

ABSOLUTE PP MEMBRAN PROTECT

Dedicated pre-filter for membrane protection

Technical characteristics

- Pre-filter ideal for the protection of the final membranes
- Removal of contaminants before the final filter, to extend the life of the membrane filter cartridges
- 0.4 μ m porosity with absolute particle degree ß 5000
- Polypropylene six-layer graduated density structure
- · Reduction of filtrability indexes
- · Wide compatibility with regenerating and sanitizing products
- Food grade
- Configuration suitable for frequent chemical regeneration

Laser particle counter

Retention e ciency

Particle removal e ciency is established with the Beta ratio (B):

Number of particles upstream of filter

Number of particles downstream of filter

The **ABSOLUTE PP MEMBRAN PROTECT** filter cartridges are all validated with β-ratio 5000 e ciency, which corresponds to a 99.98% particle retention.

	DOWNSTREAM PARTICLES	RATIO	ß	EFFICIENCY
	50.000	<u>100.000</u> 50.000	2	50%
	5.000	<u>100.000</u> 5.000	20	90%
	1.000	<u>100.000</u> 1.000	100	95%
	100	<u>100.000</u> 100	1.000	99,9%
	20	<u>100.000</u> 20	5.000	99,98%

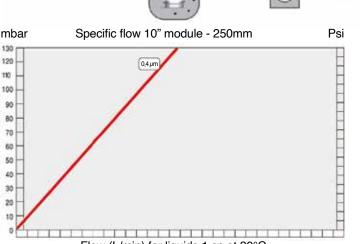


The particulate retention e ciency of the ABSOLUTE PP MEMBRAN PROTECT, filter elements is randomly tested, by performing a destruction filtration test, with a suspension of ACFTD (AC Fine Test Dust) standard particles and using in-line laser particle counters, according to ISO 4572 procedure.

0,4 µm

UPSTREAM PARTICLES = 100.000 units





Flow (L/min) for liquids 1 cp at 20°C



Construction materials

Filter plate	Pleated heat-sealed polypropylene, scalar porosity
Support and drainage layers	Polypropylene microfiber
Internal and external cage	Polypropylene
Terminal supports	Polypropylene
Standard 'O' rings	Silicone
Material coupling	Thermowelding

Operational data

Filter surface	0,6 m ² (6,5 ft ²) for a 250 mm module (10")
Max operating temperature	80°C
Max ∆p operating at 20°C	5 Bar (72,5 Psi)
Max ∆p at 121°C with steam	0,3 Bar (4,3 Psi)

Regeneration and hygienization

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PROTECT filter elements can be repeatedly regenerated also in backflush, with hot water max 80°C, sterilized with steam up to 121°C. They can also be used in hot caustic cycle, even with peroxide.

Terminal with no internal cavity.

Weldings made for heavy duty applications, with high temperature and pH excursions.

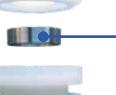
The tolerance between cage and pleated filter plate allows dilatation during thermal excursions.



Detail of the welding, excluding "traps" or fluid retention, dangerous for process filtration.



Construction suitable for backflush regeneration.



to maintain the joint size stable, it is separable for disposal.

The inox ring is a reinforcement

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