

Polyflux H

DESIGNED FOR: CONVECTIVE (HDF-HF) | **HFHD** (High flux)

OTHER APPLICABLE THERAPIES:

MEMBRANE: **POLYAMIX** (PAES/PVP/PA, BPA-free)

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FOR EFFECTIVE CONVECTIVE THERAPIES

The **Polyflux** H dialyzer series deliver proven biocompatibility¹ with consistent performance. The **Polyflux** H dialyzers effectively support the delivery of high-volume convective therapies,² while helping control the loss of essential proteins such as albumin³, particularly challenging at high flows and TMPs.

DESIGNED TO PROMOTE BIOCOMPATIBILITY¹

The Polyflux H dialyzers deliver convective treatments (HDF or HF mode), as well regular high-flux hemodialysis.

- Since 1988, over 300 million Polyflux dialyzers have been used globally⁴
- Composed of the Polyamix membrane, which is BPA-free, the **Polyflux** H dialyzers may limit the risk of clotting events¹
- The Polyflux H dialyzers are steam sterilized inside-out, designed to promote biocompatibility, avoiding the risks associated with the exposure to chemicals such as ethylene oxide and manufacturing residues^{5,6}

WITH HIGH CONVECTIVE VOLUMES IN MIND

The Polyflux H dialyzers are aimed at delivering stable and high performing convective treatments, supporting a consistent reach of high volumes of substitution fluid.

- Narrow pore size distribution is responsible for a carefully controlled albumin selectivity, combined with an effective permeability to small and conventional middle molecules¹
- The 3-layer-membrane structure has been designed to optimize the combination of high diffusive and convective transport rates, while acting as a barrier to endotoxins⁷
- Facilitates obtention of high convective flow rate, and provides effective clearance of conventional middle molecules such as β₂-microglobulin (β₂m)^{8,9}

Polyflux H Specifications

MATERIALS	POLYFLUX 140 H	POLYFLUX 170 H	POLYFLUX 210 H		
Membrane	Polyamix Polyarylethersulfone, Polyvinylpyrrolidone and Polyamide blend BPA-free				
Potting	Polyurethane (PUR)				
Housing	Polycarbonate (PC)				
Gaskets	Silicone rubber (SIR)				
Protection caps	Polypropylene (PP)				
Sterilization	Steam (inside-out)				
Sterile barrier	Medical Grade Paper				
SPECIFICATIONS					
UF-Coefficient (mL/(h*mmHg))*	60	70	85		
KoA urea*	998	1153	1452		
Blood Compartment volume (mL)	94	115	125		
Minimum recommended priming volume (mL)	500				
Maximum TMP (mmHg)	600				
Recommended Q _B (mL/min)	200-400	250-500	300-500		
Storage conditions	<30°C (or <86°F)				
Units per box	24				
Gross/net weight (g)	274/245	304/275	317/300		
MEMBRANE					
Effective Membrane Area (m²)	1.4	1.7	2.1		
Fiber inner diameter (µm)	215				
Fiber wall thickness (µm)	50				
SIEVING COEFFICIENTS*					
Vitamin B12 (1,4 kDa)	1.0				
Inulin (5,2 kDa)	1.0				

Inulin (5,2 kDa)	1.0
β ₂ -microglobulin (11,8 kDa)	0.82
Myoglobin (17 kDa)	0.37
Albumin (66,4 kDa)	0.0022

* According to EN 1283/ISO 8637:

- UF-Coefficient: measured with bovine blood, Hct 32%, Pct 60g/L, 37°C

– KoA urea: calculated at Q_B =300 mL/min, Q_D =500mL/min, UF=0 mL/min

– Sieving coefficients: measured with bovine plasma, $\Omega_{\rm B}{=}300\,mL/min,$ UF=60 mL/min – Clearances In-Vitro: measured at UF=0 mL/min, $\pm10\%$

HDF/HF mode: measured at UF=60 mL/min, ±10%

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- Golli-Bennour EE, et al. Cytotoxic effects exerted by polyarylsulfone dialyser membranes depend on different sterilization processes. Int Urol Nephrol. 2011; 43:483-490.

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The products meet the applicable provisions of Annex I [Essential Requirements] and Annex II [Full quality assurance system of the Council Directive 93/42/EEC of 14 June 1993, amended by Directive 2007/47/EC]

For safe and proper use of the device, please refer to the Instructions for Use C € 0086

CLEARANCES IN VITRO (mL/min)*	POLYFLUX 140 H	POLYFLUX 170 H	POLYFLUX 210 H
HEMODIALYSIS MODE (HD)			
Urea (60 Da) (Q _B -Q _D , mL/min)			
200/500	193	196	
300/500	262	270	281
400/500	309	321	339
500/500			378
Phosphate (95 Da)			
200/500	174	180	
300/500	220	232	249
400/500	250	266	289
500/500			317
Creatinine (113 Da)			
200/500	181	186	
300/500	232	243	259
400/500	266	281	303
500/500			334
Vitamin B12 (1.4 kDa)			
200/500	128	137	
300/500	149	162	183
400/500	163	178	203
500/500			218
Inulin (5.2 kDa)			
200/500	91	100	
300/500	102	113	131
400/500	109	121	143
500/500			151
HEMODIAFILTRATION MODE (HDF/H	HF)		
Urea (60 Da) (Q_B-Q_D , mL/min)			
200/500	198	199	
300/500	277	283	290
400/500	332	343	359
500/500			406
Phosphate (95 Da)			
200/500	187	191	
300/500	242	252	266
400/500	277	292	314
500/500			347
Creatinine (113 Da)			
200/500	91	194	
300/500	252	262	274
400/500	292	306	327
500/500			363
Vitamin B12 (1.4 kDa)			
200/500	152	159	
300/500	177	189	208
400/500	193	208	232
500/500			249
Inulin (5.2 kDa)			
200/500	120	128	
300/500	133	143	161
400/500	141	153	174
500/500			183

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