FibraFix® series
For coarse, fine and sterile filtration

FibraFix® - Depth filter modules allow the user to handle large filter areas easily in a disposable assembly. Filtration is performed in a closed system. Depth filter sheets inside have a high dirt holding capacity of up to 4 kg per m².

In the filtration process, dirt particles are slowed down and eventually retained by the tortuous path inside the filter sheet and by electrokinetical interactions («zeta potential»). Through this unique mechanism, a high capacity (long life-time of filter until plugging) can be achieved.

All materials are FDA approved.

DESIGN / FUNCTION

FibraFix® - filter modules are designed for use in closed sy-stems. Drip loss, dangerous emissions into the environment, as well as a bit of downtime when changing the filter layers belong to the past.

Flow chart:

up to 4 modules

defiled media   filtrate
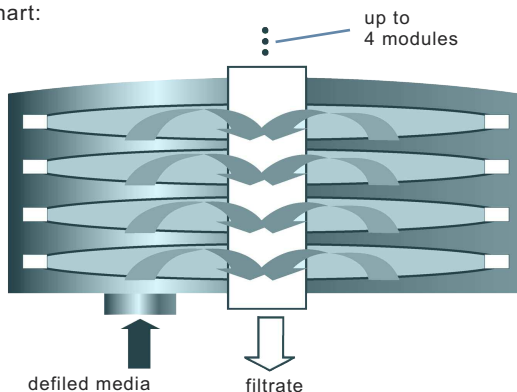
The frame structure of the module is made of polypropylene. A stable, metal-free core sleeve carries the drainage body, which supports the filter sheets. The defied medium is forced under pressure through the filter material. The sediment par-ticles are retained and the filtrate is passed through the drai-nage body, and the core sleeve to the outlet. The seal between the modules and to the filter housing is either a flat adaptor or a bayonet adaptor with double O-ring.

The latter type of seal ensures greater safety and bypass is essential in sterile filtration. In corresponding filter housings up to four filter modules can be arranged one above the other.
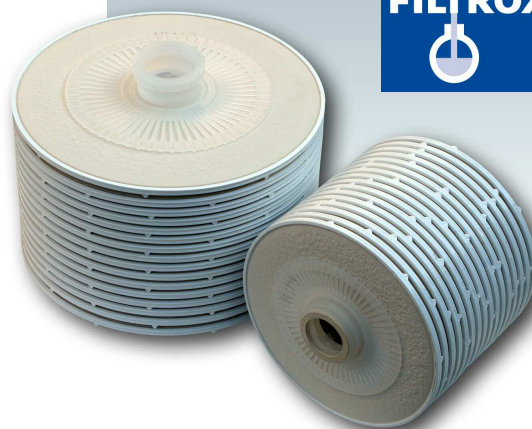
TECHNICAL DATA   FibraFix® series

|	12"	16"
Diameter	300 mm	400 mm
Filter area	1,8 m²	3,6 m²
Height (bayonet adaptor)	330 mm	330 mm
Height (flat adaptor)	272 mm	272 mm

Filter area for modules with 16 cells. Modules with re-duced number of cells are available upon request.

APPLICATIONS

FibraFix®- filter modules are used in all industrial applications, such as:

• Process water, DI-water
• Backwashing and cleaning fluids
• cooling and lubrication fluids
• Solvents and fine chemicals
• Ink and varnish
• Cosmetics
• Beverage
• Pharmaceutical intermediates

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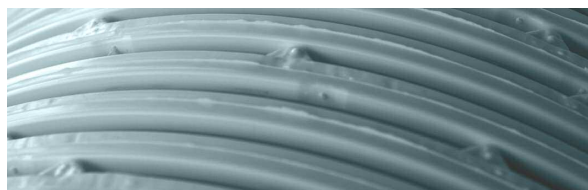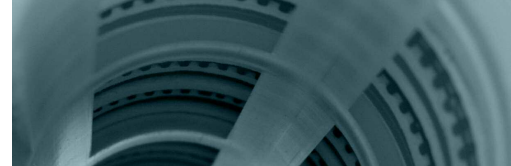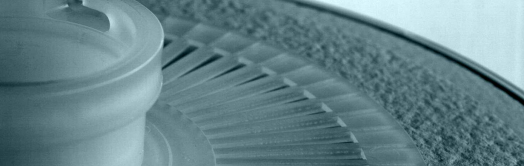
RETENTION RATES
OF COARSE AND FINE FILTER SHEETS

