

# FIBRADISC® SY

## FILTER MODULES WITH REINFORCED FILTER SHEETS



### Description

Lenticular modules containing FIBRAFIX® SY high quality depth filter sheets reinforced by synthetic fibers.

- Higher wet strength
- Higher flow rates
- Greater resistance against pH
- Less absorption of color
- Longer lifetime

compared to standard filter sheets.

### Module Version

Standard lenticular module

### Components

Filter Sheet: Purified and bleached cellulose from sustainable sources, natural filter aids, wet strength agent  
 Standard Module: Polypropylene  
 Gaskets: Silicone sealing gasket (optionally EPDM, FKM, NBR)

### Dimensions

	12" K		12"		16"	
Adapter type <sup>(1)</sup>	DOE	DOR	DOE	DOR	DOE	DOR
Height [mm]	132	178	272	330	272	330
Filtration area [m <sup>2</sup> ]	0.6	0.7	1.8		3.6	
Number of lenses	5	6	16		16	
Dry/wet weight <sup>(2)</sup> [kg]	2.0 / 3.5		4.4 / 8.5		8.6 / 17	
Diameter [mm]	290		290		400	

<sup>(1)</sup> DOE: Double Open End (flat adapter). DOR: Double O-Ring (plug-in adapter). <sup>(2)</sup> indicative values.

### FIBRADISC® SY Product Range

Sheet grade	Retention rate [µm]	Water value <sup>(3)</sup> [L/m <sup>2</sup> ×min]	Ash content [%]	Filtration type
SY 30	5.0 – 12.0	421 – 758	34.0 – 40.0	Fine
SY 50	3.0 – 6.0	225 – 393	36.0 – 42.0	Fine
SY 100	0.6 – 1.5	140 – 253	33.0 – 39.0	Fine
SY 120	0.4 – 0.7	66 – 86	36.0 – 42.0	Sterile

<sup>(3)</sup> Δp = 100 kPa, the indicated water value is not related in any way to the actual filtration flow rate.

### Bacterial Retention

Sheet grade	Bacterial species	Number of cells	LRV
SY 120	Serratia marcescens ATCC 14756	1.0 × 10 <sup>7</sup> /cm <sup>2</sup>	>6

### Operating Conditions

Parameter	Recommendation
Maximal differential pressure	2.4 bar / 35 psi
Maximal differential pressure for sterile filtering sheets	1.5 bar / 21 psi
Rinsing volume	50 L/m <sup>2</sup>
Maximum temperature (continuous)	82 °C
Maximum temperature (short term)	90 °C
Minimum temperature	-5 °C
Sterilization	Hot water or chemically

## Chemical Stability

Substance	[%]	Media	PP	Gasket material			
				MVQ	EPDM	FKM	NBR
NaOH	1.0	r	r	r	r	lr	r
HCl	5.0	r	r	lr	lr	r	lr
HNO <sub>3</sub>	5.0	r	r	nr	lr	r	nr
H <sub>2</sub> SO <sub>4</sub>	10	r	r	nr	lr	r	nr
Citric acid	10	r	r	r	r	r	r
Acetic acid	20	r	r	nr	lr	r	nr
Peracetic ac	1.0	r	r	r	lr	lr	lr
Acetone	conc	r	lr	lr	r	nr	nr
Ethanol	80	r	r	lr	r	r	nr
SO <sub>2</sub>	0.1	r	r	r	r	r	nr

r = resistant, lr = limited resistance, nr = not resistant, at 50°C. This table is for guidance purposes only.

## Quality Assurance

Certified to:

- ISO 9001 (quality management)
- ISO 14001 (environmental management)
- ISO 22000 (food safety)
- Kosher standard

Compliant to:

- Recommendation XXXVI/1 of the German Federal Institute for Risk Assessment (Bundesinstitut für Risikobewertung, BfR)
- FDA (US Food and Drug Administration) 21 CFR 177.2260 e-k
- EU-Directive 10/2011
- USP Class VI

## Packaging and Storage

Filter modules are hygienically packed in plastic bags and placed in cardboard boxes. They must be stored in their original packaging in a dry, odorless and well-ventilated area. The modules should be used within 36 months for life science and 60 months for food and beverages from the date of manufacture.

## Disposal

The respective official regulations for disposal must be followed depending on the filtered product. Untaminated modules can be disposed of as non-hazardous waste.

## Remarks

The validity of the information cannot be guaranteed for every application. All information is based on current knowledge and does not claim to be complete. No liabilities can be derived from this information. FILTROX reserves the right to make changes in the course of technical improvements.