



**MANN+HUMMEL Europiclone®**  
**Two-stage air cleaner – Modular system**

# Europiclone® : The flexible allrounder

The Europiclone® from MANN+HUMMEL is characterised by its high dust capacity and low pressure drop.

These characteristics have made the Europiclone® the tried and tested air cleaner for all machines and equipment used in conditions with

medium to heavy dust loads. These include construction and agricultural machines, mobile compressors and harvesting machines.

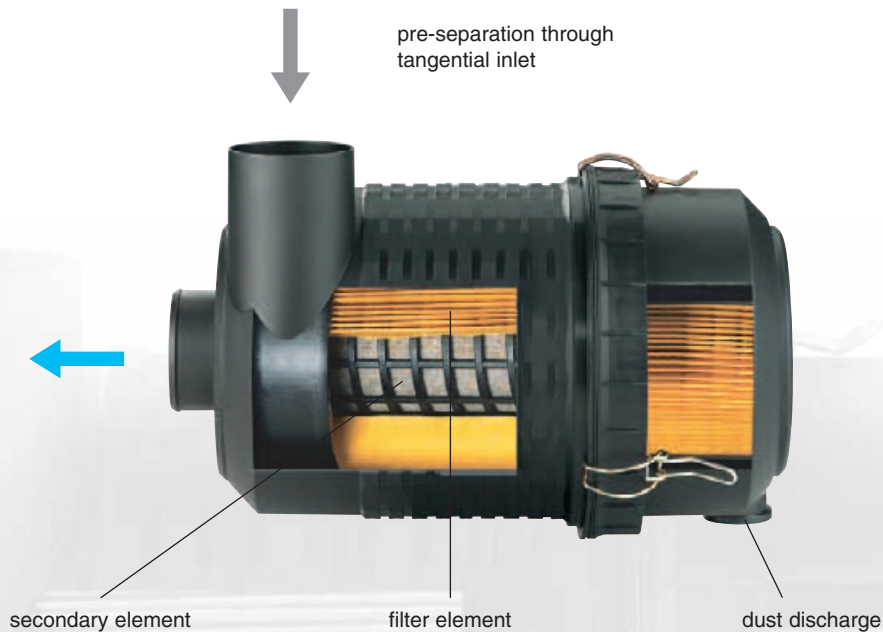
- easy element change without tools
- highest operational reliability through elements with proven radial seal
- metal-free filter elements are easily disposed of by incineration and therefore are environmentally friendly with inexpensive disposal
- easy adaptation to other equipment with a flexible bracket system
- patented filter elements

## Advantages at a glance:

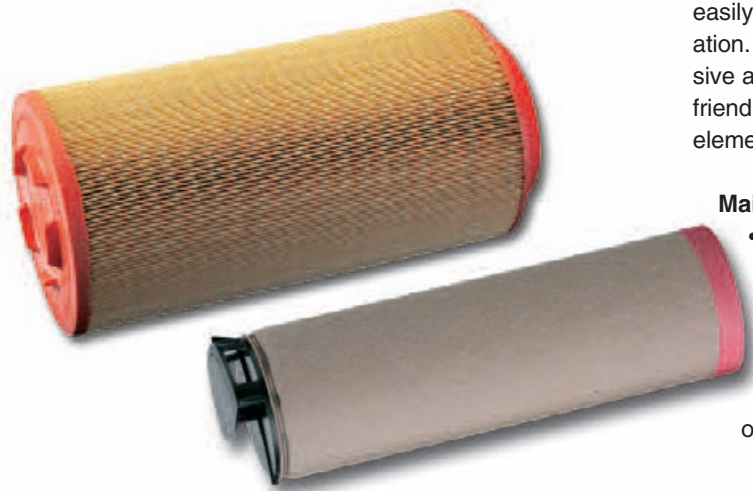
- long service life through integrated pre-separation
- highly economical through modular system
- extensive range of accessories
- corrosion free housing in impact resistant plastic



## Sectional view



# Filter elements



The Europiclone® elements are free of metal and therefore easily disposed of by incineration. This enables inexpensive and environmentally friendly disposal of the used elements.

### Main element

- high dust capacity through special MANN+HUMMEL filter medium
- high reliability through radial seal on housing

- reliable pleat stability prevents pleats sticking together under demanding conditions

### Secondary element

- MANN+HUMMEL synthetic fabric allows a high safety margin with low pressure drop
- secure fit in housing prevents unintentional removal of the secondary element

# Housing

The housing of the Europiclone® is made of impact resistant polypropylene and is suitable for continuous use in the temperature range - 40 °C to +80 °C or for short periods up to +100 °C.

The external polygon design of the housing is recognizable in the picture. The Europiclone® bracket, designed especially for this structure, can be turned in increments of 5° opposite to the housing.

Depending on the air cleaner size, the housing can be turned in the axial direction to six different locking positions. This offers the designer up to 432 different fitting possibilities for the air cleaner. In addition, the wire clamps which lock the air cleaner housing can be placed in special pockets on the cap to adapt to special installation conditions.



# Europiclone® 100 to 800

## Dimensions and part numbers

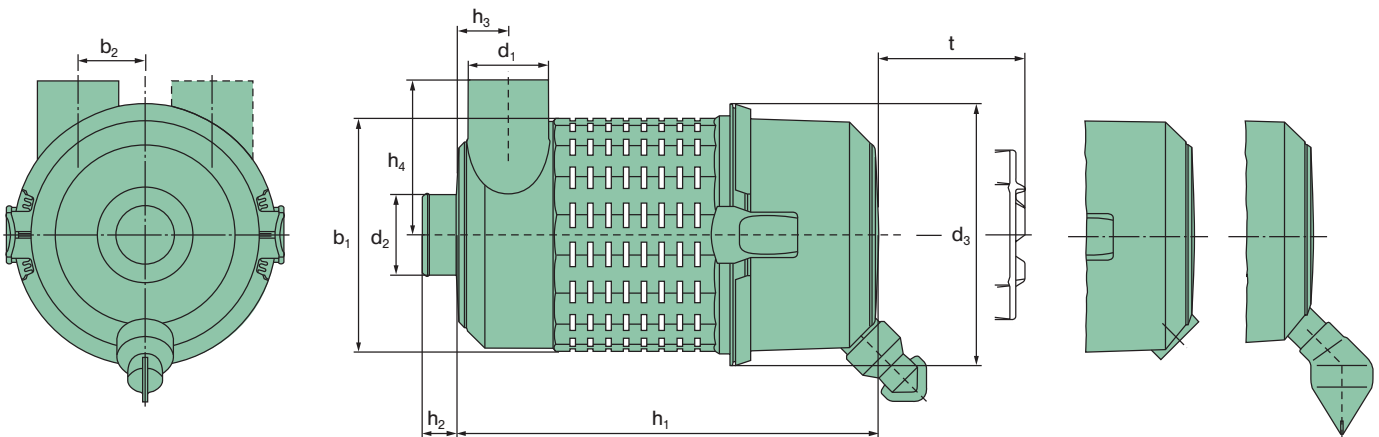


Fig. 1  
Mirror image version of dirty air connection available on request

1a  
Cover with snap fasteners  
(just for 44 100 ...)

