

Masterfilter DPESGF series

The Masterfilter *OptiPes* DPESGF are composed of an asymmetric hydrophilic PES membrane with glass fiber support layers. This technical solution combines the particle and microorganism retention of membrane filters with high dirt holding capacity of depth filters.

Thanks to this characteristic the DPESGF is the ideal protection of the membrane filtration to control bioburden level or in sterile processing of biological and biotech solutions containing colloids and cellular debris.

Applications

- Biological
- Blood derivatives
- Biotech proteins
- Cell culture media
- Ophthalmics
- Antibiotics

Features and Benefits

- Asymmetric hydrophilic PES membrane provides enhanced filtration efficiency
- Glass fiber support layers provide high dirt holding capacity
- Effective retention on colloids and large and small size contaminants
- The stiff structure of the glass fiber media and the asymmetric configuration of the PES media assure high flow rate and controlled performance
- All the materials used in this filter meet the requirements of US 21 CFR

Materials of Construction

- Filter media: Dual layer of asymmetric PES and glass fiber (GF)
- Support layers: Polypropylene
- Inner core: Polypropylene
- Adaptor insert: PBT
- Outer cage: Polypropylene
- End caps: Polypropylene
- O-rings: Silicone, EPDM, Viton, FEP/PFA encapsulated

Operating Parameters

- Maximum differential pressure:
Forward: 6.9 bar at 25 °C, 4.0 bar at 60 °C, 2.4 bar at 80 °C
Reverse: 3.0 bar at 25 °C, 1.0 bar at 80 °C



- Recommended SIP: 25 cycles of 30 min at 135 °C, differential pressure \leq 0.3bar
- Recommended Autoclave: 25 cycles of 30 min at 130 °C
- Filtration Area 10" Module: 0.58 m²

Quality Assurance

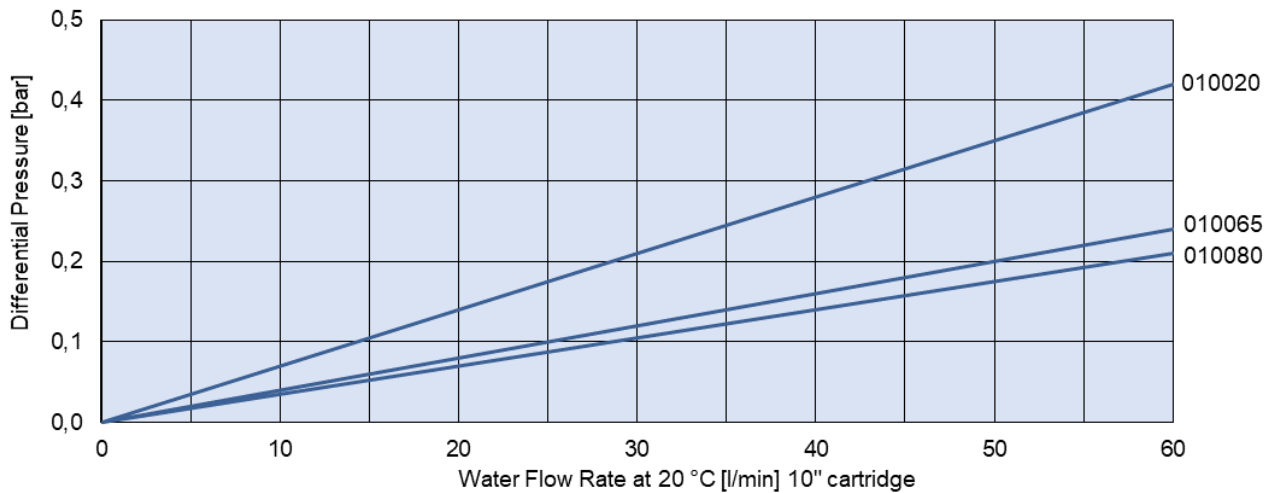
- Cartridge is marked with unique serial number for identification and traceability
- Manufactured under ISO 9001:2015 certified quality management system

Biological Standards

- TOC: Autoclaved filter effluent meets USP <643> for Total Organic Carbon per WFI requirements after a UPW flush of 20 l
- Non-Fiber Releasing: Component materials meet criteria for Non-fibre 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>
- Cytotoxicity: Meet the requirement of USP <87> In Vitro Biological Reactivity Test
- Biological Reactivity: 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

Flow Rate Characteristics

Flow Rate Characteristics DPESGF - PES in 0.2 µm | 0.65 µm | 0.8 µm



Part Numbers

DPESGF 010065 - 10 - HSF - S

Code	Removal rating [µm]	Length		Code	End caps	Code	O-rings	
		Code	[mm]					[inch]
010020	1 + 0.2	05	127	5	STC	Sartorius code 28	S	Silicone
010065	1 + 0.65	10	254	10	HTC	222 O-ring/flat (Code 3)	E	EPDM
010080	1 + 0.8	20	508	20	HSF	226 O-ring/fin (Code 7)	V	Viton
		30	762	30	HSC	226 O-ring/flat (Code 2)	P	FEP/PFA encapsulated
		40	1016	40				

e.g. part number: DPESGF-010065-10-HSF-S

Dual layers DPESGF filter, PES layer in 0.65 µm, 10" Length, Code 7 End caps, Silicone O-rings