

# Poliflo HFC

## **Product Information**

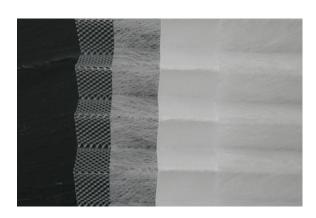
Envirogen's Poliflo HFC filter cartridges are designed for applications requiring a very high flow rate, they are equally suitable for use as membrane pre-filters or final polishing filters in applications that do not require membrane filtration. The use of an spacer mesh as an upstream pleat support means that fluid flow is uniform across the entire surface of the filter medium, the mesh holds the flow channels open thereby maximizing dirt holding capacity and minimizing pressure drop across the filter.

Poliflo HFC filter cartridges are absolute rated, tested to Beta 1000 using the industry standard single pass OSU-F2 test procedure with ISO 12103 part 1 A2 Fine and A4 Coarse test dust as appropriate.

Manufactured from polypropylene or microfiber glass filter media and hardware, Poliflo HFC filter cartridges have excellent chemical compatibility. Thermal bonded construction eliminates the requirement for adhesives, maintaining product integrity in demanding applications and minimizing the level of extractables in the filtrate. All materials conform to the relevant requirements of FDA CFR21 part 177.1520 and 174.5.



## Features & Benefit



- Absolute micron ratings ensure consistent, repeatable performance
- Inside to out flow ensures that contamination is collected inside the filter cartridge, for easy disposal
- Large surface area, typically 49ft² per 40" and pleat spacing mesh on the inner layer ensures low initial pressure drops and high dirt holding capacity, for extended service life
- 100% Polypropylene construction (Poliflo HFC only) and thermal bonding mean wide chemical compatibility and minimum levels of extractables.
- Suitable for steam sterilization, autoclaving and hot water sanitization
- Available in 20", 40" and 60" lengths to retrofit most existing installations

## **Technical Data**

#### **Dimensions**

Outside Diameter: 6.0" (15.2cm)

Lengths: 20", 40" and 60" (50.8, 101.6, 152.4cm)

#### **Operating Conditions**

Recommended change out  $\Delta P:35psid$  (2.4 bar)

Recommended Maximum  $\Delta P$ 

Forward Flow: 20psid @ 180°F (1.4 bar @ 82°C

30psid @ 160°F (2.1 bar @ 71°C) 50psid @ 77°F (3.4 bar @ 25°C)

#### **Materials of Construction**

Surface area: 49ft<sup>2</sup>/4.6m<sup>2</sup>

Filter Medium: Polypropylene or Glass Fiber

Drainage layers: Polypropylene
Support mesh: Polypropylene
Outer Core: Polypropylene
End Caps: Polypropylene
O-rings: Various, see below

Reverse Flow: Not recommended

High Flow Presure Drop										
Polypropylene Media Elements										
Micron	Element Pressure Drop psid/gpm			Element Pressure Drop Mbar/M³/Hr						
	20"	40"	60"	20"	40"	60"				
1	0.0200	0.0097	0.0065	6.0845	2.9395	1.9820				
3	0.0167	0.0081	0.0054	5.0705	2.4495	1.6516				
5	0.0076	0.0037	0.0025	2.3179	1.1198	0.7550				
10	0.0046	0.0022	0.0015	1.3908	0.6719	0.4530				
20	0.0021	0.0010	0.0007	0.6374	0.3079	0.2076				
40	0.0017	0.0008	0.0006	0.5215	0.2520	0.1699				
60	0.0015	0.0007	0.0005	0.4552	0.2199	0.1483				
100	0.0010	0.0005	0.0003	0.3035	0.1466	0.0989				
Glass Media Elements										
Micron	Element Pressure Drop psid/gpm			Element Pressure Drop Mbar/M³/Hr						
	20"	40"	60"	20"	40"	60"				
1	0.0394	0.0197	0.0131	11.9419	5.9709	3.9806				
2.5	0.0183	0.0091	0.0061	5.5385	2.7692	1.8462				
4.5	0.0144	0.0072	0.0048	4.3549	2.1775	1.4516				
10	0.0095	0.0048	0.0032	2.8830	1.4415	0.9610				
20	0.0069	0.0035	0.0023	2.0940	1.0470	0.6980				

## **Ordering Guide**

Code	Micro Rating		Filter Media	Length	Gasket
Poliflo HFC	PP	GF	P = Polypropylene	20	E = EDPM
	1	1	G = Glass Media	40	N = Buna N
	3	2.5		60	S = Silicone
	5	4.5			V = Viton
	10	10			
	20	20			
	40				
	60				
	100				

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