

Super-Dura® Filter Cartridges

Hydrophilic PTFE Membrane · Sterile Liquid Filter



Super-Dura® Filter Cartridges are designed for the majority of pharmaceutical liquids, but especially for solvent-containing liquids and ophthalmic solutions. These filters are composed of a hydrophilic PTFE membrane which provides excellent chemical and heat tolerance.

Features and Benefits

- Hydrophilic PTFE membrane which requires no pre-wetting
- Excellent chemical compatibility especially for solvent-containing liquids
- Minimal preservative binding in ophthalmic solutions
- Clean membrane with very low gravimetric extractable

Quality Standards

- Bacterial quantitative retention of 10^7 CFU/cm² Brevundimonas Diminuta(ATCC 19146) according to ASTM F838 methodology .
- 100% Integrity testing in manufacturing .
- Each filter is fully traceable with unique serial number .
- Manufactured in a facility which adheres to ISO 9001:2015 Practices .
- Full Regulatory Compliance with following :
 - Bacterial Endotoxin :Aqueous extraction of autoclaved filter contains <0.25 EU/ml as determined by Limulus Amebocyte Lysate (LAL),USP<85>.
 - Non-fiber Releasing :Component materials meet the criteria for a " Non-fiber-releasing filter " as defined in 21 CFR 210.3(b)(6).
 - Component Material Toxicity :Meet the requirement of USP <87> In Vitro Cytotoxicity Test ; Meet the Criteria of USP<88> Biological Reactivity Test for Class VI-121 C plastics
 - TOC/Conductivity at 25 C : Autoclaved filter effluent meet 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 meet the USP<788>for large volume Injections .
 - 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 Application

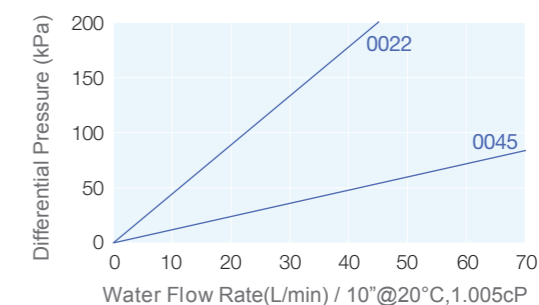
- Antibiotics
- LVP & SVP
- Large Batch Solutions
- Ophthalmic Solutions
- Disinfectants and Sanitizing Agents



Materials of Construction

Filter Media	SLHPF Single-Layer Hydrophilic PTFE Membrane
	DLHPF Double-Layer Hydrophilic PTFE Membrane
Support	Polypropylene
Core/Cage/End Caps	Polypropylene

Flow Rate Characteristics



Operating Conditions

Max. Operating Pressure	6.9 bar (100 psi) at 25 °C 4.0 bar (58 psi) at 60 °C 2.4 bar (35 psi) at 80 °C
Max. Differential Pressure	Forward 6.9 bar (100 psi) at 25 °C 4.0 bar (58 psi) at 60 °C 2.4 bar (35 psi) at 80 °C Reverse 3.0 bar (44 psi) at 25 °C 1.0 bar (15 psi) at 80 °C
Effective Filtration Area	2.4bar/90°C(forward) 0.65m ² / Φ 69-10 inch

Sterilization

Inline Steam Sterilization	up to 10 cycles (135°C for 30min< 0.3 bar per cycle),SLHPF up to 35 cycles (135°C for 30min< 0.3 bar per cycle),DLHPF
Autoclave	up to 120 cycles (130°C for 30min per cycle)

Integrity Test Data

Bubble Point	BP: ≥ 0.32 MPa(water), DLHPF(0.22 μm)
Diffusion Flow	DF: ≤ 30 ml/min/10"@ 0.22 MPa, DLHPF(0.22 μm)

Ordering Information

SLHPF [Single-Layer]	Removal Ratings	End Cap	Nominal Length	Seal Material	-P
	0022=0.22μm	HSF=226 /Fin (PBT Insert)	05= 5"	S=Silicone	
	0045=0.45μm	HSC=226 /Flat (PBT Insert)	10=10"	E=EPDM	
	0100 =1.0μm	HTF=222 /Fin (PBT Insert)	20=20"	V=Viton	
		HTC=222 /Flat (PBT Insert)	30=30"	P=PFA/Viton	
		DOE=Double Open End	40=40"		
DLHPF [Double-Layer]	2222=0.22+0.22μm				
	4545=0.45+0.45μm				