1b

1c

Part No.		Fig.	Nominal flow rate [m <sup>3</sup> /min]	Replacement filter element		Approx. weight [kg]
without secondary element	with secondary element			MANN-FILTER main element	MANN-FILTER secondary element	
44 100 92 910	44 100 92 911	1a	1 – 3	C 11 100	CF 100	0.9
44 100 92 920	44 100 92 921	1b				
44 100 92 940	44 100 92 941	1c				
45 200 92 910	45 200 92 911	2a	2 – 4.5	C 14 200	CF 200	1.7
45 200 92 920	45 200 92 921	2b				
45 200 92 940	45 200 92 941	2c				
45 300 92 910	45 300 92 911	2a	3 – 6	C 15 300	CF 300	2.1
45 300 92 920	45 300 92 921	2b				
45 300 92 940	45 300 92 941	2c				
45 400 92 910	45 400 92 911	2a	4 – 8	C 16 400	CF 400	3.0
45 400 92 920	45 400 92 921	2b				
45 400 92 940	45 400 92 941	2c				
45 500 92 910	45 500 92 911	2a	6 – 12	C 20 500	CF 500	3.8
45 500 92 920	45 500 92 921	2b				
45 500 92 940	45 500 92 941	2c				
45 600 92 910	45 600 92 911	2a	7.5 – 15	C 23 610	CF 610	5.0
45 600 92 920	45 600 92 921	2b				
45 600 92 940	45 600 92 941	2c				
45 700 92 940	45 700 92 941	2c	15 – 21	C 25 710/3 *	CF 710	6.0
45 800 92 940	45 800 92 941	2c	18 – 28	C 30 810/3	CF 810	9.0

\* with spiral wound glue strip

# Europiclone® 100 to 800

## Dimensions and part numbers

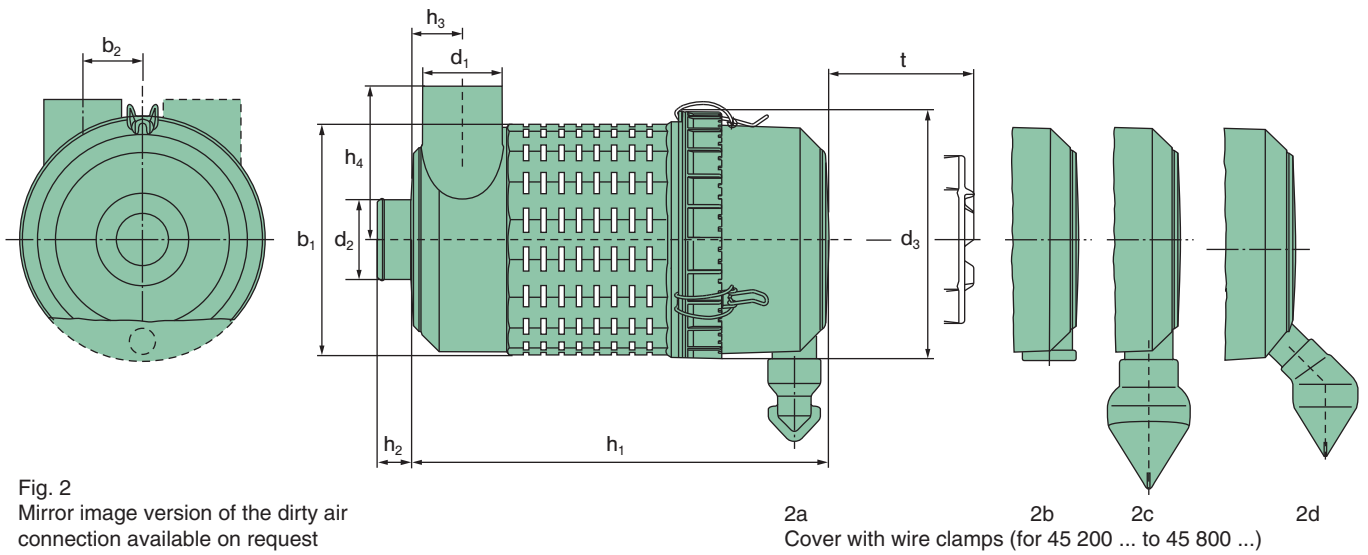


Fig. 2  
Mirror image version of the dirty air  
connection available on request

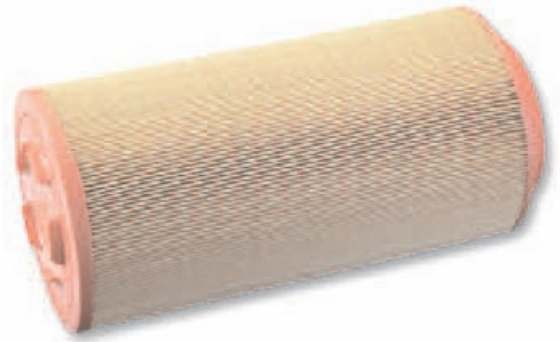
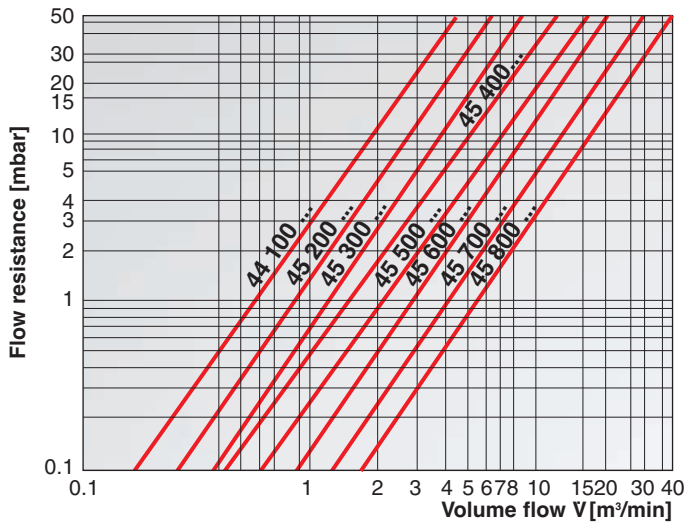
2a  
Cover with wire clamps (for 45 200 ... to 45 800 ...)