Pore size in depth filter sheets is measured indirectly by the flow rate. The correlation between pore size and flow rate is empirical. The following nominal porosities (retention rates) are available:

Type module	Retention size in µm	Flow rate* in l/m² min
AF 03	20	
AF 09	10	
AF 23	6,0	max. 80 - 100
AF 33	5,0	
AF 43	4,0	
AF 73	1,5	

* at 0,1 bar differential pressure

RETENTION RATES
OF STERILE FILTERING FILTER SHEETS

Type module	Retention size in µm	Flow rate* in l/m² min
AF 103	0,6	
AF 113	0,5	
AF 133	0,4	max. 40
AF 143	0,2	
AF 153	0,04	

* at 0,1 bar differential pressure

OPERATING CONDITIONS

Max. operating temperature..82°C
Max. differential pressure (modules).....................................2,4 bar
Recommended rising volume..50 l/m²
Recommended sterilization...........................hot water or chemical

Note: For chemical sterilization with oxidizing agents do not exceed recommended contact time. Inline steam sterilization requires careful handling to avoid back pressure.
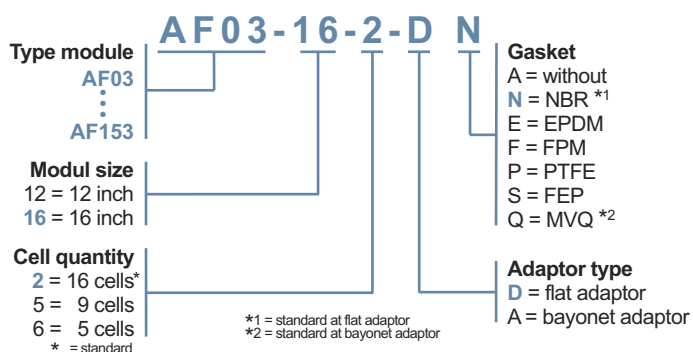
QUALITY ASSURANCE

The assures the best quality control according to international standards:
• ISO 9001 (Quality management))
• ISO 14001 (Environmental management)
• FDA Drug master File: # 16418

GASKET MATERIALS

Available materials:
• MVQ   • FPM
• EPDM   • PTFE
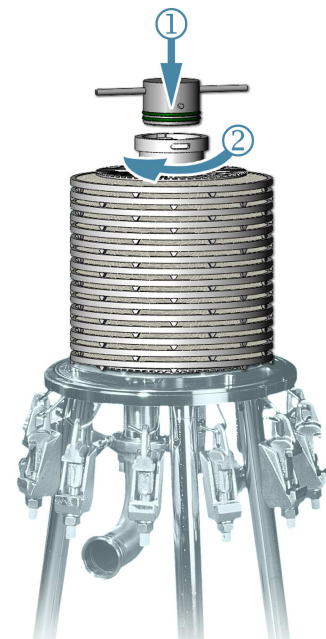• NBR   • FEP-O-SEAL®

CHEMICAL RESITANCE
Filter sheets

Substance	Concentration (%)	Resistance	
		T = 20°C	T = 80°C
NaOH	1	r	r
NaOH	2	r	lr
HCl	5	r	lr
HNO$_3$	5	r	lr
H$_2$SO$_4$	10	r	lr
Acetic acid	Conc.	r	r
Citric acid	10	r	r
Peracetic acid	0,1	r	r
Butanol	80	r	r
Ethanol	80	r	r

r = resistant; lr = limited resistant
For the complete list please refer to our special documentation

MATERIAL (filter sheets)

Purified and bleached cellulose, natural inorganic filter aid and polyamidoamine (< 3%).

ORDERING INFORMATIONS   FibraFix®

AF03-16-2-D N

Type module
AF03
⋮
AF153

Modul size
12 = 12 inch
16 = 16 inch

Cell quantity
2 = 16 cells*
5 = 9 cells
6 = 5 cells
* = standard

*1 = standard at flat adaptor
*2 = standard at bayonet adaptor

Gasket
A = without
N = NBR *1
E = EPDM
F = FPM
P = PTFE
S = FEP
Q = MVQ *2

Adaptor type
D = flat adaptor
A = bayonet adaptor

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