diamond PureFlow Syringe filters satisfy requirements of life science applications for sterilization of solutions or clarification of biological fluids. Sterile filters include a PP microfiber pre-filter layer to improve filtration of particulate-laden fluids that are difficult to filter with single layer syringe filters.

- Individually packaged in peelable blister with filter diameter, membrane type, and membrane porosity clearly marked on the package
- Sterilized by Gamma Irradiation to SAL 10<sup>-6</sup>



## **Non-Sterile Syringe Filters:**

Non-sterile Diamond PureFlow syringe filters are perfect for use in a wide range of filtration and sample applications where sterility is not needed. Non-sterile filters are used in analytical chemistry for sample preparation, HPLC operations, and protecting analytical equipment from particle contamination.

- Bulk packaged with filter membrane type and membrane porosity printed on each filter
- PP microfiber pre-filter layer to improve filtration of particulate-laden fluids

*Available in a variety of filter diameters, membrane types, and membrane porosities, there is a Diamond PureFlow syringe filter to meet nearly all syringe filter application requirements.*





**Membrane Types:**

**PVDF (Polyvinylidene Fluoride) Hydrophilic / Hydrophobic Membrane**

- Low protein binding
- Suitable for aqueous and organic samples
- Good resistance to solvents that exhibit low levels of UV adsorbing extractables. Broad chemical compatibility
- Ideal for HPLC sample filtration and general biological filtration
- pH Range: 1-12

**PES (Polyethersulfone) Membrane**

- Low protein binding
- Suitable for aqueous and organic samples
- High flow rates and throughput and compatible with high temperature liquids
- Ideal for tissue culture filtration, filtration of proteins and nucleic acids, and chromatography
- pH range: 1-14

**MCE (Mixed Cellulose Ester) Membrane**

- Low protein binding and biologically inert
- Suitable for aqueous samples
- Ideal for air monitoring, particle analysis, bacteriological analysis and sterilizing filtration
- pH Range: 4-8

**Nylon Membrane**

- High protein binding – Not used when protein recovery is important
- Suitable for aqueous or organic samples
- Not compatible with acids, bases or for use in protein recovery
- Ideal for general laboratory, chemical and beverage filtration and HPLC applications
- pH Range: 2-13

**PTFE (Polytetrafluoroethylene) Hydrophilic Membrane**

- “Universal” membrane – Ideal for both aqueous and organic samples
- Strong chemical stability and inertia
- Strong acid and alkali solvent filtration
- Chemically resistant to all solvents
- pH Range: 1-14

**PTFE (Polytetrafluoroethylene) Hydrophobic Membrane**

- Strong temperature and chemical conditions
- High durability and fast filtering speed
- Ideal for venting applications, phase separations and aerosol samplings
- pH Range: 1-14

**CA (Cellulose Acetate) Membrane**

- Low Protein Binding and biologically inert
- Suitable for aqueous samples
- High protein recovery from filtrate
- Ideal for sample analysis that requires maximum recoveries, tissue culture media filtration, and general water filtration
- pH Range: 4-8

**SFCA (Surfactant Free Cellulose Acetate) Membrane**

- Low protein binding, low extractables and leachables, and high flow rate
- Ideal for cell culture media and serum, immunological samples, and biological fluids
- pH Range: 4-8


**Specifications**

	Sterile		Non-Sterile	
	13mm	30mm	13mm	30mm
<b>Diameter</b>	13mm	30mm	13mm	30mm
<b>Housing Material</b>	PP	PP	PP	PP
<b>Filtration Area (cm<sup>2</sup>)</b>	0.92	4.9	0.92	4.9
<b>Holdup-Volume (µl)</b>	<10	<120	<10	<120
<b>Volume Throughput (ml)</b>	10	100	10	100
<b>Connections (Inlet/Outlet)</b>	Female Luer Lock Inlet / Male Luer Slip Outlet			
<b>Max Operating Pressure (psi)</b>	87	87	87	87
<b>Max Operating Temperature (°C)</b>	100	100	100	100
<b>Prefilter</b>	PP	PP	PP	PP



