

MAHLE

Industrial Filtration

Filter bag amaFlow Monofilament

1. Introduction

For a wide number of filtration applications amaFlow filter bags are a simple, easy to use and economical choice. amaFlow woven monofilament filter bags are mainly employed where accurate straining is required. The precisely woven non-fibre shedding material results in a very consistent filter quality.



2. Features

- 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 NMO conform to the European Directive 2002/72/EC for plastic materials and articles intended to come into contact with foodstuffs (food & beverage).
- Filter bags and bag filter housings are usually employed as closed systems, but open or end-of-pipe applications are attractive alternatives.
- The standard amaFlow 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.
- An additional bias tape is used as standard on the finer grades of NMO (nylon) and PEMO (polyester) for better sealing of seams. The coarser grades of NMO ($\geq 250 \mu\text{m}$) have a triple stitched side seam, resulting in an extra strong bag.

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 monofilament filter bags are all sewn. An additional bias tape is used as standard on the finer grades of NMO (nylon) and PEMO (polyester).

The filter bag can be supplied with an optional handle strap.

Filter bags with P flange have standard two handles in flange (size 3, 4 : one handle).

Types

The amaFlow monofilament bags are available as standard in nylon, polyester or polypropylene with many different micron ratings. Other materials such as PTFE are available on request.

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. For open systems (uses outside a filter housing) the filter bags can also be supplied without any ring (thus no integrated means of fastening) or with a pull cord only.

5. Temperature and chemical resistance

Filter bag grade	NMO nylon	PEMO polyester	POMO polypropylene	T PTFE	
Max. temperature [°C]	100	150*	100	250	
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

6. Order code

Example

	<i>amaFlow NMO</i>	10	P	2	S	-	BT
Material							
NMO = nylon							
PEMO = polyester							
POMO = polypropylene							
T = PTFE							
Micron rating [μm]							
NMO: 1, 5, 10, 25, 35, 50, 75, 100, 125, 150, 200, 250, 300, 400, 600, 800, 1000, 1200							
PEMO: 50, 100, 150, 200, 300							
POMO: 50, 100, 150, 200, 300, 400, 600, 800, 1000							
T: 250, 300, 420, 500, 590, 850, 1000, 1800, 2000							
Finish							
P = plain							
Bag dimensions							
1 = size 1 (\varnothing 178 x 432 mm)			4 = size 4 (\varnothing 104 x 356 mm)				
2 = size 2 (\varnothing 178 x 787 mm)			30 = size 30 (\varnothing 106 x 254 mm)				
3 = size 3 (\varnothing 104 x 203 mm)			65 = size 65 (\varnothing 106 x 559 mm)				
<i>Other dimensions are available on request</i>							
Ring/seal							
S = carbon steel ring (Snap-Collar)							
SS = stainless steel AISI 304 ring (Snap-Collar)							
PO = polypropylene ring (Snap-Collar)							
P = polypropylene flange (size 1, 2), polyethylene flange (size 3, 4)							
T = PTFE ring (Snap-Collar, T only)							
N = no ring							
DS = draw string							
Additional handle							
HS= handle strap, (standard on size 30 and 65 for S, SS and PO ring)							
Other options							
BT = bias tape (as standard on specific seams for NMO + PEMO \leq 200 μm bags)							

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