

Depth Filtration
BECO PROTECT® HF

Depth Filter Cartridges

BECO PROTECT HF HighFlow depth filter cartridges are made of pleated, multi-layer and thermally bonded polypropylene filter material, which offers a large surface area, maximum efficiency and exceptionally high flow rates.

These depth filter cartridges are designed for processes that require high performance. BECO PROTECT HF HighFlow depth filter cartridges are mainly used for water filtration in Life Science applications, due to the low pressure drop and the high dirt holding capacity.

Features and Benefits

- High retention for a reliable separation effect, β ratio ≥ 5000 or $\geq 99.98\%$ efficiency for defined particles
- Cleanable with hot water or chemicals
- High surface area, resulting in low initial differential pressure and excellent dirt holding capacity
- Completely thermally welded construction
- Flow direction from inside to outside
- Lower initial costs with smaller filter housings

Configuration

BECO PROTECT HF HighFlow depth filter cartridges are made from pleated polypropylene layers. The filter material has a broad chemical compatibility. The cage and core made of polypropylene ensures maximum mechanical stability. All materials used ensure product-neutral filtration without adsorption or particle migration.



Material

Filter material:	Polypropylene
Cage and core:	Polypropylene
End caps:	Polypropylene
O-ring:	EPDM (standard)

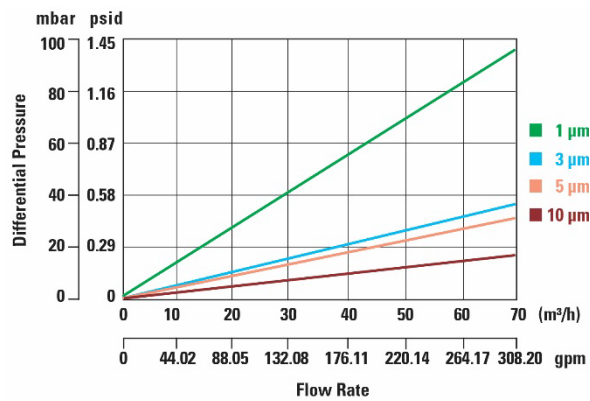
The plastic components meet the requirements of Directive 10/2011/EC and amendments. All materials used meet the FDA requirements according to 21 CFR § 177.1520.

Technical Data

Nominal length for Code U	
4 = 40"	(1038 mm)
Outer diameter:	6.3 in (160 mm)
Inner diameter:	3 in (75 mm)
Surface area:	52.7 ft ² (4.9 m ²)
Maximum operating temperature:	176 °F (80 °C)
Maximum differential pressure in flow direction:	49 psid (340 kPa, 3.4 bar) at 68 °F (20 °C)
Hot water sanitization:	Max. 7.2 psig (50 kPa, 0.5 bar) at 194 °F (90 °C) for 30 minutes
Chemical regeneration:	Can be sterilized with conventional chemical cleaners

Flow Rate

40" with water at 68 °F (20 °C) (standard values)



Note: the inner diameter of the filter element and the filter housing in/outlet is the limited factor

Types/Retention Ratings/Flow rate

Type	Retention rate (µm)	Flow rate gpm (m ³ /h)	
		Maximum	Recommended
HF010	1	132.08 (30)	132.08 (30)
HF030	3	308.20 (70)	176.11 (40)
HF050	5	308.20 (70)	176.11 (40)
HF100	10	308.20 (70)	176.11 (40)

Adapter Code

Code U
Single open end (SOE)



Ordering Information

BECO PROTECT HF HighFlow depth filter cartridges with protective foil in carton.

Type	Retention rating	Adapter	Nominal length	Gasket
HF	010 = 1 µm	U = Code U (SOE)	4 = 40" (1038 mm)	E = EPDM
	030 = 3 µm			
	050 = 5 µm			
	100 = 10 µm			

Example:

HF	010	U	4	E
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BECO PROTECT HF depth filter cartridge; 1 µm retention rating; Code U, 40" (1038 mm); EPDM gasket

Safety

When used as directed and handled correctly, there are no known unfavorable effects associated with this product. BECO PROTECT HF HighFlow depth filter cartridges do not require the provision of safety-relevant information.

Storage, handling and transport do not present any environmental and health risks.

Disposal

BECO PROTECT HF HighFlow depth filter cartridges should be treated as industrial waste. Any local and other official regulations in relation to the filtered product must be followed.

Storage

Store cartridges in their original packaging and in a dry, odor-free and UV ray protected place.

Use filter cartridges within 60 months after production date.

Certified Quality

During the production process, BECO PROTECT HF HighFlow depth filter cartridges are regularly monitored to ensure consistent excellent quality control.



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