CARTRIDGE FILTERS

Stacked Disc Module Cartridge Filter

Lenticular depth filter module of cellulose or activated carbon cells stacked between double PP separators. With a 0.2–60 µm range, it is an enclosed alternative to sheet filter presses for clarification and bioburden reduction on wine, beer, juice, syrup, pharmaceutical and cosmetics lines.



FILTER MEDIA	FILTRATION	SURFACE AREA	DIAMETER
2 series	**0.2–60 µm**	**3.7 m²**	**8″/12″/16″**
Cellulose · activated carbon	Nominal depth filter	16″ module · 16 cells	Ø291 mm · Ø402 mm

Technical specifications

Filter media	Cellulose fibre (with diatomaceous earth / perlite and resin) · Activated carbon impregnated depth layer
Micron ratings	0.2–0.4 · 0.4–0.6 · 0.6–1 · 1–3 · 2–5 · 3–7 · 10–15 · 25–30 · 40–50 · 50–60 µm · activated carbon 5 µm
Filtration type	Depth filtration; mechanical retention and adsorption
Core / separator	Polypropylene core and double PP separator
Module diameter	8″ · 12″ (Ø291 mm) · 16″ (Ø402 mm)
Number of cells	8″: 7 / 8 · 12″ and 16″: 9 / 12 / 15 / 16
End cap type	DOE (flat gasket) · SOE (double O-ring, 8″ only)
Gasket material	Cellulose: Silicone · EPDM · NBR · Viton · E-FKM · Activated carbon: Silicone · EPDM · NBR
Max. operating temperature	80 °C
Max. ΔP	Cellulose 2.5 bar · activated carbon 2.0 bar at 25 °C · 1.0 bar at 80 °C
Replacement ΔP	1.5 bar
Hot water sanitisation	Max. 85 °C · 25–30 min
Steam sterilisation (SIP)	Backwashable version only: 125 °C · 30 min · max. 3 cycles · steam < 2 bar
Backwash	Backwashable version only: cold water or max. 60 °C · 5–10 min · max. 0.5 bar
pH range	2–11
Quality	ISO 9001:2015 · Certificate No: 06009/PR09U

Model and surface area

MODULE	CELLS	HEIGHT	SURFACE AREA
8″	8	–	0.26 m²
12″	9	175 mm	1.0 m²
12″	15	275 mm	1.7 m²
12″	16	273 mm	1.8 m²
16″	16	–	3.7 m²

12″ Ø291 mm · 16″ Ø402 mm.

End cap and connection options

DOE
Flat gasket adapter; standard on 8″, 12″ and 16″ modules.

SOE
Double O-ring adapter; 8″ module only.

Backwashable
Backwashing and SIP apply only to this version.

Chemical compatibility

CHEMICAL GROUP	CELLULOSE FIBRE	ACTIVATED CARBON
Dilute acids	G	E
Concentrated acids	P	P
Oxidising acids	N/R	P
Weak acids	G	E
Organic solvents	G	E
Strong bases	P	G
Inorganic salts	E	E
Steam (≤ 100 °C)	G	G

E: Excellent · G: Good · F: Fair · P: Poor · N/R: Not recommended

Flow rate and pressure drop

ΔP	8″	12″	16″
0.20 bar	10	75	145
0.40 bar	20	150	290
0.70 bar	30	230	445
1.00 bar	40	300	580
1.50 bar	48	380	740

L/min · 8″ 8 cells, 12″ and 16″ 16 cells · clean water, 20 °C.

Use and maintenance

- Before first use, flush with 50 L/m² of water at no more than 85 °C, then carry out a leak-tightness test.
- Size by the required filter area; limit flow to 75% of the module capacity.
- Replace the module when ΔP reaches 1.5 bar; do not exceed 1.5 bar when removing microorganisms.
- Do not exceed 0.5 bar ΔP during backwashing.
- Use silicone grease on gaskets, not mineral oil.

Values in this data sheet are typical and for information only. Product selection should be made with our engineers based on process fluid, temperature, pressure and flow conditions. Proses T.İ.M. reserves the right to change product specifications without prior notice.

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