



## Filter bag Standard FB-S

### Description

Standard series filter bags are two-layer or three-layer bags, which can be used either in a WBF filter housing or in market standard bag filter housings from other manufacturers.

The surface is protected by an additional fine fabric covering, so that fibers cannot become detached from the bag and get into the clean side. At the same time, the bags also offer excellent chemical resistance and are free of substances that impair wetting. The filter bags meet FDA requirements for use in food-related areas. To increase the service life there are optionally available magnets incl. holders, which support the separation of magnetic particles in the WBF housing.

### Applications

- Filtration of washing and machining fluids, particularly in the automotive industry
- Paint and lacquer filtration
- Use in applications with increased purity requirements

### Special features

- Simple handling through tool-free installation
- An optimum material compound guarantees maximum safety during operation and ensures sufficient flexibility for optimum adaptation to the bag receptacle
- Plastic collar for optimum sealing
- Bar magnets and holders available as accessories for the WBF filter housing

### Technical details

#### General data

Filter Size	100	200
Differential pressure, maximum	1.4 bar	
Filtration rating (nominal)	1 ... 200 µm	
Filter material	Polypropylene (PP)	
Collar material	Polypropylene (PP)	
Operating temperature, maximum	60 °C	
Flow rate maximal	200 l/min	400 l/min

## Order details:

**N 200 FB-SA 100 - PP 1**

**Filter Size** \_\_\_\_\_

100 = for filter bag Size 1  
200 = for filter bag Size 2

**Filter bag type** \_\_\_\_\_

FB-SA = Filter bag Standard (2-layer)  
FB-SB = Filter bag Standard (3-layer)

**Filtration rating (nominal)** \_\_\_\_\_

001 = 1 µm  
005 = 5 µm  
010 = 10 µm  
025 = 25 µm  
050 = 50 µm  
075 = 75 µm  
100 = 100 µm  
150 = 150 µm  
200 = 200 µm

**Filter material** \_\_\_\_\_

PP = Polypropylene

**Collar type** \_\_\_\_\_

P1 = Polypropylene

## Design:

The total pressure loss of the filters at a given flow rate is comprised of the filter housing  $\Delta p$  and the filter bag  $\Delta p$ . The housing pressure loss is determined by the characteristic curves for housing pressure loss. The pressure loss of the uncontaminated filter bags is calculated using the R factors.

## Filter bag $\Delta p$ : pressure loss calculation

The following calculation is based on a clean filter bag.

$$\Delta p[\text{bar}] = \frac{R * V[\text{mm}^2 / \text{s}] * Q[\text{l} / \text{min}]}{n}$$

R = R Factor  
V = Viscosity [mm<sup>2</sup>/s]  
Q = Flow rate (l/min)  
n = Number of filter bags

## R (Resistance) Factors

### Filter bag FB-SA

R Factors		N 100	N 200
Filtration rating	1 µm	0.014	0.007
	5 µm	0.006	0.003
	10 µm	0.004	0.002
	25 µm	0.002	0.001
	50 µm	0.002	0.001
	100 µm	0.002	0.001
	150 µm	0.002	0.001
	200 µm	0.002	0.001

### Filter bag FB-SB

R Factors		N 100	N 200
Filtration rating	1 µm	0.018	0.009
	5 µm	0.010	0.005
	10 µm	0.008	0.004
	25 µm	0.007	0.003
	50 µm	0.004	0.002
	100 µm	0.002	0.001
	150 µm	0.002	0.001
	200 µm	0.002	0.001

## Note:

The information in this brochure relates to the operating conditions and applications described.

In the event of deviating applications and/or operating conditions, please contact the respective HYDAC department concerned.  
Subject to technical modifications.

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