

### Filter bag amaFlow Multi layered and extended life needed felt filter bags

#### 1. Introduction

For a wide number of filtration applications amaFlow filter bags are a simple, easy to use and economical choice.

The amaFlow multi layered and extended life needed felt filter bags have improved filtration properties and an extended service life due to their increased depth design. The dual or triple layer filter design can be optimised to suit specific applications, resulting in improved filtration efficiency.



## 2. Features

- Bags with multiple layers can be useful for removing particles which are usually difficult to filter. They also give a longer filter life. amaFlow multi layered bags are available either as double bag or triple bag. These bags can be made from material with the same or different micron ratings.
- The amaFlow extended life (XL) bags are double bags with a 200 µm needled felt as first layer. This first layer removes the larger particles, thus reduces the contaminant load to the final layer, increasing the service life of the filter bag.
- The contaminant load is gradually removed from the liquid when filtered through the graduated layers of filtration media.
- Bags are quick and easy to change-out.
- Inside-out flow keeps contaminants enclosed in the bag.
- Bags are silicone free (does not apply to 0.5 µm AP bag) and are produced in a silicone free environment.
- Materials used conform to the European Directive 2002/72/EC for plastic materials and articles intended to come into contact with foodstuffs (food & beverage).
- The standard filter bags are sized to fit into our baskets and housings, but will also fit into most other housings. Special sizes are available on request.

## 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 flange (with handles) which tightly fits into our standard baskets.

## 3. Description

The amaFlow needled felt filter bags with Snap-Collar are sewn as standard at the ring, have a welded longitudinal seam and are sewn at the bottom seam, bags with flange are fully welded. The polyester and polypropylene filter bags are equipped with handles as standard:

- S, SS, PO: Finger grips inside bag (slits in felt). An additional handle strap is optional, from the same material as needled felt.
- P: 2 handles in ring (size 3, 4: 1 handle)

### *Types*

The amaFlow multi layered and extended life needled felt filter 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 flange in polypropylene.

## 5. Surface treatment

Polypropylene and polyester 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. Also available as an option are anti-migration covers on the felt, made either from non-woven nylon fleece or very fine nylon mesh.

## 6. Temperature and chemical resistance

Filter bag grade	AP polyester	SP polypropylene	
Max. temperature [°C]	150*	100	
resistance to:			+++ = excellent ++ = good + = fair - = not recommended
inorganic acids	++	++	
organic acids	++	+++	
alkalines	+	++	
oxidising agents	+	+	
solvents	+++	++	
vegetable/animal oils	+++	+++	
micro-organisms	+++	+++	

\* 100 °C for polypropylene ring / flange

## 7. Order code

### Example

amaFlow AP 100/10/1 S 1 S - - -

#### Material

AP = polyester

SP = polypropylene

#### Micron rating [ $\mu\text{m}$ ]

XL z first layer 200  $\mu\text{m}$ , final layer z  $\mu\text{m}$

x / z first layer x  $\mu\text{m}$ , final layer z  $\mu\text{m}$

x / y / z first layer x  $\mu\text{m}$ , second layer y  $\mu\text{m}$ , final layer z  $\mu\text{m}$

AP: 0.5, 0.8, 1, 3, 5, 10, 25, 50, 75, 100, 150, 200

SP: 0.8, 1, 3, 5, 10, 25, 50, 75, 100, 150, 200

#### Finish

P/S = standard finish for SP (with improved outer surface: thermally treated)

S = outside thermally treated (AP)

#### Bag dimensions

1 = size 1 ( $\varnothing$  178 x 432 mm)

2 = size 2 ( $\varnothing$  178 x 787 mm)

Other dimensions available on request

#### Ring/seal

S = carbon steel ring (Snap-Collar)

SS = stainless steel AISI 304 ring (Snap-Collar)

PO = polypropylene ring (Snap-Collar)

P = polypropylene flange

#### Welded/sewn

- = standard with sewn longitudinal seam welded and bottom seam sewn (S, SS, PO)

WE = all welded (P)

AP 0.5 is all sewn

#### Additional handle

HS = handle strap, from same material as needed felt (S, SS, PO)

#### Other options

1PK = single packed in plastic bag, together in box

N = nylon mesh cover

C = nylon fleece cover

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