

BREW FREE C

Pleated media in
heat-sealed polypropylene

Technical characteristics

- Thermo-welded polypropylene filter with multilayer media, with no electric charge
- Porosity $\leq 0.6 \mu\text{m}$, with absolute particle degree β 5000
- Wide compatibility with regenerating and sanitizing products
- Food grade
- Configuration suitable for frequent chemical regeneration

Retention efficiency

Particle removal efficiency is established with the Beta ratio (β):

$$\beta = \frac{\text{Number of particles upstream of filter}}{\text{Number of particles downstream of filter}}$$

The **BREW FREE C** filter cartridges are all validated with β 5000 efficiency, which corresponds to a 99.98% particle retention.

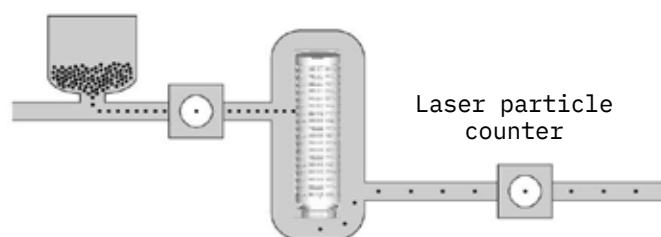
UPSTREAM
PARTICLES
=
100.000
units



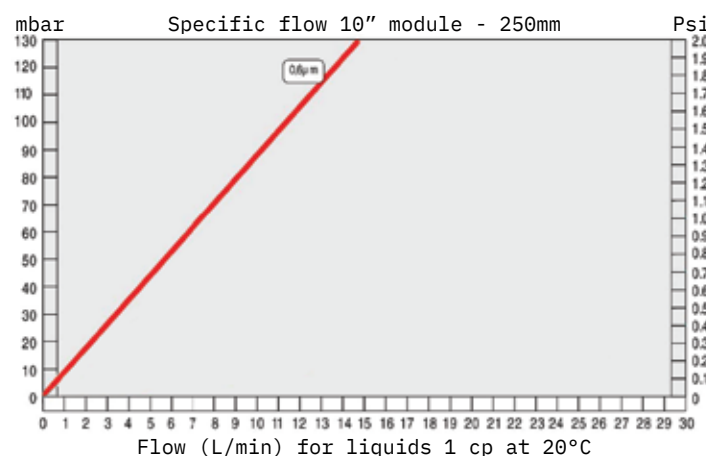
DOWNSTREAM PARTICLES	RATIO	β	EFFICIENCY
50.000	$\frac{100.000}{50.000}$	2	50%
5.000	$\frac{100.000}{5.000}$	20	95%
1.000	$\frac{100.000}{1.000}$	100	99%
100	$\frac{100.000}{100}$	1.000	99,9%
20	$\frac{100.000}{20}$	5.000	99,98%

Validation

The particulate retention efficiency of the **BREW FREE C** 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.



■ $\leq 0,6 \mu\text{m}$



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Construction materials

Filter pleats	Heat-sealed pleated polypropylene, multi-layer progressive porosity
Support and drainage layers	Polypropylene microfiber
Internal and external cage	Polypropylene
Terminal supports	Polypropylene
Reinforcing ring	Stainless steel aisi 316L
Standard 'O' rings	Silicone
Material coupling	Thermo welding

Operational data

Filter surface	0.40 m ² (4,3 ft ²) for a 250 mm module (10")
Max operating temperature	80°C
Max Δp operating at 20°C	5 Bar (72,5 psi)
Max Δp at 121°C with steam	0,3 Bar (4,3 psi)

Regeneration and hygienization

BREW FREE C 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.