Part No.		Fig.	Dimensions in mm ( <i>dimensions in inches</i> )									
without secondary element	with secondary element		b <sub>1</sub>	b <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	h <sub>4</sub>	t
44 100 92 910	44 100 92 911	1a										
44 100 92 920	44 100 92 921	1b	158	45	54	50	188	260	27	38	104	237
44 100 92 940	44 100 92 941	1c	(6.22)	(1.77)	(2.12)	(1.97)	(7.40)	(10.24)	(1.06)	(1.50)	(4.09)	(9.39)
45 200 92 910	45 200 92 911	2a										
45 200 92 920	45 200 92 921	2b	173	48	62	60	198	327	27	42	112	304
45 200 92 940	45 200 92 941	2c	(6.81)	(1.89)	(2.44)	(2.36)	(7.80)	(12.87)	(1.06)	(1.65)	(4.41)	(11.97)
45 300 92 910	45 300 92 911	2a										
45 300 92 920	45 300 92 921	2b	203	59	70	70	228	367	30	45	135	344
45 300 92 940	45 300 92 941	2c	(7.99)	(2.32)	(2.76)	(2.76)	(8.98)	(14.45)	(1.18)	(1.77)	(5.32)	(13.54)
45 400 92 910	45 400 92 911	2a										
45 400 92 920	45 400 92 921	2b	223	63	82	80	248	383	32	52	144	359
45 400 92 940	45 400 92 941	2c	(8.78)	(2.48)	(3.23)	(3.15)	(9.76)	(15.08)	(1.26)	(2.05)	(5.67)	(14.13)
45 500 92 910	45 500 92 911	2a										
45 500 92 920	45 500 92 921	2b	264	73	102	100	288	408	37	62	174	384
45 500 92 940	45 500 92 941	2c	(10.39)	(2.87)	(4.02)	(3.94)	(11.34)	(16.06)	(1.46)	(2.44)	(6.85)	(15.12)
45 600 92 910	45 600 92 911	2a										
45 600 92 920	45 600 92 921	2b	295	87	110	110	323	414	27	65	190	384
45 600 92 940	45 600 92 941	2c	(11.61)	(3.43)	(4.33)	(4.33)	(12.72)	(16.30)	(1.06)	(2.56)	(7.48)	(15.12)
45 700 92 940	45 700 92 941	2d	325	92	132	130	353	548	32	76	212	500
			(12.80)	(3.62)	(5.20)	(5.12)	(13.90)	(21.57)	(1.26)	(2.99)	(8.35)	(19.69)
45 800 92 940	45 800 92 941	2d	390	114	150	150	418	598	32	85	241	550
			(15.35)	(4.49)	(5.91)	(5.91)	(16.46)	(23.54)	(1.26)	(3.35)	(9.49)	(21.65)

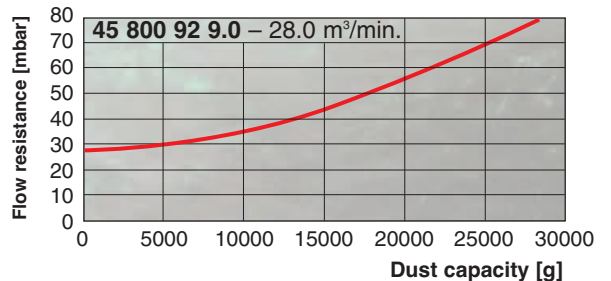
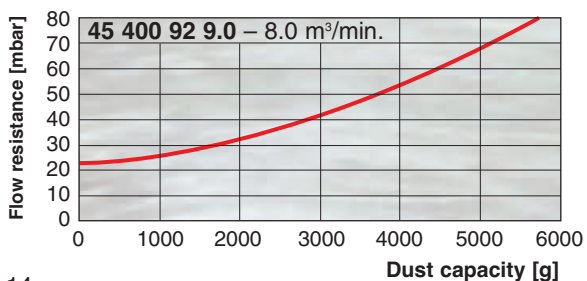
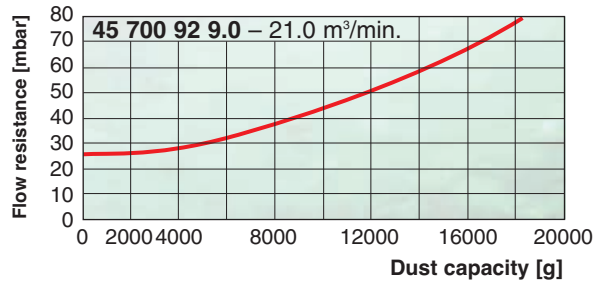
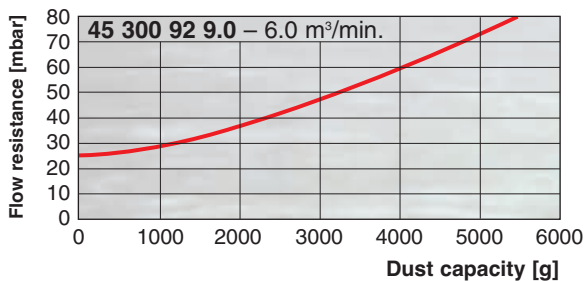
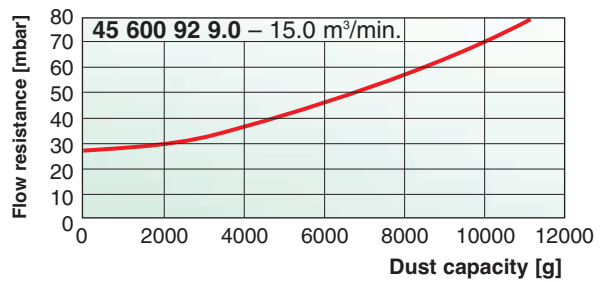
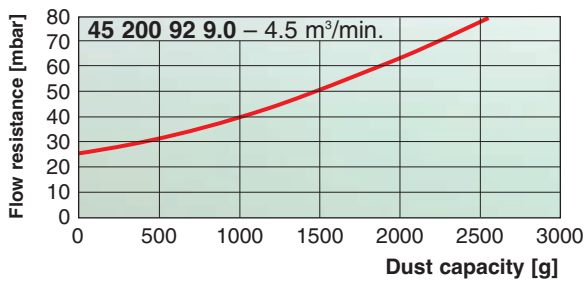
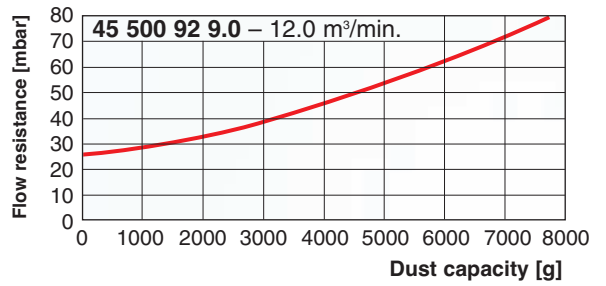
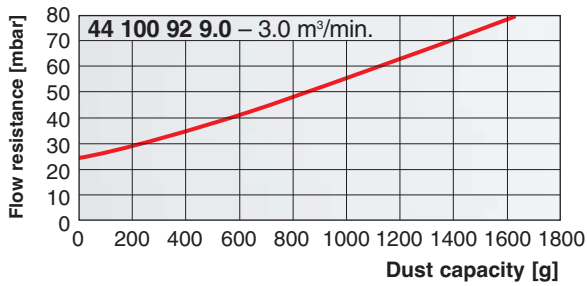
# Europiclone® 100 to 800

