

MANN Europiclon

Two stage air cleaner – modular system



Industriefilter



Background picture: Claas

MANN Europiclon ...

Applications

The MANN Europiclon is the ideal intake air cleaner for construction and agricultural machinery, compressors, stationary installations, etc.

Technical advantages

MANN Europiclon cleaners offer high dust capacities and low flow resistance. These values are some of the requirements necessary to fulfill future emission regulations. Top grade filter elements guarantee the necessary functional safety and an economical service life of the unit. No tools are required for the maintenance of the air cleaner.



MANN Europiclon with bracket

Flexibility

The Europiclon series is a modular system. Different housing models and dust discharge devices equipped with a flexible position locking system allow the Europiclon to adapt to practically all planned or existing assemblies. There are two different brackets specially designed for the external polygon design of the housing which respectively offer more than 40 different fitting possibilities. An extensive array of system components (see page 63 ff) completes the range.

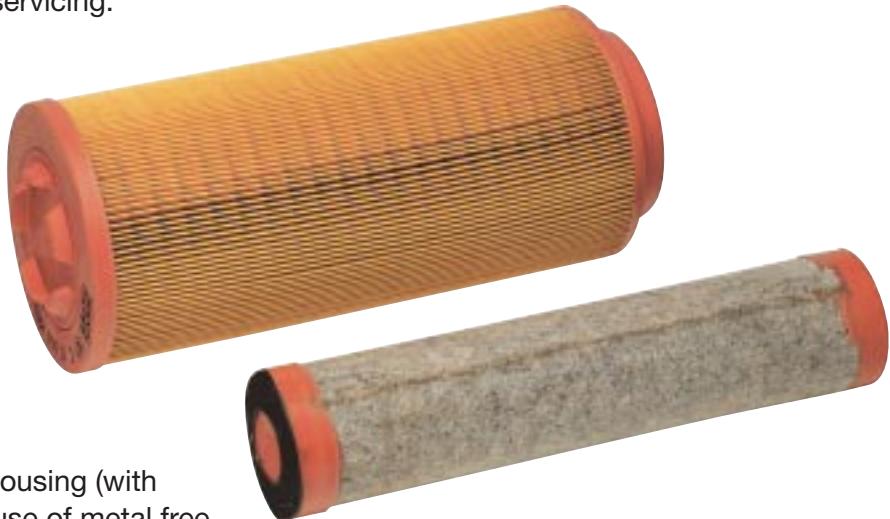


... flexible air cleaner system

Patented filter elements

The metal free main and secondary elements of the MANN Europiclon are protected by patents and available around the world through our extensive service network.

The MANN Europiclon can be purchased or retrofitted with a secondary element. The secondary element protects the clean air side from the entrance of dust during filter servicing.



Recycling

The innovative design of the housing (with fixed centre tube), allows the use of metal free main and secondary elements. As no environmentally harmful adhesives are used, the elements are particularly easy on the environment.

Metal free main and secondary elements

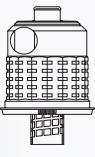
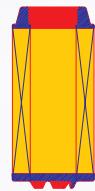
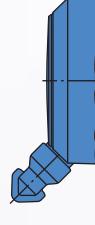
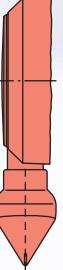
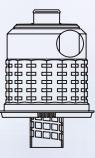
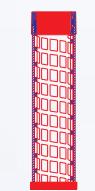
Advantages in a glance

- highly economical
- corrosion free
- easy to recycle
- flexible adaptation to existing aggregates
- extensive range of accessories
- patented technology for main and secondary elements
- accessories and spare parts available worldwide
- easy to service without tools
- naturally in the usual MANN+HUMMEL original equipment quality

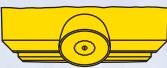
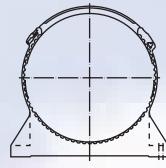
Technical specifications

- Nominal flow range 1 to 15 m³/min
- Allowed continuous running temperature: -40 °C to +80 °C, for short periods +100 °C
- Housing material: impact resistant polypropylene
- Filter elements with radial seal

Less components – many possible combinations ...

