

GLASSFLOW® FILTER CARTRIDGES

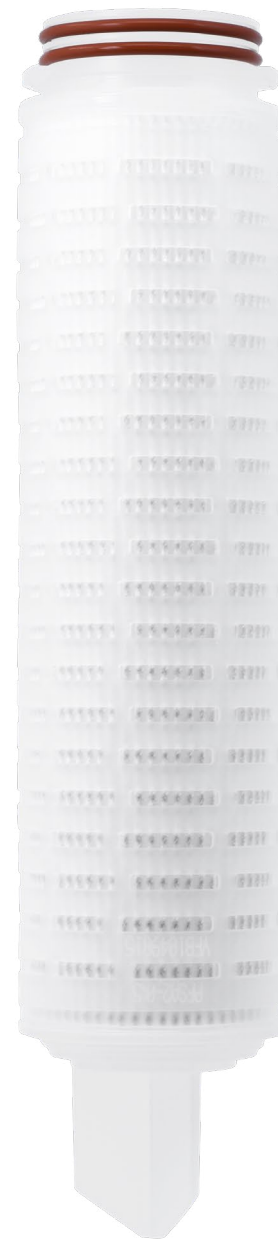
SUPER-FINE GLASS MICROFIBER FILTERS FOR PRE AND FINAL FILTRATION OF LIQUIDS

GlassFlow® Filter Cartridges are composed of super-fine glass fiber media with a pre-layer constructed of polypropylene for use during pre-filtration and final filtration. Glass fiber media has an inherently absorptive characteristic that enhances filter retention capability. These filters are ideally suited in the filtration of liquids containing gels, lipids, and proteins.

FEATURE	BENEFIT
Super-fine glass micro-fiber membrane with built-in polypropylene pre-filtration layer	High porosity for high flow rates and low pressure drops
	>97% particle retention efficiency at rated pore size
	Stiff structure of glass micro-fiber media provides high flow rate
	Glass fiber media has high contaminant holding capacity and inherently adsorptive effect which features its gel removal ability
	Extremely good chemical compatibility

QUALITY STANDARDS

Quality Assurance	These products are manufactured in a facility which adheres to ISO 9001 Practices. 100% Integrity tested and traceable with unique serial number.
TOC / Conductivity at 25°C	Autoclaved filter effluent meets the USP <643> for Total Organic Carbon and USP <645> for Water Conductivity per WFI requirements after a UPW flush of specified volume.
Particle Shedding	Autoclaved filter effluent meets the requirements in USP <788> for large volume injections
Non-Fiber Releasing	Component materials meet the criteria for a "Non-fiber-releasing filter" as defined in 21 CFR 210.3 (b) (6)
Bacterial Endotoxin	Aqueous extraction of autoclaved filter contains < 0.25 EU/mL as determined by Limulus; Amebocyte Lysate (LAL), USP <85>.
USP <87> Cytotoxicity	Meet the requirement of USP <87> In Vitro Cytotoxicity Test
USP <88> Biological Toxicity	Meet the criteria of the USP <88> Biological Reactivity Test for Class VI-121°C plastics.
Indirect Food Additive	All component materials meet the FDA Indirect Food Additive requirements cited in 21 CFR 177–182, and EU framework regulation [1935/2004/EC].



Typical Applications

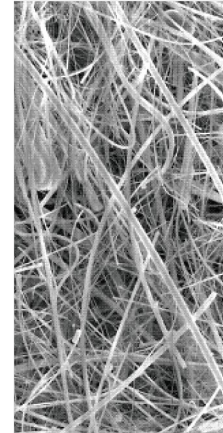
- Blood Products
- High Viscosity Liquids
- Serums
- Prefilter for Liquids

