POLYPASS

- Positive ZETA potential
- Steamable
- Sanitizable
- Thermowelded construction
- EC-listed materials for Food contact
- FDA-listed materials per CFR21
- Bio-safety per USP-Plastics (only PH grade)

POLYPASS filter cartridges are manufactured using an innovative media of alumina nanofibers grafted onto borsilicate microfibers in order to have a filter matrix with positive ZETA potential. Its positive charges greatly interact with the negative contaminant electrical charges contained in the fluid and therefore the media is able to retain particles smaller than its physical passages. Polypass is used to extend the operating life of expensive membrane filter elements as they reduce colloids, cysts and bio-burden contained in the fluids. The media has been proven to reduce the concentration of eventual heavy metals present in the water. The main applications, within the pH range below indicated, are in filtration of aqueous solutions on food & beverages and pharmaceutical industries. The cartridges are manufactured within a controlled environment.

**MATERIALS OF CONSTRUCTION**

<table>
<thead>
<tr>
<th>Filter media</th>
<th>Alumina nanofibers and borsilicate microfibers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upstream supports</td>
<td>polypropylene</td>
</tr>
<tr>
<td>Downstream supports</td>
<td>polypropylene</td>
</tr>
<tr>
<td>Internal Core</td>
<td>polypropylene</td>
</tr>
<tr>
<td>External Cage</td>
<td>polypropylene</td>
</tr>
<tr>
<td>End caps / Adapters</td>
<td>polypropylene</td>
</tr>
</tbody>
</table>

**FOOD-SAFETY**


**BIO-SAFETY**

Filter media and components pass USP Biological Reactivity and Chemical-Physical tests for CLASS VI plastics. Specific for “PH” grade: the filter meets USP “Water for injection” requirements for particle release and the effluent is Non-Pyrogenic per USP Bacterial Endotoxins (< 0,25 EU/ml).

**RECOMMENDED OPERATING CONDITIONS**

- max. continuous temperature: 65 °C
- max. cumulative time of steam sterilization: 20 hours at 125 °C (with cycles of 30 minutes)
- sanitization with hot water: 80 °C max
- max. differential pressure: 5,0 bar at 25 °C
- recommended change out differential pressure: 2,0 bar at 25 °C
- pH range of the fluid: Between 4 and 9

<table>
<thead>
<tr>
<th>CODE</th>
<th>FILTRATION RATING IN LIQUIDS</th>
<th>MAX WATER FLOW RATE FOR 10” CARTRIDGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>HC</td>
<td>0,5 µm</td>
<td>300 l/h</td>
</tr>
</tbody>
</table>
WATER FLOW RATE FOR 10" CARTRIDGE

POLYPASS ORDERING INFORMATION

END FITTING | CODE
---|---
DOE: double open end with flat gaskets | 200
SOE: open end with (2) O-Ring 2.226 and 2 bayonet locks. Blind end with fin. | 207
SOE: open end with (2) O-Ring 2.222. Blind end with fin. | 208

FLOW RATE (l/h) | PRESSURE DROP (bar)
---|---
0 | 0
250 | 0,05
500 | 0,1
750 | 0,15

FILTRATION RATING

| CODE | NOMINAL LENGTH |
---|---|
1 | 10"
2 | 20"
3 | 30"
4 | 40"

GASKETS | CODE | END FITTING CODE
---|---|---
Silicone | No code | 200-207-208
SILICONE | SSS | 207-208 With AISI 316 stainless steel ring

CODE | PRODUCT GRADE
---|---
GG | General grade; fluxed with water.
PH | Biological grade; prefluxed with non-pyrogenic water; Quality Certification in the box.

Data contained in this bulletin are informative and subject to change without notice. User is responsible for determining whether the product is fit for particular purpose and suitable for user’s method of application.