Sizes	Nominal flow rate m ³ /min	Housing	Main and secondary elements	Small dust-discharge valve	Large dust-discharge valve
		 Housing – Inlet left hand side (basic model)	 Main element		
		 Housing – Inlet right hand side (on request)	 Secondary element		
44 100 ...	1 – 3	●	●	●	
45 200 ...	2 – 4.5	●	●	●	●
45 300 ...	3 – 6	●	●	●	●
45 400 ...	4 – 8	●	●	●	●
45 500 ...	6 – 12	●	●	●	●
45 600 ...	7.5 – 15	●	●	●	●

Other combinations on request.

Dust-discharge variations				Accessories	
Adapter for ejector extraction	Adapter with backpressure valve	Diaphragm valve	Vacuum filter	Bracket	Elbow adapter
				 Bracket with wide base	 Elbow adapter
				 Bracket with narrow base	 Straight connector
					 Elbow adapter with M 10x1 connection
					 Straight connector with M 10x1 connection
					 Adapter for service indicators M 10x1
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●

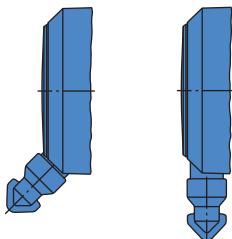
... thanks to the modular system

The right type for any situation

The MANN Europiclon is available with a number of dust discharge variations:

Dust discharge

Small dust-discharge valve



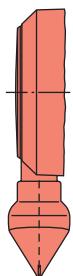
Application

Engines with high pulsation (usually aspirating engines up to 4 cylinders)

End number of the part number

.. 910/.. 911

Large dust-discharge valve



Engines with low pulsation (usually aspirating engines with 5 or more cylinders, turbo-charged engines)

