

# Aquasart® Plus

Membrane Filter Cartridge  
for Food & Beverage  
Applications Only



## Product Information

Aquasart® Plus filter cartridges feature a highperformance, double-layer pleated hydrophilic polyethersulfone membrane. Specially developed for the filtration of water and non-carbonated drinks. Aquasart® Plus filter cartridges have enhanced total throughput performance.

## Applications

Aquasart® Plus membrane filter cartridges are used for final filtration prior to bottling for products, such as the following:

- Non-carbonated water
- Near-water beverages

## Product Performance

Aquasart® Plus filter cartridges incorporate a special double layer membrane. This new combination, coarse prefilter membrane followed by a final membrane, has been developed to meet the demanding process requirements in terms of high total throughput performance. In combination with an optimally designed prefilter, Aquasart® Plus achieves maximum service life performance and minimizes filtration costs.

## Flow Rates

The high effective filtration area of Aquasart® Plus filter cartridges allows highest flow rates and economic filtration system design.

## Stability

Aquasart® Plus filter cartridges withstand multiple steam sterilisation cycles up to 135 °C without loss of filter integrity.

## Integrity Test

In order to ensure filter reliability, Aquasart® Plus filter cartridges can be checked before and after every use with an integrity test.

## Quality Control

Each individual element is tested for integrity during production by Bubble-Point and Diffusion-Test assuring highest product quality.

## Documentation

Aquasart® Plus membrane filters are designed and manufactured according to an ISO 9001 certified quality management system.

## Technical Data

### Specifications

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Materials	
Membrane	Asymmetric, double layer, Polyethersulfone
Support Fleece	Polypropylene
Outer Cage, Inner Core, End Caps, Adapter	Polypropylene
O-Rings	Silicone

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#### Retention rate

0.2 µm final membrane

0.1 µm final membrane

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### Available Sizes | Filtration Area

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Cartridges		
Size 2	20"	1.2 m <sup>2</sup>   12.9 ft <sup>2</sup>
Size 3	30"	1.8 m <sup>2</sup>   19.4 ft <sup>2</sup>
Size 4	40"	2.4 m <sup>2</sup>   25.9 ft <sup>2</sup>

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### Available Adapters

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Operating Parameters	
Max. Allowable Differential Pressure	6.9 bar   100 psi at 25 °C 2.4 bar   35 psi at 80 °C
Max. Allowable Back Pressure	3.0 bar   44 psi at 25 °C 1.0 bar   15 psi at 80 °C
Sterilisation	<ul style="list-style-type: none"><li>Autoclave at 130 °C, 30 minutes</li><li>Steam at 135 °C, 30 minutes, ΔP max. 0.3 bar   4psi, min. 100 cycles</li></ul>
Sanitization	<ul style="list-style-type: none"><li>Hot water at 85 °C, 30 minutes, min. 50 cycles</li></ul>

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## Compatibility

Aquasart® Plus filter cartridges meet the requirement of the current USP <88> for plastics Class VI (121 °C).

All materials of construction used to produce these filter products are selected in compliance with the EU and US requirements for products intended to come in contact with foodstuff:

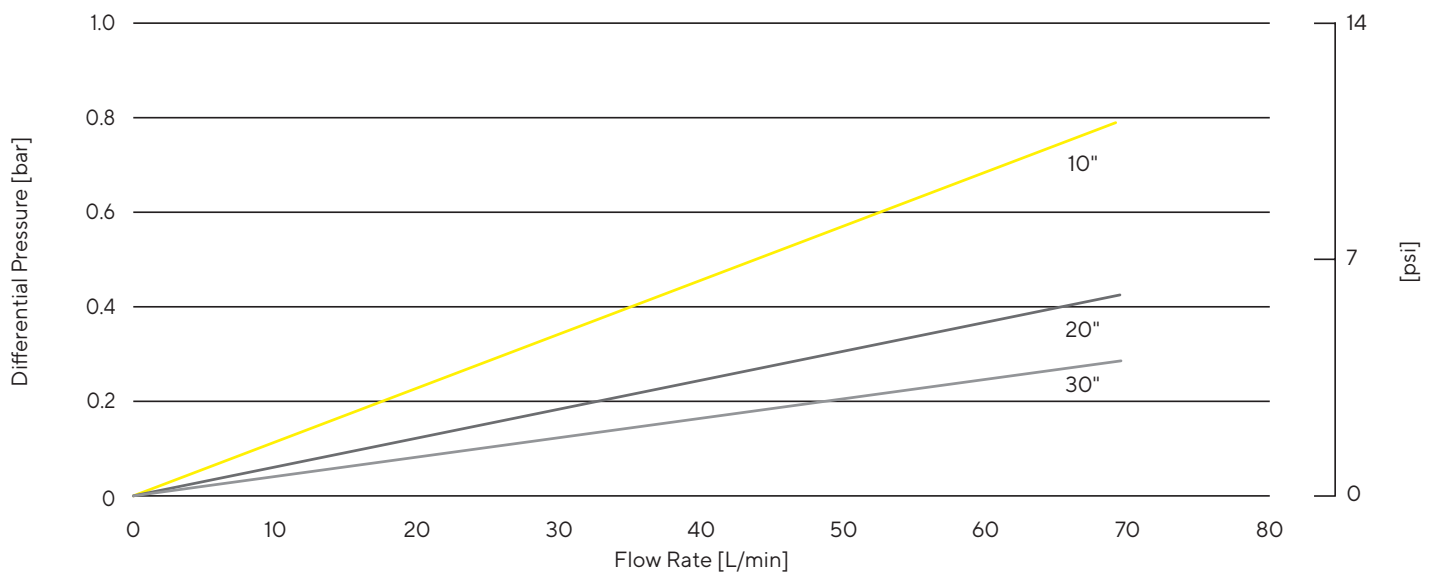
- Meet the requirements for European Food Contact Materials Regulation as detailed in (EC) No 1935/2004 and (EU) No 10/2011.

- Meet the United States Food and Drug Administration (US FDA) requirements as detailed in Code of Federal Regulations (CFR), Title 21, paragraphs 170 – 189. The FDA Compliance for indirect food additives is based on the information provided by our raw material suppliers.

The membrane is chemically resistant within the pH-range of 1 – 14. Caustic soda and acids can be used for a chemical regeneration.

Aquasart® Plus filter cartridges are free of pork DNA and drinkable alcohol.

## Water Flow Rates for 10", 20" and 30" Cartridges 0.1 µm and 0.2 µm



## Ordering Information

### Integrity Test Data for Aquasart® Plus Filter Cartridges

Order Code	Retention rate [µm]	Pack Size [Pieces]	Test Pressure [bar psi]	Max. Diffusion [mL/min]	Min. Bubble Point [bar psi]
538C**07H2*	0.2	1	2.75   40	50	3.4   49
538C**07H3*	0.2	1	2.75   40	75	3.4   49
538C**07H4	0.2	1	2.75   40	100	3.4   49
538C**58K3	0.1	1	2.75   40	75	3.4   49

Test Limits for max. Pressure Drop depend on the installation and need to be determined individually.

\* Partially available as G-pack (box of 25)


\*\* Adapter 25, 28

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