

HixPharm® PES

HixPharm® PES cartridges are filters with a Polyethersulfone membrane, specially developed for bacterial retention in the pharmaceutical, veterinary and biotechnology industries. They are characterized by a heterologous PES membrane that offers high flow rates, low levels of extractables with very low protein binding and superior microbiological safety.

Features

- Low extractables
- High Flow rates
- Testable integrity
- Low protein binding



Quality

Cartridges produced in a controlled environment
Manufactured according to the ISO9001 Quality Management
The filter complies with the norms and regulations of materials approved to be in contact with food

Specifications

Materials

Membrane: Heterologous Polyethersulfone (PES)
Support and drainage: Polypropylene (PP)
O-rings: Silicone, EPDM or Viton
Sealing technology: Thermal bonding, without adhesives
Core & Housing: Polypropylene (PP)

Dimensions

Diameter: Ø 68mm
Length: 10", 20", 30"

Retention, µm

Single Layer 0.1, 0.2, 0.45
Dual Layer 0.1 + 0.2, 0.2 + 0.45

Filtration Area

10"	6.7 ft²	0.62 m²
20"	13.4 ft²	1.24 m²
30"	20.4 ft²	1.86 m²

Adapter

Double O-Ring 226 Lock (S7) & Double Open End (DOE)

Working Characteristics

Max. Working Pressures and Temperatures

Δp 5.5bar @ 0-38°C
Δp 4.1bar @ 66°C
Δp 1.5bar @ 82°C

Integrity Test (at 23°C) *for every 10" of cartridge

	Bubble Point	Diffusive Flow*
0.1µm	----	≤20ml/min/10" @ 4.0 bar
0.2µm	≥3200 mbar	≤30ml/min/10" @ 2.8 bar
0.45µm	≥2300 mbar	≤25ml/min/10" @ 1.7 bar

Bacterial Endotoxins

0.25 EU/ml determined by LAL test.

Typical Flow Rate (per 10" of cartridge at 210 mbar)

0.1µm ≥ 10 L/min
0.2µm ≥ 18 L/min
0.45µm ≥ 25 L/min

Bacterial Retention

0.1µm > 10⁷ CFU/cm² *Alcholeplasma laidawi*
0.2µm > 10⁷ CFU/cm² *Brevundimonas diminuta*
0.45µm > 10⁷ CFU/cm² *Serratia marcescens*

Sterilization

Autoclaving at 134°C, 30 min, 1 bar, min. 20 cycles.
SIP 121°C 30 min.

Ordering Information

Name		Filter Media		Type		Pore Size		Length		Adapter	
HP		PE		A		06		30		S7	
HP	HixPharm	PE	PES	A	Absolute	01	0.1µm	10	10"	S7	Double O-ring 226 Lock
						02	0.2µm	20	20"	DOE	Double Open End
						04	0.4µm	30	30"		
						12	0.1 + 0.2µm				
						24	0.2 + 0.45µm				