.. 940/.. 941

Adapter for ejector extraction



Engine with integrated ejector extraction, for extremely high dust loads

.. 980/.. 981

Adapter for ejector extraction with integrated backpressure valve



Engine with integrated ejector extraction, for extremely high dust loads

.. 970/.. 971

Diaphragm valve



Engines with high pulsation, where installation space is limited

.. 920/.. 921

Rubber plug and seal

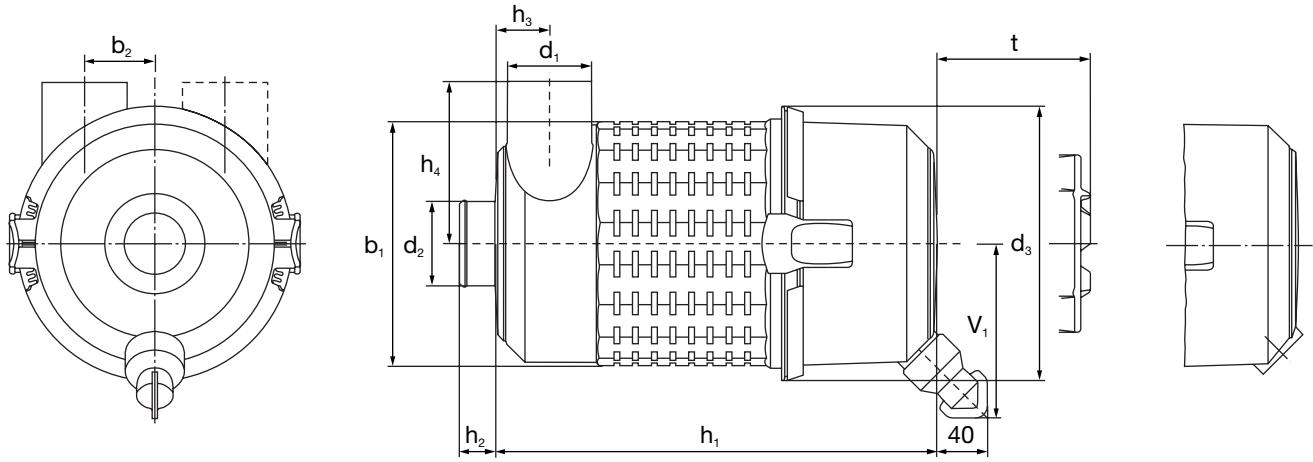


Vacuum filter

.. 960/.. 961



MANN Europiclon



*Fig. 1
Mirror image version of air inlet
on request*

*1a
Cover with snap fastener*

Part No. without secondary element	Part No. with secondary element	Fig.	Flow rate range [m³/min]	Replacement filter element MANN micro-Top filter	Replacement filter element MANN secondary element	Weight approx. [kg]
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				
45 200 92 910	45 200 92 911	2a				
45 200 92 920	45 200 92 921	2b				
45 200 92 940	45 200 92 941	2c	2 – 4.5	C 14 200	CF 200	1.7
45 200 92 970	45 200 92 971	2d				
45 200 92 980	45 200 92 981	2e				
45 300 92 910	45 300 92 911	2a				
45 300 92 920	45 300 92 921	2b				
45 300 92 940	45 300 92 941	2c	3 – 6	C 15 300	CF 300	2.1
45 300 92 970	45 300 92 971	2d				
45 300 92 980	45 300 92 981	2e				
45 400 92 910	45 400 92 911	2a				
45 400 92 920	45 400 92 921	2b				
45 400 92 940	45 400 92 941	2c	4 – 8	C 16 400	CF 400	3.0
45 400 92 970	45 400 92 971	2d				
45 400 92 980	45 400 92 981	2e				
45 500 92 910	45 500 92 911	2a				
45 500 92 920	45 500 92 921	2b				
45 500 92 940	45 500 92 941	2c	6 – 12	C 20 500	CF 500	3.8
45 500 92 970	45 500 92 971	2d				
45 500 92 980	45 500 92 981	2e				
45 600 92 910	45 600 92 911	2a				
45 600 92 920	45 600 92 921	2b				
45 600 92 940	45 600 92 941	2c	7.5 – 15	C 23 610	CF 610	5.0
45 600 92 970	45 600 92 971	2d				
45 600 92 980	45 600 92 981	2e				