## Flow characteristics without secondary element ...

... for flow rates as per ISO 5011



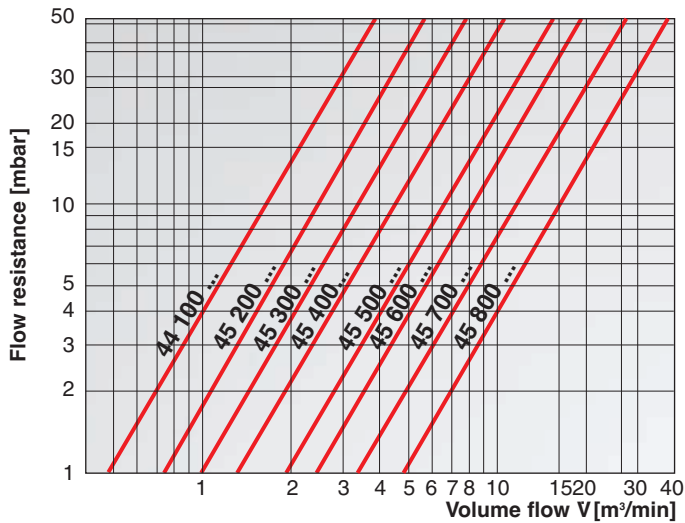
... for dust capacity as per ISO 5011 with SAE coarse test dust



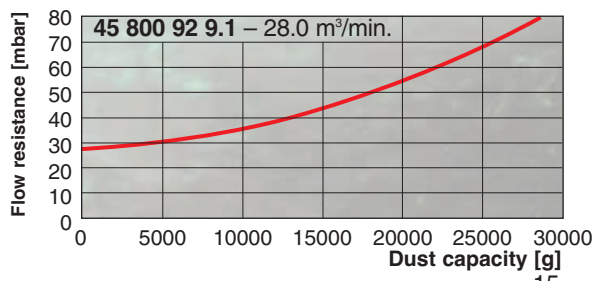
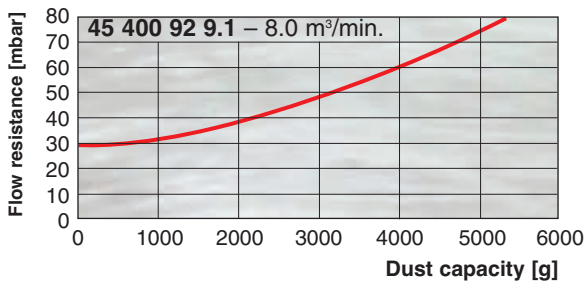
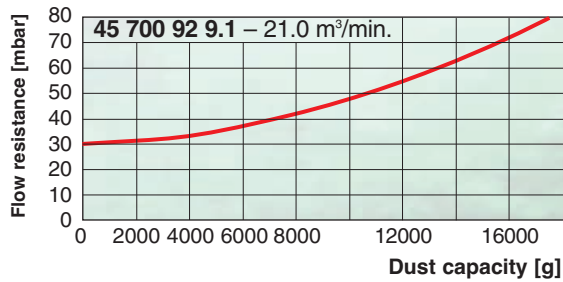
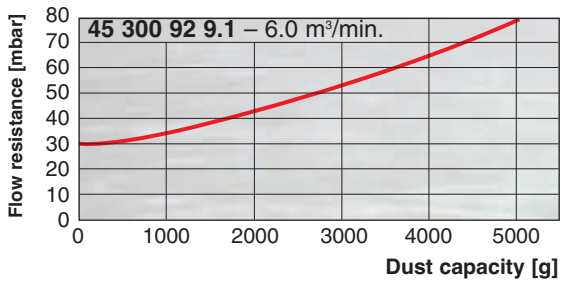
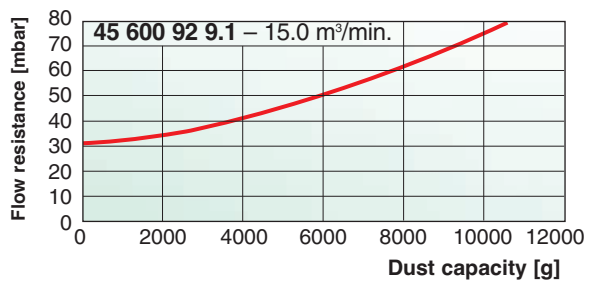
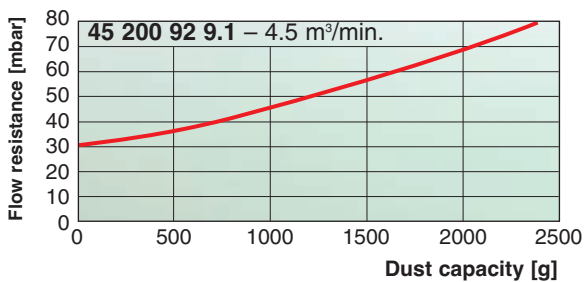
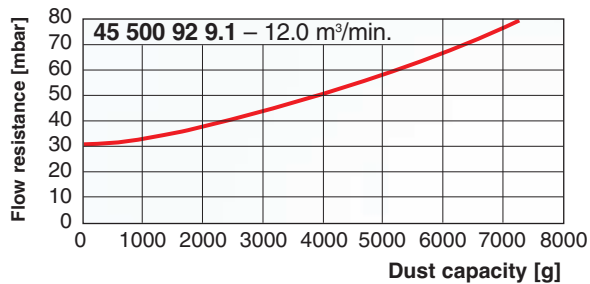
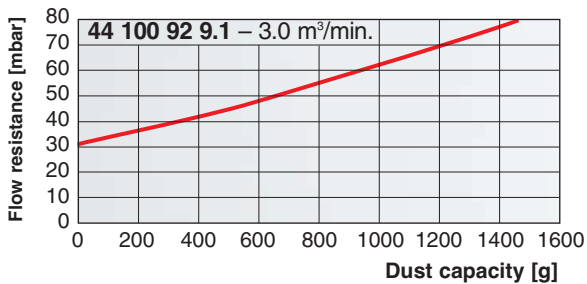
# Europiclone® 100 to 800

