

Cartridge Filtration

BECO PROTECT® PP

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Pre-Filter Cartridges

BECO PROTECT® PP pre-filter cartridges consist of a pleated polypropylene filter material, characterized by an exceptionally high retention rate of up to 99.98 % of the specified retention rate. The support core and end caps are made from polypropylene and are thermally bonded to each other, thus achieving very high chemical resistance. The BECO PROTECT® PP pre-filter cartridges are available with retention rates between 0.6 and 60 µm, and are optimized for the requirements of pre- and fine filtration of liquids. BECO PROTECT® PP pre-filter cartridges are characterized by high dirt holding capacities, long service life and absolute retention rates. Due to their separation characteristics, BECO PROTECT® PP pre-filter cartridges are used for the filtration of

- ▶ wine, sparkling wine,
- ▶ beer, mineral water,
- ▶ cider,
- ▶ liquid foods,
- ▶ products of the pharmaceutical, cosmetics, chemical and electronics industries.

Configuration of the Filter Cartridge

BECO PROTECT® PP pre-filter cartridges are made from high-quality, pleated polypropylene layers. The internal and external polypropylene support core ensures maximum mechanical stability. All materials used ensure product-neutral filtration without adsorption or particle migration. The BECO PROTECT® PP pre-filter cartridges therefore meet the requirements of the customer in terms of safe, gentle filtration of his products.

Materials used:

Filter material:	polypropylene
Internal and external support core:	polypropylene
End caps/adapters:	Polypropylene, adapter with stainless steel ring
O-rings:	silicone (standard)

All materials used meet the requirements of USP-XXII Class VI-121 °C (250 °F) and are thermally bonded without the use of adhesives.

Characteristics and Advantages

The specific advantages of BECO PROTECT® PP:

- ▶ Large effective filter surface area through pleated filter material
- ▶ High dirt holding capacity
- ▶ High retention rate according to β-ratio 5000
- ▶ High chemical resistance.

Filter Cartridge Types/Retention Rates

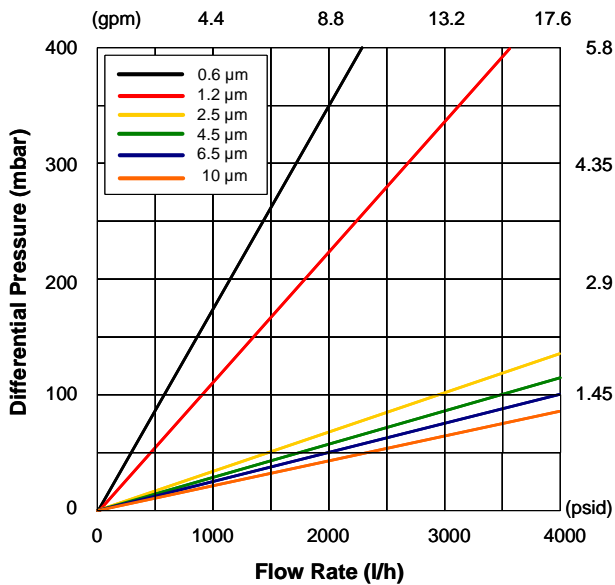
Filter cartridge type	Retention rate [µm]
PP006	0.6
PP012	1.2
PP025	2.5
PP045	4.5
PP065	6.5
PP100	10.0
PP200	20.0
PP400	40.0
PP600	60.0

Technical Data

Diameter:	70 mm (2.75 in)
Max. operating temperature:	80 °C (176 °F)
Steam sterilization:	> 50 h at 121 °C (250 °F)
Chemical sterilization:	Can be sterilized with conventional chemical cleaners
Max. differential pressure:	5.0 bar (72.5 psid) at 25 °C (77 °F)

Nom. length Code F	
1 = 10"	250 mm
2 = 20"	500 mm
3 = 30"	750 mm
4 = 40"	999 mm

**Flow Rate (recommended values)
10" element with water at 20 °C (68 °F)**



Sterilization

Steam sterilization: BECO PROTECT® PP pre-filter cartridges can be steamed or autoclaved at 121 °C (250 °F) max.

Duration: 20 minutes min. after steam emerges from all openings of the filtration system.

Sterilization with hot water or chemical cleaning via CIP with conventional cleaners is also possible.

Ordering information

Cartridges with protective foil in carton

HS customs tariff: 8421 99 00

Cartridge types	Retention rates	Adapter	Length nom.	Gasket
PP	006 = 0.6 µm	F = Code F	1 = 10"/ 25 cm	S= silicone
	012 = 1.2 µm	0 = Code 0	2 = 20"/ 50 cm	
	025 = 2.5 µm	2 = Code 2	3 = 30"/ 75 cm	
	045 = 4.5 µm	5 = Code 5	4 = 40"/100 cm	
	065 = 6.5 µm	7 = Code 7		
	100 = 10.0 µm			
	200 = 20.0 µm			
	400 = 40.0 µm			
	600 = 60.0 µm			

Example:

PP	006	F	1	S
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BECO PROTECT® PP pre-filter cartridge 0.6 µm retention rate, Code F, 10"

Adapter Codes

Code F	Code 0
DOE 2 flat gasket	2-222 O-ring without centering tip

Code 2	Code 5	Code 7
2-222 O-ring tripple bayonet adapter with centering tip	2-222 O-ring with centering tip	2-226 O-ring 2 bayonet adapter with centering tip

Safety

When used and handled correctly, there are no known unfavorable effects associated with this product. BECO PROTECT® PP pre-filter cartridges do not require the provision of safety-relevant information.

There are no known risks to humans or the environment during storage, handling and transport.

Disposal

BECO PROTECT® PP pre-filter cartridges should be treated as industrial waste. Any local and other official regulations must be followed, taking the product to be filtered into account.

Storage

BECO PROTECT® PP pre-filter cartridges should be stored in their original packaging, and in a dry, odor-free and UV ray protected place. Never store the product near evaporating chemicals, oils or fuels etc. The filter cartridges should be used within 2 years after delivery.

Certified quality

During the production process, BECO PROTECT® PP pre-filter cartridges are monitored constantly to ensure consistently high quality.



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