Wombat filter element
WB

Description

The Wombat filter element is a pleated filter element designed for flow from the inside to the outside.

It has a high contamination retention capacity along with a high filtration efficiency level.

The Wombat filter element can either be installed into Wombat filters (WBF) or other bag filter housings using an adapter.

Bar magnets are available as an optional extra for the filtration of magnetic particles.

Applications

- Filtration of washing and machining fluids
- Pre-filtration of fluids in hydraulic and lubrication systems
- As a working and protective filter in cleaning systems (washing bays)
- As a protective filter in machining centres

Advantages over filter bags

- Very high fluid cleanliness
- Longer service life
- Increased contamination retention capacity
- Lower pressure drop (up to 30%)
- Robust element design
- High temperature stability
- Rapid filter element change due to conical design

Technical data

General data	
Max. differential pressure	2.5 bar
Filtration rating	1 to 135 µm
Filtration efficiency	>99.8%
Filter material	Polyester (PES)
Cap material	Polypropylene (PP)
Max. temperature	70°C

Model code

N 200 WB 005 – PES F

Element size
100 = for filters size 1
200 = for filters size 2

Element type
WB = Wombat

Filtration rating
001 = 1 µm
003 = 3 µm
005 = 5 µm
010 = 10 µm
020 = 20 µm
030 = 30 µm
040 = 40 µm
A, B, C, D, E = special models (see table below for filtration efficiency)

Filter material
PES = polyester

Seal material
F = FKM (FPM, Viton®)

Filtration efficiency for special models A–E:

Separation efficiency for given particle size (µm)

Model	>99.8%	99%	95%	80%
A	60	40	30	25
B	70	50	40	30
C	85	65	50	40
D	105	85	70	60
E	135	110	95	85

R (resistance) factors

for water-based media

R factors		N 100	N 200
Filtration rating	1 µm	0.20	0.12
	3 µm	0.18	0.10
	5 µm	0.14	0.08
	10 µm	0.13	0.07
	20 µm	0.13	0.07
	30 µm	0.11	0.06
	40 µm	0.10	0.05
	A	0.09	0.05
	B	0.08	0.04
	C	0.07	0.04
	D	0.06	0.03
	E	0.05	0.02

Dimensioning

The total pressure drop of the filter at a certain flow rate is the sum of the housing Δp and the element Δp. The housing pressure drop can be determined using the pressure drop curves. The pressure drop of the elements is calculated using the R factors.

The following calculation is based on clean filter elements.

$$\Delta p\ [\text{mbar}] = \frac{R \times V\ (\text{mm}^2/\text{s}) \times Q\ (\text{l/min})}{n}$$

R = R factor
V = viscosity (mm²/s)
Q = flow rate (l/min)
n = no. of elements

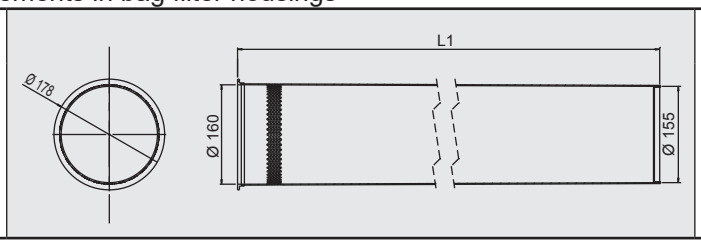
Zubehör

Adapter kits

for the installation of Wombat filter elements in bag filter housings

Adapter Kit TL-100-F, part no. 3674956
for e.g. Eaton Topline housing size 1

Adapter Kit TL-200-F, part no. 3549057
for e.g. Eaton Topline housing size 2



	L1
Adapter Kit TL-100-F	302
Adapter Kit TL-200-F	710

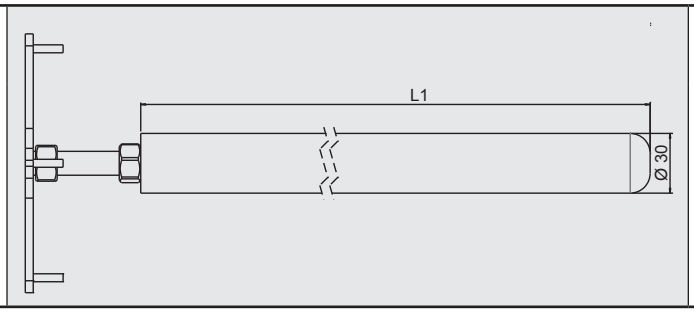
Others on request

Bar magnet insert

for filtering out magnetic particles from a fluid

Bar magnet insert N100, Part no. 3633896
for Wombat element N100

Bar magnet insert N200, Part no. 3601237
for Wombat element N200



	L1
Bar magnet insert N100	196
Bar magnet insert N200	540

Note

The information in this brochure relates to the operating conditions and applications described.
For applications and/or operating conditions not described please contact the relevant technical department.
Subject to technical modifications.

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