Filter bag
amaFlow Added area

1. Introduction

For a wide number of filtration applications amaFlow filter bags are a simple, easy to use and economical choice. The added area filter bags have a filtration area which is approximately 2/3 times higher than for standard size filter bags. This leads to longer bag life and less bag change outs. Our bag filters are excellent for use in the filtration of liquids containing higher concentrations of coarse solids. They are particularly beneficial when handling batches of (various) liquids. They are also especially suitable for end filtration or polishing of liquids with extremely low concentrations of solids.
2. Features

There are several ways to increase the capacity of a bag filter installation. Increasing filtration area and capacity by adding extra bag filters is one option, while often an added area filter bag from Filtration Group could be the solution.

- These added area filter bags are available for our size 2 bag filter housings, which fit into specific added area support baskets.
- Changing the filter bag and handling is facilitated because less liquid can remain inside the bag. This results also in less product loss.
- The support basket for the added area bags is specially constructed to meet the demanding requirements.
- For easy and proper mounting of the filter bags a special bag positioner is required.
- The added area filter bags are available as standard in polyester or polypropylene extended life needled felt, as well as in polyester or polypropylene standard needled felt.
- Bags are quick and easy to change-out.
- Inside-out flow keeps contaminants enclosed in the bag.
- Bags are silicone free and are produced in a silicone free environment.
- Materials used for amaFlow AA bags conform to the European Directive 2002/72/EC for plastic materials and articles intended to come into contact with foodstuffs (food & beverage).

3. Description

The amaFlow added area filter bags are all sewn. The filter bags with Snap-Collar are equipped with two handles as standard; one on the outside part of the bag and one on the centre part, the bags with flange have the integrated handles and one on the centre part.

Types

The amaFlow added area needle felt bags are available as standard in polyester or polypropylene with many different micron ratings. The amaFlow filter bags seal with either a Snap-Collar seal comprising of either carbon steel, stainless steel or polypropylene or with a plastic seal ring in polypropylene.

4. Sealing systems

In order for bag filters to function properly, especially with smaller pore sizes, a good seal between bag and support basket is of great importance. For this reason we have two options:

- The Snap-Collar; a felt-covered metal or plastic ring which clicks neatly into the upper collar of the support basket. The felt serves as the sealing.
- The plastic seal type (a plastic flange with handles) which tightly fits into our standard baskets.

5. Surface treatment

All amaFlow PEXL, POXL, AP and SP needled felt filter bags are thermally treated on the outside as standard. This will further minimise any possible release of fibres from the needled felt filter media. During the thermal treating process the softened fibres are bonded together on the downstream side of the bag.
6. Temperature and chemical resistance

<table>
<thead>
<tr>
<th>Filter bag grade</th>
<th>AP, PEXL polyester</th>
<th>SP, POXL polypropylene</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. temperature [°C]</td>
<td>150*</td>
<td>100</td>
</tr>
<tr>
<td>resistance to:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>inorganic acids</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>organic acids</td>
<td>++</td>
<td>+++</td>
</tr>
<tr>
<td>alkalines</td>
<td>+</td>
<td>++</td>
</tr>
<tr>
<td>oxidising agents</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>solvents</td>
<td>+++</td>
<td>+</td>
</tr>
<tr>
<td>vegetable/animal oils</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>micro-organisms</td>
<td>+++</td>
<td>+++</td>
</tr>
</tbody>
</table>

+++ = excellent
++ = good
+ = fair
- = not recommended

* 100 °C for polypropylene ring / flange
## 8. Order code

### Example

<table>
<thead>
<tr>
<th>Material</th>
<th>Micron rating [µm]</th>
<th>Finish</th>
<th>Bag dimensions</th>
<th>Ring/seal</th>
<th>Handles</th>
<th>Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>apaFlowAP</td>
<td>AP = polyester felt</td>
<td>P/S = standard for SP + POXL (with improved outer surface: thermally treated)</td>
<td>2 = size 2 (Ø 178 x 787 mm)</td>
<td>S = carbon steel ring (Snap-Collar) (AP, SP)</td>
<td>HS = two handle straps, from same material as needled felt (P: no code)</td>
<td>AA = added area bag</td>
</tr>
<tr>
<td>PEHL = polyester extended life felt</td>
<td>PEXL = polyester extended life felt</td>
<td>S = outside thermally treated (AP + PEXL)</td>
<td></td>
<td>SS = stainless steel AISI 304 ring (Snap-Collar) (AP, SP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SP = polypropylene felt</td>
<td>SP = polypropylene felt</td>
<td></td>
<td></td>
<td>PO = polypropylene ring (Snap-Collar) (AP, SP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POXL = polypropylene extended life felt</td>
<td>POXL = polypropylene extended life felt</td>
<td></td>
<td></td>
<td>P = polypropylene flange</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Micron rating [µm]

- AP: 0.8, 1, 3, 5, 10, 25, 50, 75, 100, 150, 200
- PEXL: 1, 5, 10, 25, 50, 75, 100
- SP: 0.8, 1, 3, 5, 10, 25, 50, 75, 100, 150, 200
- POXL: 1, 5, 10, 25, 50, 75, 100

### Material

- AP = polyester felt
- PEXL = polyester extended life felt
- SP = polypropylene felt
- POXL = polypropylene extended life felt

### Finish

- P/S = standard for SP + POXL (with improved outer surface: thermally treated)
- S = outside thermally treated (AP + PEXL)

### Bag dimensions

2 = size 2 (Ø 178 x 787 mm)

### Ring/seal

- S = carbon steel ring (Snap-Collar) (AP, SP)
- SS = stainless steel AISI 304 ring (Snap-Collar) (AP, SP)
- PO = polypropylene ring (Snap-Collar) (AP, SP)
- P = polypropylene flange

### Handles

- HS = two handle straps, from same material as needled felt (P: no code)

### Configuration

- AA = added area bag