Filter cartridge
amaGuard HF-PP

1. Introduction

The amaGuard HF-PP, high flow filter cartridge utilises a unique pleating configuration to maximise flow rate and dirt holding capacity. The amaGuard HF-PP has been developed for a large variety of industrial processes where a high performance is required. Low pressure drop and high dirt holding capacity makes the amaGuard HF-PP an ideal choice for many applications. Flow is from inside out and the unique pleat geometry has been optimised to take advantage of this.

Typical amaGuard HF-PP applications
- Process water
- Pre-RO treatment
- Refineries - pre & final filtration
- Amines
- Oil & gas production
  - Seawater injection
  - Well injection chemicals
- Food & beverage
- Pre & final filtration of chemicals
- Desalination
- Petrochemicals
- Pulp & paper
2. Features

- All polypropylene construction
- Melt blown polypropylene filter media. Inside to out flow captures all contaminants within the filter element
- Sturdy construction for use in demanding applications
- Unique pleat geometry to enable consistent flow rates with low Δp
- Large filtration area which significantly reduces the footprint of installation
- Absolute retention ratings from 1 µm to 40 µm
- High effective filtration area
- Manufactured in cleanroom 10,000

3. Food safety

Food safety
The filter cartridges comply with the requirements of the 'Food and Drug Administration (FDA)' title 21 of the "Code of Federal Regulations" 177.1520.

Bio safety
The components of the filter cartridges (excl. O-ring) pass the USP Biological Reactivity and Chemical-Physical tests for CLASS VI plastics.
Safe for use in pharmaceutical applications.

Extractable substances
The cartridges are free of surfactants, lubricants, antistatic agents, binders and adhesives.

4. Product / Performance specifications

Filter medium : polypropylene
Support medium : polypropylene
Hardware : polypropylene
O-Rings : EPDM, silicone, Viton®

Dimensions
Internal diameter : 70 mm
External diameter : 152 mm
Length : see ordering information
Filtration area : 5.6 m²/40" cartridge

Maximum recommended differential pressure
Design : 5.1 bar at 25 °C
Operation : 2.1 bar at 25 °C

Maximum operating temperature
65 °C

5. Water flow rate for 40" cartridge

<table>
<thead>
<tr>
<th>Element length</th>
<th>Flow rate for optimum performance / element [m³/h]</th>
</tr>
</thead>
<tbody>
<tr>
<td>20&quot;</td>
<td>25</td>
</tr>
<tr>
<td>40&quot;</td>
<td>50</td>
</tr>
<tr>
<td>60&quot;</td>
<td>70</td>
</tr>
</tbody>
</table>

6. Ordering code

Example
amaGuard HF-PP

<table>
<thead>
<tr>
<th>Cartridge type</th>
<th>Micron rating [µm]</th>
<th>Nominal length [inch]</th>
<th>Hardware material</th>
<th>Cartridge style</th>
<th>O-Ring material</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>20 (527 mm)</td>
<td>U= polypropylene</td>
<td>X19</td>
<td>E=EPDM</td>
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<tr>
<td></td>
<td>4.5</td>
<td>40 (1038 mm)</td>
<td></td>
<td></td>
<td>S=Silicone</td>
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<tr>
<td></td>
<td>10</td>
<td>60 (1538 mm)</td>
<td></td>
<td></td>
<td>V=Viton®</td>
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<tr>
<td></td>
<td>20</td>
<td></td>
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</tr>
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