

# Cartridge Filtration

## BECO PROTECT FS

1 A 4.3.12 · EB  
11/2011

### The Innovative Depth Filter Cartridge Solution

**FineStream**

BECO PROTECT FS FineStream is an innovative depth filter cartridge used to protect downstream membrane filter cartridges.

It is distinguished by its combination of as yet unparalleled depth filter cartridge retention ratings and a unique design that increases the filter area. This synthesis of the finest filter fleece and excellent filtration performance gives the best membrane protection.

The variable flow of the BECO PROTECT FS is also unique. This can be adjusted to flow from outside to inside or, if the inlet and outlet ends on the housing are reversed, from inside to outside. The filtering effect remains the same.

The BECO PROTECT FS is used in the beverage industry.

#### Characteristics and Advantages

The specific advantages of the BECO PROTECT FS are:

- ▶ Outstanding protection for subsequent membrane filtration thanks to the fine, newly developed filter material, and thus an increased membrane filter cartridge service life
- ▶ The larger filter area gives a greater filter performance
- ▶ Noticeable improvement in filterability (index values)
- ▶ No adsorption and thus no color or flavor loss
- ▶ Variable flow
- ▶ Minimum product loss with flow from inside to outside
- ▶ Backwashable at up to 2 bar at 80 °C
- ▶ High chemical resistance by using 100 % polypropylene

#### Type of Filter/Retention Rating

Absolute ( $\beta$  ratio > 5000)

Type of filter	Retention rating
FS002	0.2 $\mu$ m



#### Technical Data

<b>Diameter:</b>	70 mm
<b>Maximum operating temperature:</b>	80 °C
<b>Maximum pressure difference in flow direction:</b>	4.8 bar at 25 °C 2.0 bar at 80 °C
<b>Steam sterilization:</b>	Max. 1 bar (121 °C) for 30 minutes
<b>Chemical regeneration/sterilization:</b>	Can be sterilized with conventional chemical cleaners

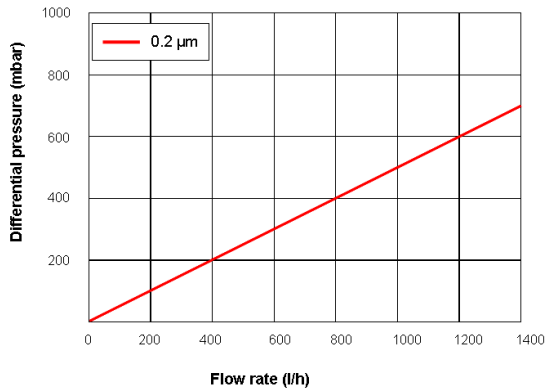
#### Materials Used

<b>Filter material:</b>	Polypropylene
<b>Internal and external support body:</b>	Polypropylene
<b>End caps/adapters:</b>	Polypropylene with reinforcing ring
<b>O-rings:</b>	Silicone (standard)

The plastic components meet the requirements of Directive 2002/72/EC and amendments.

All materials used meet the FDA requirements according to 21 CFR § 177.1520.

**Flow rate, 10-inch elements with water at 20 °C  
(reference values)**



**Ordering Information**

Depth filter cartridges wrapped in protective foil and packed in cartons.

Type of filter	Retention rating	Adapter	Nominal length	Gasket
FS	002 = 0.2 µm	2 =	1 =	S = silicone
		Code 2	10"/25 cm	
		7 =	2 =	
		Code 7	20"/50 cm	
		3 =	30"/75 cm	
4 =	40"/100 cm			

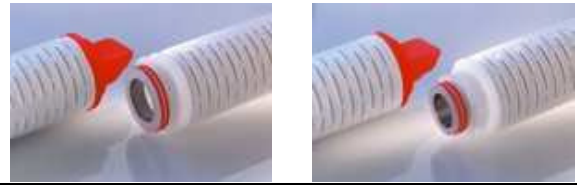
Example:

FS	002	7	2	S
----	-----	---	---	---

BECO PROTECT FS:  
0.2 µm retention rating; Code 7; 20"; silicone gasket

**Adapter Codes**

Code 7	Code 2
2-226 O-ring Double bayonet adapter with spear	2-222 O-ring Triple bayonet adapter with spear



HS Customs Tariff: 8421 99 00

**Safety**

When used and handled correctly, there are no known unfavorable effects associated with this product. No safety specifications are required for BECO PROTECT FS depth filter cartridges. Storing, handling and transporting this product do not present any health or environmental risks.

**Disposal**

BECO PROTECT FS depth filter cartridges should be treated as industrial waste. However, please note that any local and other official regulations must be complied with, depending on the filtered product.

**Storage**

BECO PROTECT FS depth filter cartridges should be stored in their original packaging, protected from UV radiation, in a dry and odor-free place. Never store the product near evaporating chemicals, oils or fuels, etc. The filter cartridges should be used within two years of delivery.

**Certified Quality**

During the production process, BECO PROTECT FS depth filter cartridges are constantly monitored to ensure consistently high quality.

**LENNTECH**  
 info@lennotech.com Tel. +31-152-610-900  
 www.lennotech.com Fax. +31-152-616-289

All information is given to the best of our knowledge. However, the validity of the information cannot be guaranteed for every application, working practice and operating condition. Misuse of the product will result in all warranties being voided. Reproduction, even in part, is permitted only with reference to the source. Subject to change in the interest of technical progress.