## Flow characteristics with secondary element ...

... for flow rates as per ISO 5011



... for dust capacity as per ISO 5011 with SAE coarse test dust



# Europiclón® 50



The new Europiclón® 50 from MANN+HUMMEL extends the range of the successful Europiclón® line to engines and equipment with a power rating up to 20 kW.

Along with the known advantages of the Europiclón® line which include reliability, long service life and its robust, corrosion-free housing, the new Europiclón® 50 has a number of additional features which offer important advantages for the designer and user.

## Advantages at a glance:

- twelve-position clean air outlet with integrated connection for service indicator or switch
- clean air outlet available with straight pipe connection or with a 90° elbow
- new space-saving turn-lock fastener and easy filter element change without tools
- especially low pressure drop also in operation with fitted secondary element
- cost-effective

## Filter elements

The new filter elements for the Europiclón® 50 offer high performance and are cost-effective. The radial seal used for the main element in connection with the special pleat stabilisation enables a high separation efficiency of more than 99.95% and a high dust capacity. A further advantage is the patented MANN+HUMMEL production technology where the seal and the element end plates are manufactured in one process step using special elastomers.

A plastic centre tube in the housing provides good support for the element without negatively influencing the withdrawal distance.

A secondary element protects the engine during a filter service or if the main element is damaged. It is an important component for comprehensive engine protection, which ensures the maximum service

life of your machine. The secondary element of the new Europiclón® 50 consists of a special synthetic fabric, a plastic centre tube and a radial seal in PUR foam. The filter surface area is approx. 45% larger than comparable products from the competition. This leads to minimal pressure drop with an increase in the service life of the filter.





# Bracket

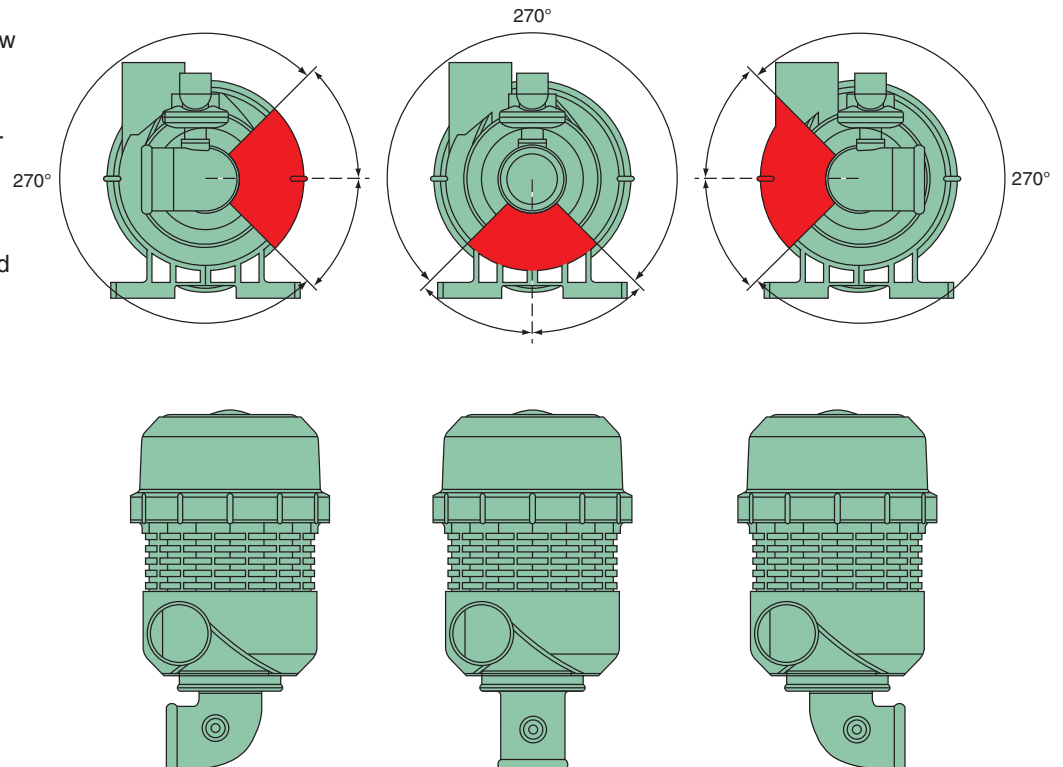
The Europiclone® 50 bracket offers flexibility during installation with 16 different available positions around its circumference and two possible locking positions in the axial direction.

The special polygon design is matched to the air cleaner housing and ensures that the air cleaner fits securely in the bracket.



# Clean air outlet

On the clean air side the new Europiclone® 50 is equipped with a twelve-position clean air outlet. This port is available in a straight pipe version or with a 90° elbow. As the hanging installation position is not recommended for the service switch, MANN+HUMMEL offers the 90° elbow in two versions. Before placing your order, please check to see which orientation is more appropriate for your installation conditions.



