

## Multi bag filter

### MBH and MBQ

#### 1. Introduction

For a wide number of filtration applications bag filters are a simple, easy to use and economical choice. Filtration Group supplies a wide range of filter bags and bag filter housings. MBH and MBQ multi bag filters are ideally suited where high filtration capacities are needed. These bag filters are available for 3 to 12 bags, with filtration areas of 1.5 to 6 m<sup>2</sup>, in different materials and specifications. The MBH and MBQ range is available as a non-code version and in PED 2014/68/EU cat: II, for non-hazardous and hazardous liquids. Filtration Group 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

- Easy to use, good interior sealing and accessibility.
- The filters are available in stainless steel 304 or 316.
- All components are stainless steel.
- The MBH multi bag filter housing has a standard cover closure with eye bolts. The cover is opened using a davit arm as a standard construction. Optional there is also a spring assisted and a hydraulic version.
- The MBQ multi bag filter housing has a quick release cover closure with a spring assisted cover opening mechanism.
- The housings are available either as non-code (PED 2014/68/EU article 3, paragraph 3) or PED 2014/68/EU category 2, suitable for non-hazardous and hazardous liquids.
- O-ring sealing: standard in EPDM. Viton®, PTFE encapsulated Viton® and silicone available on request.
- Support baskets are standard and are constructed in perforated stainless steel.
- Excellent sealing between unfiltered liquid and filtered liquid is achieved by a hold-down device. The filter bag seals with a feltcovered Snap-Collar ring or plastic flange, which tightly fits into the housing.
- Liquid displacer units are available to further reduce the dead volume inside the filter bags.
- The housings are equipped with 4 legs.
- There is a safety locking mechanism on the MBQ housings, which will only allow the housing to be used if deployed. It also has a safety pressure valve release mechanism, which is automatically activated when opening the housing.

## 4. Options

A specific Edible Oil version is also available.

## 3. Standard specifications

|                         |   |
|-------------------------|---|
| Design pressure :       | 10 bar(g)   |
| Design temperature :    | 90 °C   |
| Operating temperature : | depending on the filter media and gaskets used  |
| Design :                | ASME  |
| Approval :              | PED 2014/68/EU <ul style="list-style-type: none"><li>• article 4, paragraph 3</li><li>• or category II</li></ul> (other codes on request) |

Maximum differential pressure

|             |         |
|-------------|---------|
| design :    | 2.5 bar |
| operating : | 2.5 bar |

## 5. Filter bags

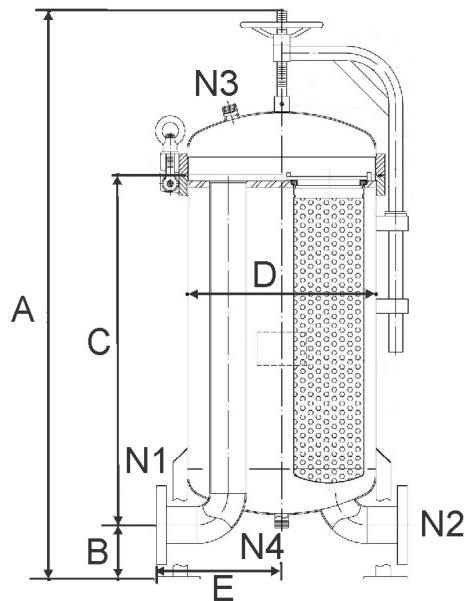
Filtration Group supplies a wide range of filter bags in different materials, pore sizes, dimensions and models to fit in our housings as well as those of other manufacturers.

For detailed information about amaFlow filter bags, please see respective Data Sheets.





## 6. Dimensions



### Nozzle specification

|    |                         |
|----|-------------------------|
| N1 | Inlet                   |
| N2 | Outlet                  |
| N3 | Vent                    |
| N4 | Drain                   |
| N5 | Pressure gauge ½" (MBQ) |

## 7. Dimensions

### MBH Model

|    | Height A [mm] | Nozzle height B [mm] | Height C [mm] | Diameter D [inch] | Standout E [mm] | N1  | N3 | Volume [dm <sup>3</sup> ] |
|----|---------------|----------------------|---------------|-------------------|-----------------|-----|----|---------------------------|
|    |               |                      |               |                   |                 | N2  | N4 |                           |
| 3  | 1431          | 145                  | 875           | 20"               | 329             | 4"  | 1" | 175                       |
| 4  | 1464          | 145                  | 878           | 22"               | 354             | 4"  | 1" | 227                       |
| 6  | 1599          | 170                  | 948           | 28"               | 475             | 6"  | 1" | 310                       |
| 8  | 1739          | 205                  | 1023          | 32"               | 556             | 8"  | 1" | 450                       |
| 12 | 1937          | 280                  | 1105          | 38"               | 683             | 12" | 1" | 600                       |

### MBQ Model

|    | Height A [mm] | Nozzle height B [mm] | Height C [mm] | Diameter D [inch] | Standout E [mm] | N1  | N3 | Volume [dm <sup>3</sup> ] |
|----|---------------|----------------------|---------------|-------------------|-----------------|-----|----|---------------------------|
|    |               |                      |               |                   |                 | N2  | N4 |                           |
| 3  | 1325          | 155                  | -             | 22"               | 354             | 4"  | 1" | 175                       |
| 4  | 1325          | 155                  | -             | 22"               | 354             | 4"  | 1" | 227                       |
| 6  | 1450          | 180                  | -             | 28"               | 475             | 6"  | 1" | 310                       |
| 8  | 1580 -        | 215                  | -             | 32"               | 556             | 8"  | 1" | 450                       |
| 12 | 1700          | 250                  | -             | 38"               | 683             | 10" | 1" | 600                       |

Dimensions are for reference only. Use dimensional drawing for installation purposes.

Subject to technical alteration without prior notice.

## 8. Ordering code

Example



| MBH 3<br>Type Number of<br>filter bags | 180<br>Model            | A<br>Material  | 4F<br>Inlet/outlet   | D<br>Cover closing   | NC<br>Category  |
|--|-------------------------|--|--|--|---|
| MBH 3<br>MBQ 4<br>6<br>8<br>12         | 180 =<br>Size 2<br>bags | A =<br>Stainless<br>steel 304<br>S =<br>Stainless<br>steel 316 | 4F = DN100 flanges<br>(for 3+4 bags)<br>6F = DN150 flanges<br>(for 6 bags)<br>8F = DN200 flanges<br>(for 8 bags)<br>10F = DN250 flanges<br>(for 12 bags, MBQ)<br>12F = DN300 flanges<br>(for 12 bags, MBH) | D = Davit arm and eye bolts<br>(standard for MBH)<br>S = Spring assisted (standard<br>for MBQ, optional for MBH)<br>H = Hydraulic assisted (optional<br>for MBH) | NC = Non-code, PED article 3, paragraph<br>3<br>P2 = PED 2014/68/EU Category 2 (for<br>hazardous and non-hazardous liquids) |