

Aquasart® PS 0.2 µm

Membrane Filter Cartridge
for Food & Beverage
Applications Only



Product Information

Aquasart® PS 0.2 µm filter cartridges are integrity testable membrane filters especially developed for filtration of water in the Food & Beverage Industry. They are characterised by a unique hydrophilic Polyethersulfone membrane offering exceptional high flow rates and total throughputs and highest microbiological safety.

Applications

Aquasart® PS 0.2 µm filter cartridges are used for final filtration prior to bottling for products, such as the following:

- Non-carbonated water
- Near-water beverages

Product Performance

The asymmetric pore structure of the Polyethersulfone membrane of the Aquasart® PS 0.2 µm filter cartridges provides outstanding total throughputs and high flow rates. Economic system design for filtration processes is assured. The total throughput of the final filters can be significantly increased by an optimised prefilter system reducing the filtration costs overall.

Flow Rates

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

Stability

Aquasart® PS 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® PS 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® PS filter cartridges are designed, developed and produced under a ISO 9001 certified Quality Management System. A Validation Guide is available.

Technical Data

Specifications

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

Retention rate
0.2 µm final membrane

Available Sizes | Filtration Area

Size 1	10"	0.6 m² 6.5 ft²
Size 2	20"	1.2 m² 12.9 ft²
Size 3	30"	1.8 m² 19.4 ft²
Size 4	40"	2.4 m² 25.9 ft²

Available Adapters

25, 27, 28

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">Autoclave at 130 °C. 30 minutesSteam at 135 °C, 30 minutes, ΔP max. 0.3 bar 4psi, min. 55 cycles
Sanitization	<ul style="list-style-type: none">Hot water at 85 °C, 30 minutes, min. 50 cycles

Compatibility

Aquasart® PS 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:

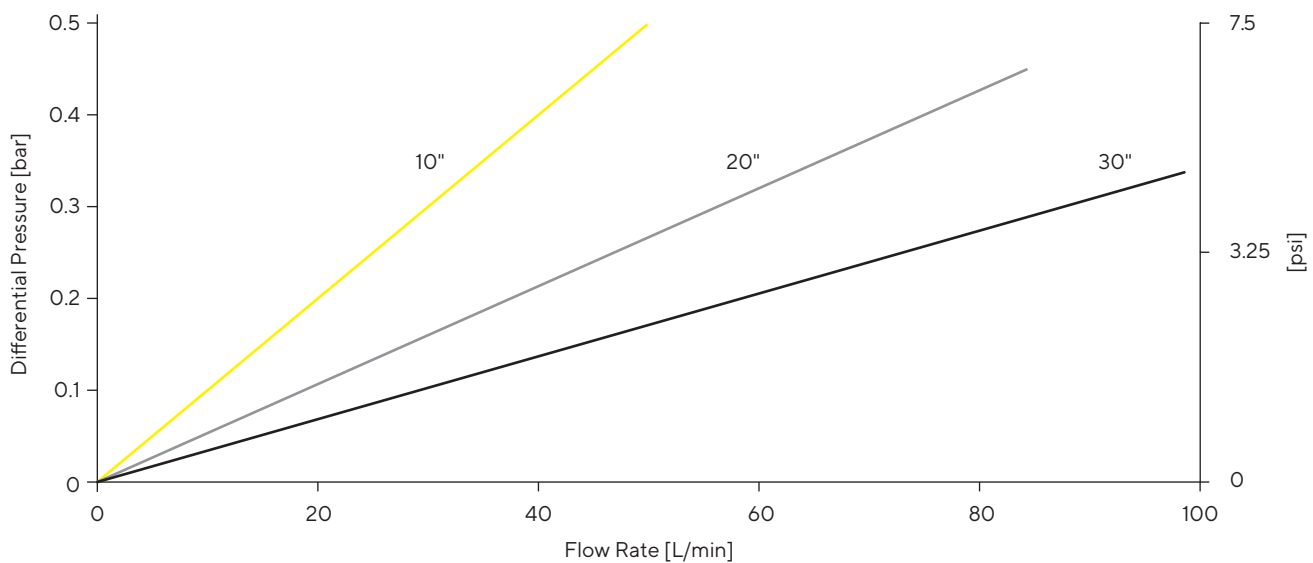
- Meet the requirements for European Food Contact Materials Regulation as detailed in (EC) No 1935/2004 and (EU) No 10/2011.

- 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® PS filter cartridges are free of pork DNA and drinkable alcohol.

Water Flow Rates for 10", 20" and 30" Cartridges



Ordering Information

Integrity Test Data for Aquasart® PS Filter Cartridges

Order Code	Retention rate [µm]	Pack Size [Pieces]	Test Pressure [bar psi]	Max. Diffusion [mL/min]	Min. Bubble Point [bar psi]
541C**07A1	0.2	1	2.5 36	30	3.4 49
541C**07A2	0.2	1	2.5 36	60	3.4 49
541C**07A3*	0.2	1	2.5 36	90	3.4 49
541C**07A4*	0.2	1	2.5 36	120	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, 27, 28

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