# Europiclón® 50

## Dimensions and part numbers

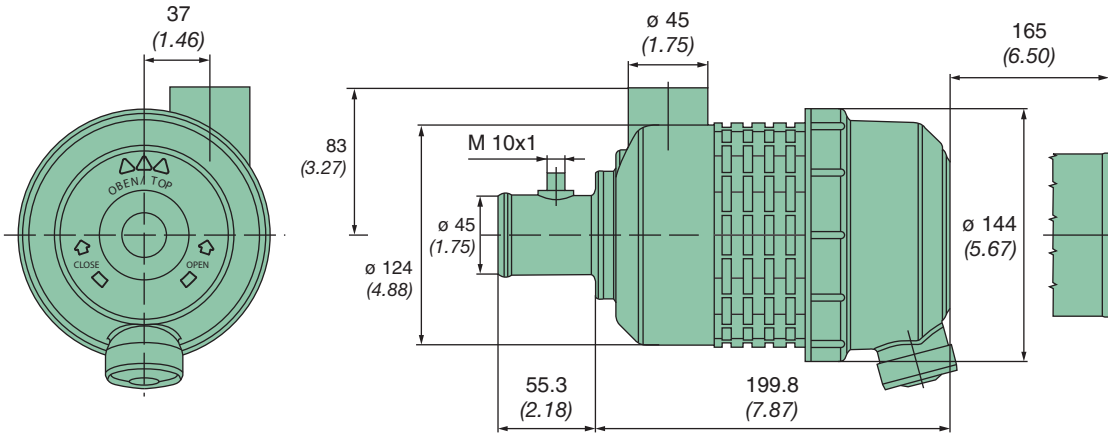


Fig. 4

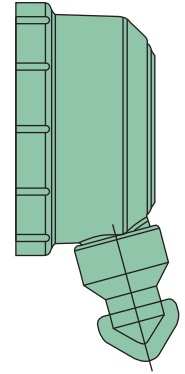
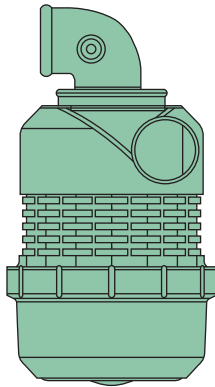
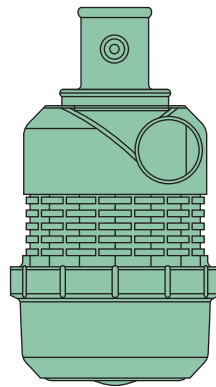


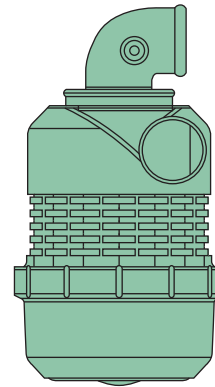
Fig. 5



90° elbow  
Fig. 1



Straight pipe  
Fig. 2



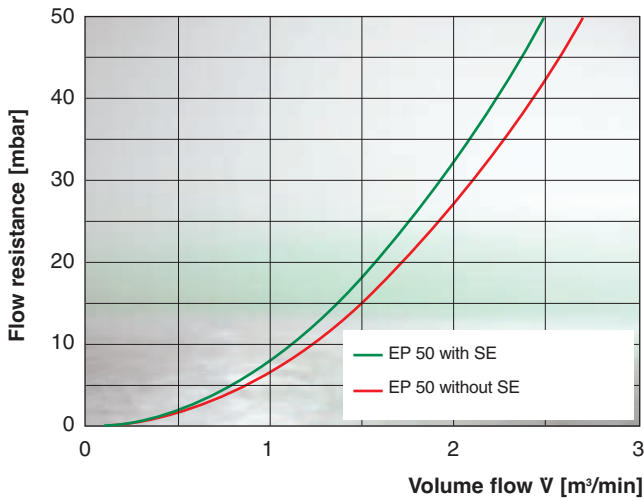
90° elbow  
Fig. 3

Part No.		Version Clean air outlet	Version Dust discharge	Nominal flow rate [m³/min]	Replacement filter element		Approx. weight [kg]
without secondary element	with secondary element				MANN-FILTER main element	MANN-FILTER secondary element	
44 058 92 910	44 058 92 911	1	5	0.8 – 2	C 10 050	CF 50	0.7
44 058 92 920	44 058 92 921	1	4				
44 050 92 910	44 050 92 911	2	5	0.8 – 2	C 10 050	CF 50	0.7
44 050 92 920	44 050 92 921	2	4				
44 059 92 910	44 059 92 911	3	5	0.8 – 2	C 10 050	CF 50	0.7
44 059 92 920	44 059 92 921	3	4				

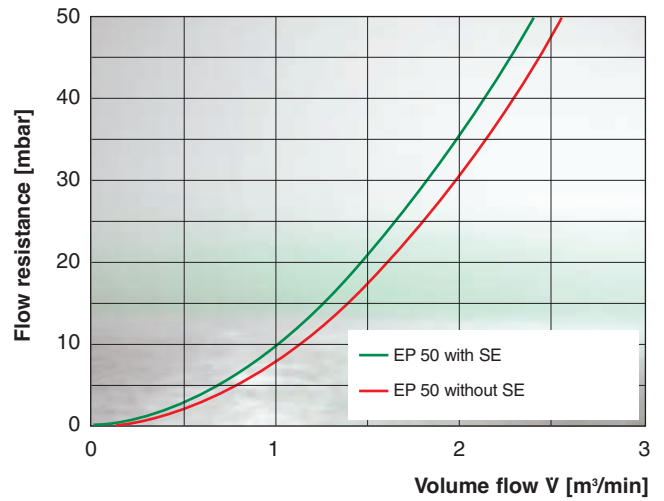
# Europiclone® 50

## Flow characteristics ...

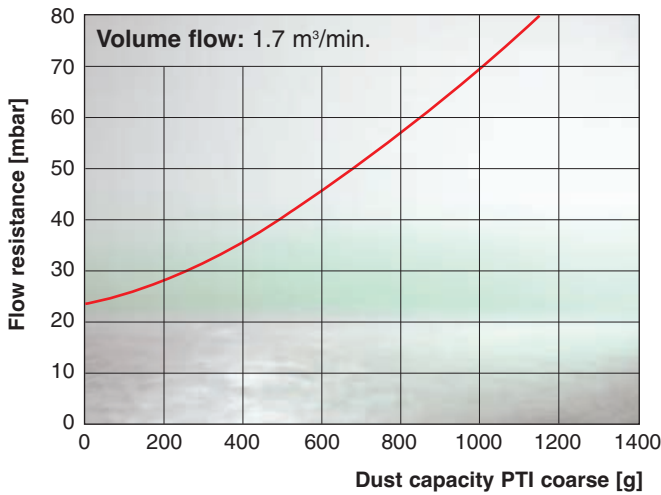
... for flow rates as per ISO 5011 with straight pipe