## Ordering Information

### Sterile Syringe Filters

Membrane Type	Pore Size	Outside Dia.	Part #	Ring Color	Packaging
PVDF Hydrophilic	0.22µm	13mm	SF-PVDF-2213-S	Magenta	 <p>All sterile syringe filters are packaged individually in blister packs, 50 blisters per box.</p>
PVDF Hydrophilic	0.22µm	30mm	SF-PVDF-2230-S	Magenta	
PVDF Hydrophilic	0.45µm	13mm	SF-PVDF-4513-S	Magenta	
PVDF Hydrophilic	0.45µm	30mm	SF-PVDF-4530-S	Magenta	
PES	0.10µm	13mm	SF-PES-1013-S	Green	
PES	0.10µm	30mm	SF-PES-1030-S	Green	
PES	0.22µm	13mm	SF-PES-2213-S	Green	
PES	0.22µm	30mm	SF-PES-2230-S	Green	
PES	0.45µm	13mm	SF-PES-4513-S	Green	
PES	0.45µm	30mm	SF-PES-4530-S	Green	
MCE	0.22µm	13mm	SF-MCE-2213-S	Blue	
MCE	0.22µm	30mm	SF-MCE-2230-S	Blue	
MCE	0.45µm	13mm	SF-MCE-4513-S	Blue	
MCE	0.45µm	30mm	SF-MCE-4530-S	Blue	
Nylon	0.22µm	13mm	SF-NYLN-2213-S	Yellow	
Nylon	0.22µm	30mm	SF-NYLN-2230-S	Yellow	
Nylon	0.45µm	13mm	SF-NYLN-4513-S	Yellow	
Nylon	0.45µm	30mm	SF-NYLN-4530-S	Yellow	
PTFE Hydrophilic	0.22µm	13mm	SF-PTFE-2213-S	Red	
PTFE Hydrophilic	0.22µm	30mm	SF-PTFE-2230-S	Red	
PTFE Hydrophilic	0.45µm	13mm	SF-PTFE-4513-S	Red	
PTFE Hydrophilic	0.45µm	30mm	SF-PTFE-4530-S	Red	
CA	0.22µm	13mm	SF-CA-2213-S	Blue	
CA	0.22µm	30mm	SF-CA-2230-S	Blue	
CA	0.45µm	13mm	SF-CA-4513-S	Blue	
CA	0.45µm	30mm	SF-CA-4530-S	Blue	
SFCA	0.22µm	13mm	SF-SFCA-2213-S	Blue	
SFCA	0.22µm	30mm	SF-SFCA-2230-S	Blue	
SFCA	0.45µm	13mm	SF-SFCA-4513-S	Blue	
SFCA	0.45µm	30mm	SF-SFCA-4530-S	Blue	
CA/GF(Glass Fiber Pre-Filter)	0.22µm	30mm	SF-CAGF-2230-S	Blue	

### Non-Sterile Syringe Filters

Membrane Type	Pore Size	Outside Dia.	Part #	Ring Color	Packaging
PVDF Hydrophobic	0.45µm	30mm	SF-PVDF-H-4530	Magenta	 <p>All non-sterile syringe filters are bulk packaged 100 filters per clear plastic carton for easy filter identification.</p>
PES	0.45µm	30mm	SF-PES-4530	Green	
Nylon	0.22µm	13mm	SF-NYLN-2213	Yellow	
Nylon	0.22µm	30mm	SF-NYLN-2230	Yellow	
Nylon	0.45µm	13mm	SF-NYLN-4513	Yellow	
Nylon	0.45µm	30mm	SF-NYLN-4530	Yellow	
PTFE Hydrophilic	0.22µm	13mm	SF-PTFE-2213	Red	
PTFE Hydrophilic	0.22µm	30mm	SF-PTFE-2230	Red	
PTFE Hydrophilic	0.45µm	13mm	SF-PTFE-4513	Red	
PTFE Hydrophilic	0.45µm	30mm	SF-PTFE-4530	Red	
PTFE Hydrophobic	0.22µm	13mm	SF-PTFE-H-2213	Red	
PTFE Hydrophobic	0.22µm	30mm	SF-PTFE-H-2230	Red	
PTFE Hydrophobic	0.45µm	13mm	SF-PTFE-H-4513	Red	
PTFE Hydrophobic	0.45µm	30mm	SF-PTFE-H-4530	Red	



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