

# Aquasart® Plus XL

## Membrane Filter Cartridge for Food & Beverage Application

### Product Information

- High total throughput for economic filtration
- Integrity testable by Diffusion- & Bubble Point Test
- Highly economic sizing
- Excellent filtration capabilities

### Performance

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

### Quality

Aquasart® Plus XL membrane filters are designed and manufactured according to an ISO 9001 certified quality management system. All raw materials which are used to produce Aquasart® Plus XL are in accordance with



EU regulation 1935/2004/EC or are listed in the Regulations (EU) No. 10/2011 relating to plastic materials and article intended to come into contact with food. All used materials meet FDA requirements.

### Safety

Aquasart® Plus XL filter cartridges guarantee highest microbiological safety, which can be checked before and after every use with an integrity test (>7 LRV for B. diminuta).

### Compatibility

Aquasart® Plus XL filter cartridges fulfill all requirements of the current USP for “Sterile Water for Injection”. This includes testing for Toxicity according to USP Plastic Class VI Test.

Aquasart® Plus XL filter cartridges are fully suitable for use in the food & beverage industry with pH-compatibility: pH 1 to pH 14.

### Applications

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

- Non-carbonated water
- Near-water beverages

## Technical Data

| Available Sizes | Filtration Area                           | Max. Diffusion at 1.5 bar   22 psi [ml/min] | Min. Bubble Point [bar   psi] |
|-----------------|---|---|-------------------------------|
| Cartridges      |   |   |                               |
| Size 2          | 1.6 m <sup>2</sup>   17.2 ft <sup>2</sup> | 50  | 2.8   40.5                    |
| Size 3          | 2.4 m <sup>2</sup>   25.8 ft <sup>2</sup> | 75  | 2.8   40.5                    |

### Max. Allowable Differential Pressure

#### Cartridges

5 bar | 72.5 psi at 20°C

2 bar | 29 psi at 80°C

### Max. Allowable Back Pressure

2 bar | 29 psi at 20°C

(for all elements)

### Materials

#### Prefilter Membrane

Polyethersulfone, asymmetric

#### Endfilter Membrane

Polyethersulfone, asymmetric

#### Support Fleece

Polypropylene

(In-Line Steam sterilizable & autoclavable)

#### Polyester

(γ-irradiatable or γ-irradiatable | autoclavable)

### Max. Operating Pressure

#### Cartridges

5 bar | 72.5 psi at 20°C

### Pore Size Combination

0.8 μm + 0.2 μm

## Regulatory Compliance

- Each individual element is tested for integrity by Diffusion test
- Fully validated as sterilizing grade filters according to ASTM current F-838-05 guidelines
- Designed, developed and manufactured in accordance with an ISO 9001 certified Quality Management System
- Meet or exceed the requirements for WFI quality standards set by the current USP
- Non pyrogenic according to USP Bacterial Endotoxins
- USP Plastic Class VI Test
- Non fiber releasing according to Code of Federal Regulations (CFR), section 210.3(b)(6) and 211.72
- Material used meet FDA requirements and fulfill EU regulation 1935/2004/EC, Regulations (EU) No. 10/2011 relating to plastic materials and article intended to come into contact with food.

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## Sterilization

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### Cartridges

#### In-Line Steam Sterilization

121°C, 0.3 bar, 20 min.

Min. 25 Sterilization Cycles

or

#### Autoclaving

121°C, 2 bar, 30 min

Min. 25 Sterilization Cycles

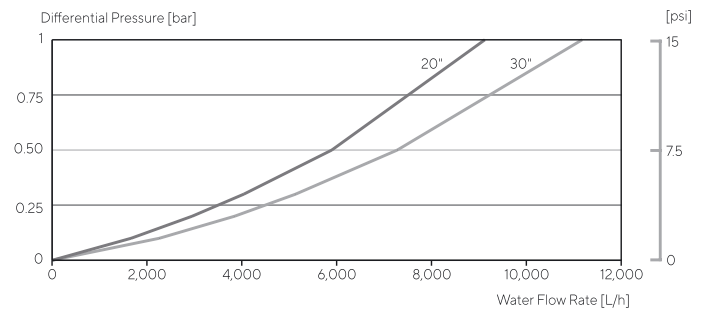
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## Performance

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### Water Flow Rates for Aquasart® Plus XL 20" & 30" cartridges



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## Technical References

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Validation Guide      2552028-000

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## Ordering Information



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#### Adapter

25: 2 Flange Bayonet adapter  
with 226 double o-ring

28: 3 Flange Bayonet adapter  
with 222 double o-ring

#### Filter Size

2: 1.6 m<sup>2</sup> | 17.2 ft<sup>2</sup> (20")

3: 2.4 m<sup>2</sup> | 25.8 ft<sup>2</sup> (30")

# Sales and Service Contacts

For further contacts, visit  
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