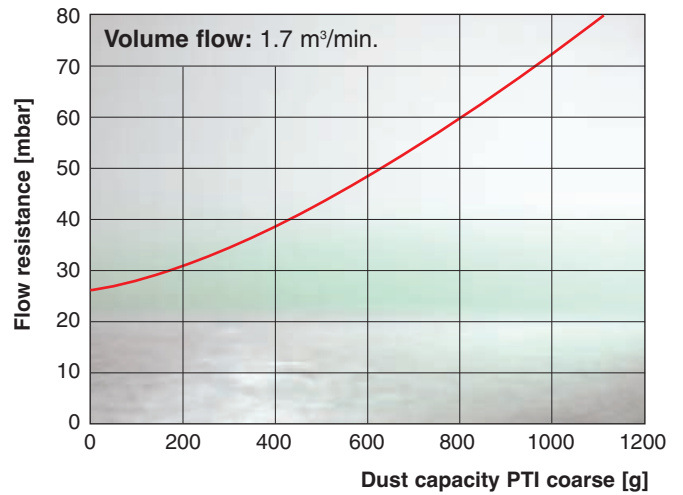
... for flow rates as per ISO 5011 with 90° elbow



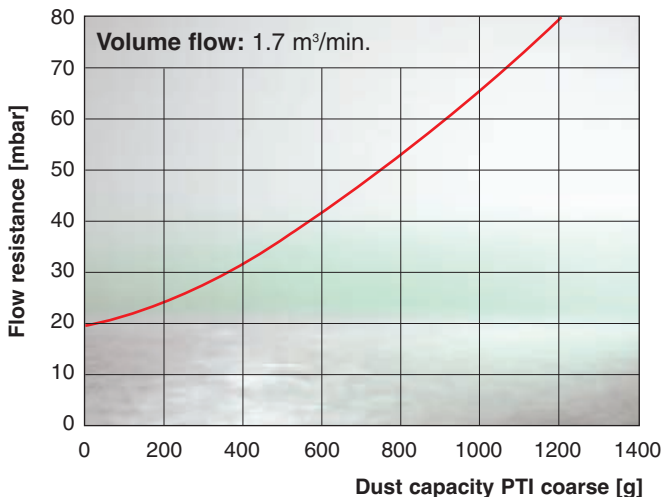
... for dust capacity as per ISO 5011 with straight pipe with secondary element ...



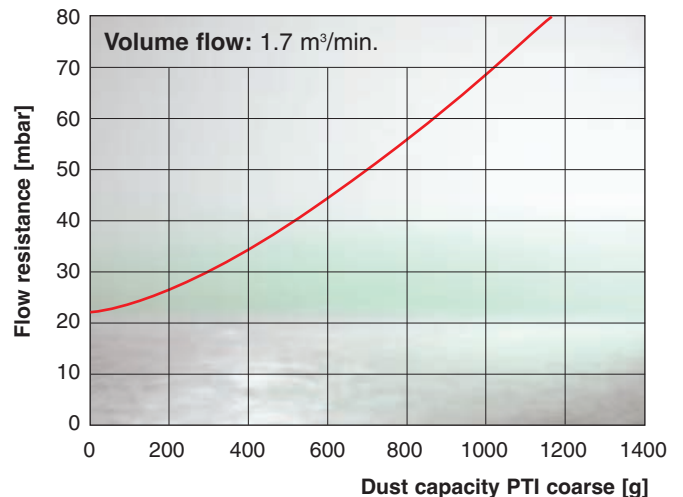
... for dust capacity as per ISO 5011 with 90° elbow with secondary element ...



... for dust capacity as per ISO 5011 with straight pipe without secondary element ...



... for dust capacity as per ISO 5011 with 90° elbow without secondary element ...



# Special versions

## Europiclone® with dust collector (sizes 100 to 800)

The Europiclone® with a dust collector is especially suitable for applications where the dust discharge process should not dirty the immediate surroundings, e.g. as a requirement for production equipment. At the same time the service life advantages of a two-stage air cleaner are still valid. In these conditions the cover of the Europiclone® is fitted with a dust collector and sealed to

the surroundings. The functionality of the pre-separation remains exactly the same.

The dust is separated reliably into the dust collector and is emptied manually from time to time. The timing of the service intervals depends on the application conditions.

Your MANN+HUMMEL partner will be happy to answer any questions on this version.



Dimensions and air cleaner specifications identical to types ... 920/921, see page 13

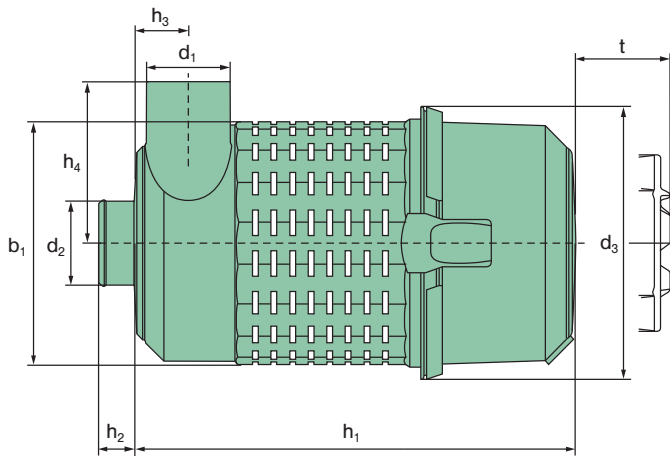


Fig. 1 Cover with snap fasteners (only 44 100 ...)

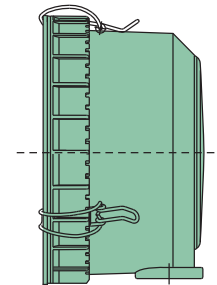
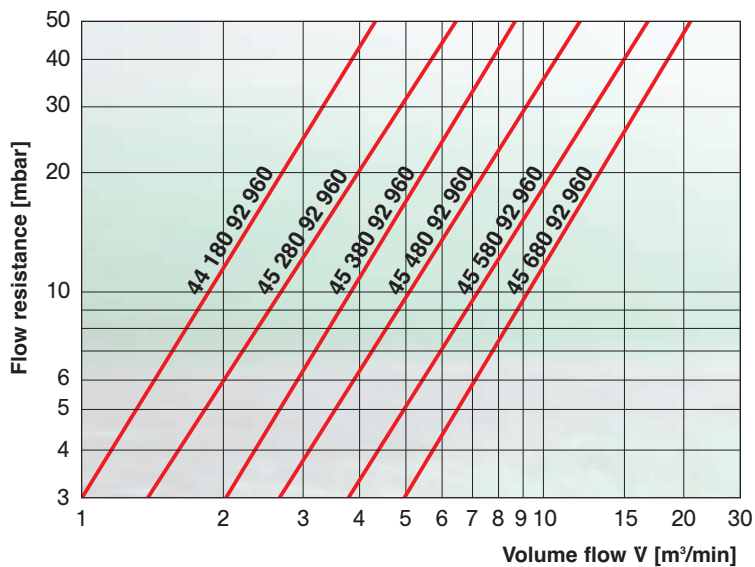


Fig. 2 Cover with wire clamps (45 200 ... to 45 800 ...)

