Filter cartridge
amaGuard PP Plus

1. Introduction

The amaGuard PP Plus consists of up to 5 layers of polypropylene filter media. The layers have a decreasing porosity creating a highly effective absolute filter cartridge. The unique design and filter media ensures high flow rates, low pressure drops and high dirt load capacity. Due to its strength, chemical compatibility and FDA materials the amaGuard PP Plus can be used in a wide variety of applications, ranging from food and beverage to chemical applications.
2. Features
- Extended effective filtration area
- Graded porosity high dirt holding capacity
- Absolute filter ratings (β\(_1\)-ratio ≥ 5000)
- Steamable in situ
- Sanitisable with hot water
- Construction materials chemically and biologically inert according to FDA and EEC directives
- Manufacturing according to cGMP guidelines

3. Sterilisation and Food safety
- **Sterilisation/sanitisation/regeneration**
  Continuously steam sterilisable at 121 °C with cycles of 20 minutes.
  Hot water sanitisation with max. 80 °C water. The cartridges can be sanitised with the standard chemical agents.

- **Food safety**
  The filter cartridges meet the European Directives 2002/72/EC and 2004/19/EC for food contact and global migration. All materials used are listed in the FDA 21 CFR regulations.

- **Bio safety**
  The components of the filter cartridges (excl. O-rings and gaskets) pass the USP Biological Reactivity and Chemical-Physical tests for CLASS VI plastics.

4. Product/Performance specifications
- **Filter medium**: polypropylene
- **Support medium**: polypropylene
- **Hardware**: polypropylene
- **Longitudinal weld**: ultrasonic welding
- **End cap seal**: thermally welded
- **Gaskets/O-rings**: silicone, EPDM, Viton®, other materials on request

- **Dimensions**
  - External diameter: 70 mm
  - Length: see ordering information
  - Filtration area: 0.7 m\(^2\)/10" cartridge

- **Maximum recommended differential pressure**
  - Design: 5.0 bar at 25 °C
  - Operating: 2.0 bar at 25 °C
  - Maximum operating temperature: 65 °C

5. Water flow rate for 10" cartridge

6. Order code

<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>0.6</td>
<td>10 (254 mm)</td>
<td>U=polypropylene</td>
<td>X3</td>
<td>S=Silicone</td>
</tr>
<tr>
<td></td>
<td>1.2</td>
<td>20 (508 mm)</td>
<td></td>
<td>X4</td>
<td>E=EPDM</td>
</tr>
<tr>
<td></td>
<td>2.5</td>
<td>30 (762 mm)</td>
<td></td>
<td>X7</td>
<td>V=Viton®</td>
</tr>
<tr>
<td></td>
<td>4.5</td>
<td>40 (1016 mm)</td>
<td></td>
<td>X8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.5</td>
<td></td>
<td></td>
<td>X28</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>120</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

X3=SOE with external 222 O-rings, X4=DOE with flat gaskets, X7=SOE with fin end, bayonet and external 226 O-Rings, X8=SOE with fin end and external 222 O-Rings, X28=SOE with fin end, 3 wing bayonet and external 222 O-rings

Filtration Group BV
Postbus 35, NL - 7240 AA Lochem
Phone +31 573 297 777, info.FGNL@filtrationgroup.com, www.filtrationgroup.com

03/2017