Wombat Filter Element
WB

Description
The Wombat element is a pleated filter element designed for flow from the inside to the outside and for high contamination retention capacity with high filtration efficiency.

The Wombat element can be installed in bag filter housings and can replace the existing filter bag. An adapter kit must be used when installing the Wombat filter. This only needs to be installed once and consists of a retainer basket and seal. Bar magnets are available as an optional extra for filtering 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 machine tools

Advantages over filter bags
- Very high fluid cleanliness
- Longer service life
- Greater contamination retention capacity
- Lower pressure drop (up to 30%)
- Robust element design
- High temperature stability
- Conical design for faster element change

Technical specifications

General specifications	
Max. differential pressure	2.5 bar
Filtration rating	1 - 135 µm
Degree of separation	> 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
N = NBR
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

Sizing

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.

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

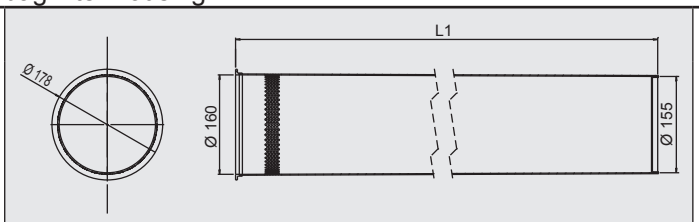
R = R factor
V = viscosity (mm²/s)
Q = flow rate (l/min)
n = no. of elements

Accessories

Adapter kits

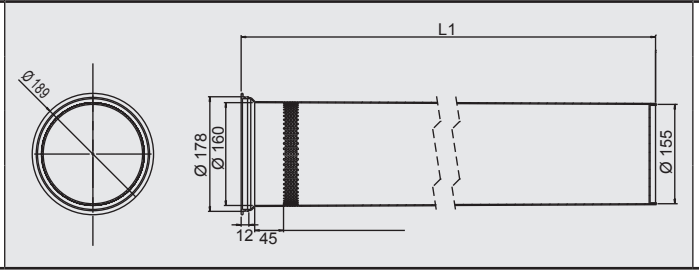
for installing the Wombat element in bag filter housing

Adapter Kit TL-100-F, Part No. 3674956
for e.g. Eaton Topline Housing Part 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

Adapter Kit EL-100-F, Part No. 3683976
for e.g. Eaton Ecoline Housing Size 1
Adapter Kit EL-200-F, Part No. 3681844
for e.g. Eaton Ecoline Housing Size 2
Adapter Kit FL-100-F, Part No. 3691554
for e.g. Eaton Flowline Housing Size 1
Adapter Kit FL-200-F, Part No. 3691595
for e.g. Eaton Flowline Housing Size 2



	L1
Adapter Kit EL-100-F	317
Adapter Kit EL-200-F	720
Adapter Kit FL-100-F	317
Adapter Kit FL-200-F	720

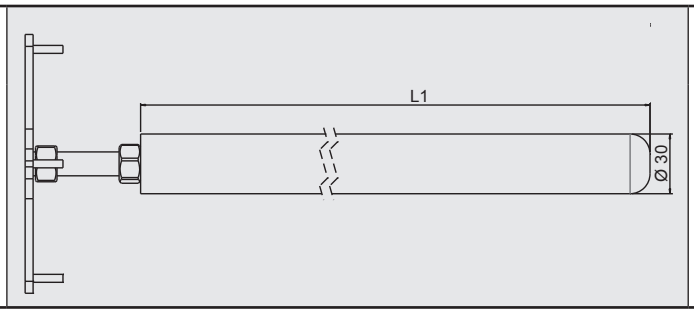
Others on request

Bar magnet insert

for filtering magnetic particles from 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

Separation Element for Bar Magnet
Part No. 3639116

Note

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

HYDAC FILTER SYSTEMS GMBH
Industriegebiet
D-66280 Sulzbach / Saar
Tel.:+49 (0) 6897/509-01
Fax:+49 (0) 6897/509-9046
Internet: www.hydac.com
E-Mail: filtersystems@hydac.com