

## GLASSGAS® FILTER CARTRIDGES

### SUPER-FINE GLASS MICROFIBER FILTERS FOR PRE FILTRATION OF GASES

GlassGas® Filter Cartridges are composed of super-fine glass fiber media with a contaminant holding capacity of over 90%. They are highly recommended for the pre-filtration of gases as an effective protection of final sterilizing-grade filters to increase their service life.

FEATURE	BENEFIT
<b>Super-fine glass micro-fiber membrane</b>	High porosity for high flow rates and low pressure drops
	>90% 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 for high retention efficiency

#### QUALITY STANDARDS

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

#### SPECIFICATIONS

<b>Filter media</b>	Super-fine Glass Microfiber
<b>Support layer</b>	Polypropylene
<b>Supports/core/cage/end caps</b>	Polypropylene
<b>O-rings</b>	Silicone, EPDM, FKM, FEP/PFA encapsulated FKM
<b>O-ring insert</b>	PBT

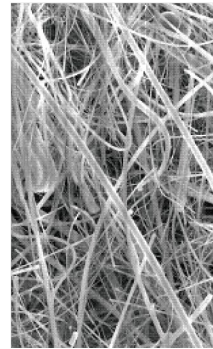
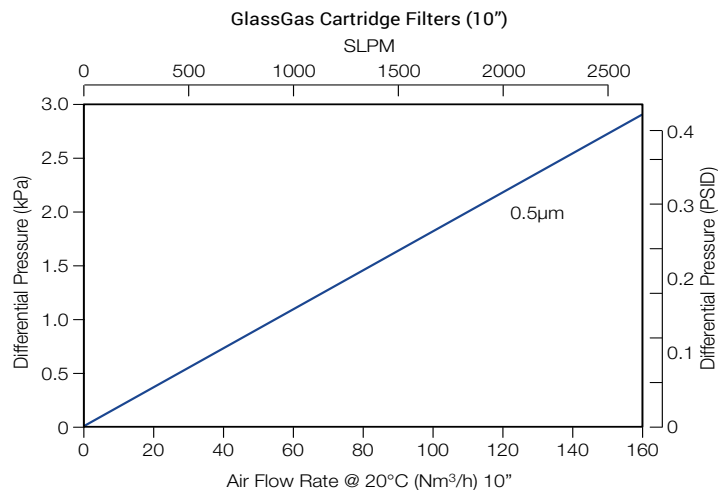


#### Typical Applications

- Antibiotic Fermented Air
- Compressed Air
- Bio-engineered Fermented Air
- Pre-Filtration

<b>Diameter</b>	69 mm
<b>Effective filtration area</b>	0.34 m <sup>2</sup> (3.7 ft <sup>2</sup> ) / 10 inch
<b>Max. operating temperature</b>	80°C
<b>Max. operating pressure</b>	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
<b>Max. differential pressure</b>	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
<b>Inline steam sterilization</b>	up to 40 cycles for 30 min. at 121°C at <0.3 bar (5 psi) per cycle

## FLOW RATES



**Glass Fiber Media**

## ORDERING INFORMATION

EXAMPLE: **GGFP0001HSF10S-P** = 0.01 µm, 226/Fin, 10" filter with silicone seals

**GGFP**



**Removal Rating**

0001 = 0.01 µm  
0030 = 0.3 µm  
0050 = 0.5 µm



**Connection**

DOE = Double Open End, flat gasket  
HTC = 222 O-ring/Flat  
HTF = 222 O-ring/Fin  
HSF = 226 O-ring/Fin  
SC = 226 O-ring/Flat



**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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CBBPP1081 Rev. 01212020

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