Part No.		Fig.	Nominal flow rate [m³/min]	Replacement filter element	
without secondary element	with secondary element			MANN-FILTER main element	MANN-FILTER secondary element
44 100 92 950	44 100 92 951	1	1 – 3	C 11 100	CF 100
45 200 92 950	45 200 92 951	2	2 – 4.5	C 14 200	CF 200
45 300 92 950	45 300 92 951	2	3 – 6	C 15 300	CF 300
45 400 92 950	45 400 92 951	2	4 – 8	C 16 400	CF 400
45 500 92 950	45 500 92 951	2	6 – 12	C 20 500	CF 500
45 600 92 950	45 600 92 951	2	7.5 – 15	C 23 610	CF 610
45 700 92 950	45 700 92 951	2	14 – 21	C 25 710	CF 710
45 800 92 950	45 800 92 951	2	18 – 28	C 30 810	CF 810

# Special versions

## Europiclone® for vacuum applications (sizes 100 to 600)



Specially modified filter types are available for use with vacuum applications.

Typical applications are vacuum lifting devices and other negative pressure systems.

Dimensions identical to types ... 920/921, see page 13

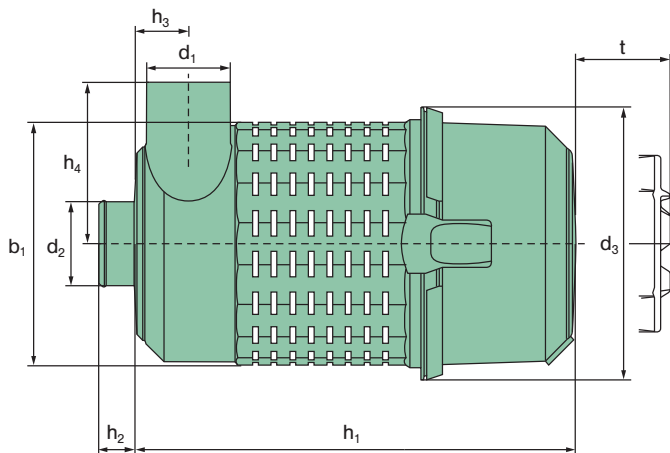


Fig. 1 Cover with snap fastener (only 44 180 ...)

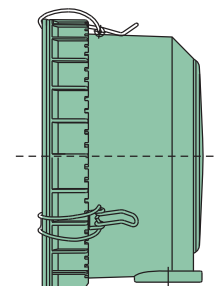


Fig. 2 Cover with wire clamps (45 280 ... to 45 680 ...)

Part No.	Fig.	Nominal flow rate [m³/min]	Replacement filter element
without secondary element			MANN-FILTER main element
44 180 92 960	1	1 – 3	C 11 100
45 280 92 960	2	2 – 4.5	C 14 200
45 380 92 960	2	3 – 6	C 15 300
45 480 92 960	2	4 – 8	C 16 400
45 580 92 960	2	6 – 12	C 20 500
45 680 92 960	2	7.5 – 15	C 23 610



## Europiclón® accessories

	Bracket		Rain cap design A * (p. 98)	Straight pipes		90° elbow	
	narrow version (p. 95)	wide version (p. 95)		without connec- tion (p. 105)	with connection (p. 105)	without connec- tion (p. 104)	with connection (p. 104)
<b>Europiclón® 50</b>	–	<b>39 050 40 959</b>	<b>39 014 67 910</b>	–	–	–	–
<b>Europiclón® 100</b>	<b>39 100 40 989</b>	<b>39 100 40 999</b>	<b>39 020 67 910</b>	<b>39 100 27 999</b>	<b>39 100 27 979</b>	<b>39 100 25 999</b>	<b>39 100 25 979</b>
<b>Europiclón® 200</b>	<b>39 200 40 989</b>	<b>39 200 40 999</b>	<b>39 028 67 910</b>	<b>39 200 27 999</b>	<b>39 200 27 979</b>	<b>39 200 25 999</b>	<b>39 200 25 979</b>
<b>Europiclón® 300</b>	<b>39 300 40 989</b>	<b>39 300 40 999</b>	<b>39 040 67 910</b>	<b>39 300 27 999</b>	<b>39 300 27 979</b>	<b>39 300 25 999</b>	<b>39 300 25 979</b>
<b>Europiclón® 400</b>	<b>39 400 40 989</b>	<b>39 400 40 999</b>	<b>39 056 67 910</b>	<b>39 400 27 999</b>	<b>39 400 27 979</b>	<b>39 400 25 999</b>	<b>39 400 25 979</b>
<b>Europiclón® 500</b>	<b>39 500 40 989</b>	<b>39 500 40 999</b>	<b>39 080 67 910</b>	<b>39 500 27 999</b>	<b>39 500 27 979</b>	<b>39 500 25 999</b>	<b>39 500 25 979</b>
<b>Europiclón® 600</b>	<b>39 600 40 989</b>	<b>39 600 40 999</b>	<b>39 100 67 910</b>	<b>39 600 27 999</b>	<b>39 600 27 979</b>	<b>39 600 25 999</b>	<b>39 600 25 979</b>
<b>Europiclón® 700</b>	<b>39 700 40 989</b>	<b>39 700 40 999</b>	<b>39 160 67 910</b>	<b>39 700 27 999</b>	<b>39 700 27 979</b>	<b>39 700 25 999</b>	<b>39 700 25 979</b>
<b>Europiclón® 800</b>	<b>39 800 40 989</b>	<b>39 800 40 999</b>	<b>39 190 67 910</b>	<b>39 800 27 999</b>	<b>39 800 27 979</b>	<b>39 800 25 999</b>	<b>39 800 25 979</b>

You will find the complete range of accessories for our air cleaners and service indicators/service switches on page 93.

\* Alternative design B possible (see page 99)

### Dust discharge valves

Part No.	Name	Suitable for
<b>23 040 30 111</b>	Diaphragm valve	<b>45 x00 92 920/921</b>
<b>39 000 40 391</b>	Small dust discharge valve	<b>45 x00 92 910/911</b>
<b>39 000 40 661</b>	Large dust discharge valve	<b>44 100 92 940/941</b>
<b>39 000 40 102</b>	Large dust discharge valve	<b>45 x00 92 940/941</b>