SPECIFICATIONS

Filter media	Glass Microfiber
Support layer	Polypropylene
Supports/core/cage/end caps	Polypropylene
O-rings	Silicone, EPDM, FKM, FEP/PFA encapsulated FKM
O-ring insert	PBT
Diameter	69 mm
Effective filtration area	0.26 - 0.29 m ² (2.8 - 3.1 ft ²) / 10 inch
Max. operating temperature	80°C
Max. operating pressure	0.69 MPa (6.0 bar, 100 psi) at 25°C 0.40 MPa (4.0 bar, 58 psi) at 60°C 0.24 MPa (2.4 bar, 35 psi) at 80°C
Max. differential pressure	Forward: 0.69 MPa (6.0 bar, 100 psi) at 25°C 0.40 MPa (4.0 bar, 58 psi) at 60°C 0.24 MPa (2.4 bar, 35 psi) at 80°C Reverse: 0.30 MPa (3.0 bar, 44 psi) at 25°C 0.10 MPa (1.0 bar, 15 psi) at 80°C
Inline steam sterilization	up to 30 cycles for 30 min. at 135°C at <0.3 bar per cycle

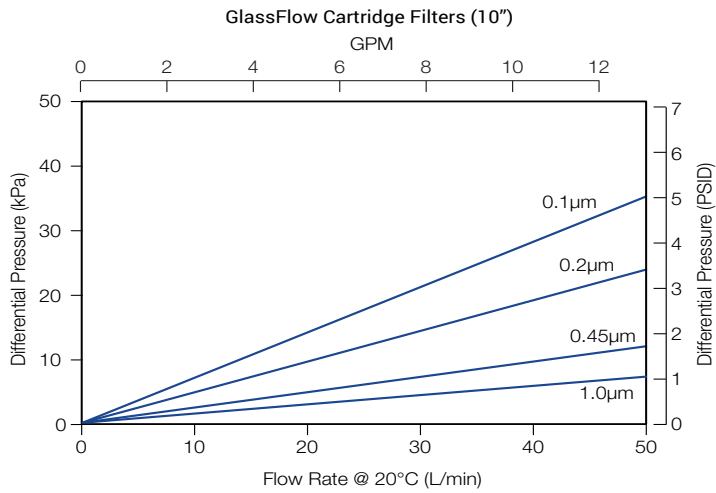
RETENTION

Particle Range	Filter Code				
	0020 (0.2µm)	0045 (0.45 µm)	0100 (1 µm)	0500 (5 µm)	0600 (6 µm)
≥0.2 µm	97.94%	92.76%	-	-	-
≥0.5 µm	98.99%	97.89%	88.59%	-	-
≥1.0 µm	100%	100%	97.87%	78.86%	-
≥2.0 µm	100%	100%	99.99%	89.45%	74.32%
≥5.0 µm	100%	100%	100%	97.99%	95.65%
≥10.0 µm	100%	100%	100%	100%	100%



Glass Fiber Media

FLOW RATES



ORDERING INFORMATION

EXAMPLE: **LGFP0045HSF10S-P** = 0.45 µm, 226/Fin, 10" filter with silicone seals

LGFP



Removal Rating

0010 = 0.1 µm
 0020 = 0.2 µm
 0025 = 0.25 µm
 0045 = 0.45 µm
 0080 = 0.8 µm
 0100 = 1.0 µm
 0300 = 3.0 µm
 0500 = 5.0 µm
 0600 = 6.0 µm
 5030 = 5.0 µm + 3.0 µm



Connection

DOE = Double Open End, flat gasket
 HTC = 222 O-ring/Flat (PBT Insert)
 HTF = 222 O-ring/Fin (PBT Insert)
 HSF = 226 O-ring/Fin (PBT Insert)
 HSC = 226 O-ring/Flat (PBT Insert)



Nominal Length

05 = 5"
 10 = 10"
 20 = 20"
 30 = 30"
 40 = 40"



-P

Seal Material

S = Silicone
 E = EPDM
 V = FKM
 P = E-FKM (FEP/PFA encapsulated FKM)



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