Dimensions and part numbers

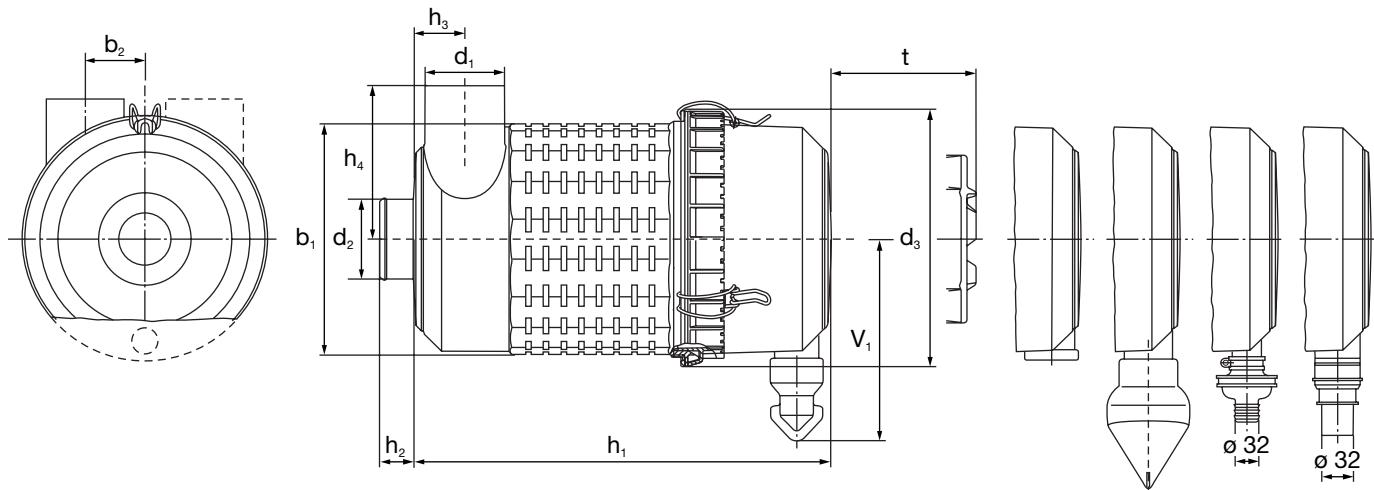


Fig. 2
Mirror image version of air inlet
on request

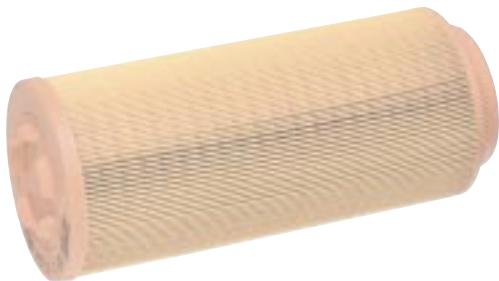
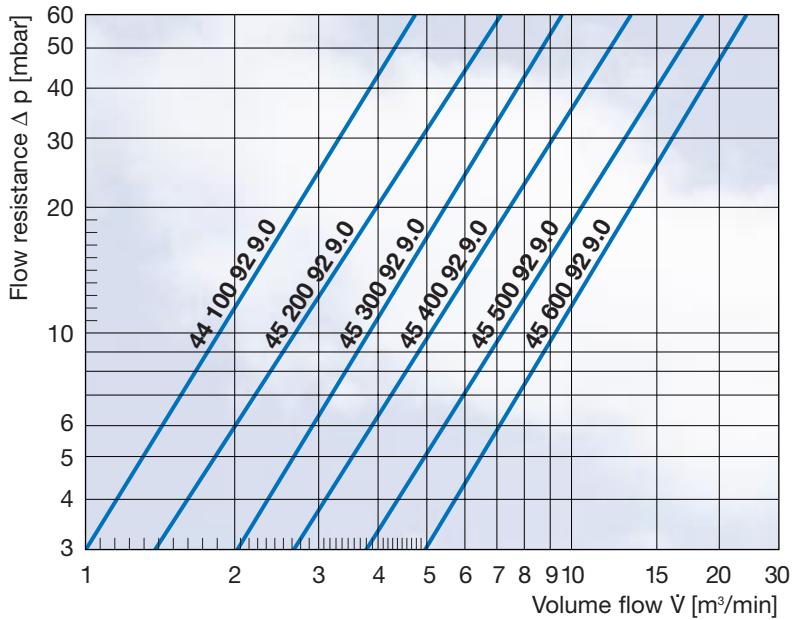
2a 2b 2c 2d 2e
Cover with wire clamps

Part No.		Fig.	Dimensions in mm										
without secondary element	with secondary element		b ₁	b ₂	d ₁	d ₂	d ₃	h ₁	h ₂	h ₃	h ₄	t	V ₁
44 100 92 910	44 100 92 911	1a											131
44 100 92 920	44 100 92 921	1b	158	45	54	50	188	260	27	38	104	237	76
45 200 92 910	45 200 92 911	2a											164
45 200 92 920	45 200 92 921	2b											88
45 200 92 940	45 200 92 941	2c	173	48	62	60	198	327	27	42	112	304	201
45 200 92 970	45 200 92 971	2d											184
45 200 92 980	45 200 92 981	2e											163
45 300 92 910	45 300 92 911	2a											179
45 300 92 920	45 300 92 921	2b											103
45 300 92 940	45 300 92 941	2c	203	59	70	70	228	367	30	45	135	344	216
45 300 92 970	45 300 92 971	2d											199
45 300 92 980	45 300 92 981	2e											179
45 400 92 910	45 400 92 911	2a											189
45 400 92 920	45 400 92 921	2b											113
45 400 92 940	45 400 92 941	2c	223	63	82	80	248	383	32	52	144	359	226
45 400 92 970	45 400 92 971	2d											209
45 400 92 980	45 400 92 981	2e											188
45 500 92 910	45 500 92 911	2a											209
45 500 92 920	45 500 92 921	2b											133
45 500 92 940	45 500 92 941	2c	264	73	102	100	288	408	37	62	174	384	246
45 500 92 970	45 500 92 971	2d											229
45 500 92 980	45 500 92 981	2e											208
45 600 92 910	45 600 92 911	2a											226
45 600 92 920	45 600 92 921	2b											150
45 600 92 940	45 600 92 941	2c	295	87	110	110	323	414	27	65	190	384	263
45 600 92 970	45 600 92 971	2d											246
45 600 92 980	45 600 92 981	2e											225

MANN Europiclon

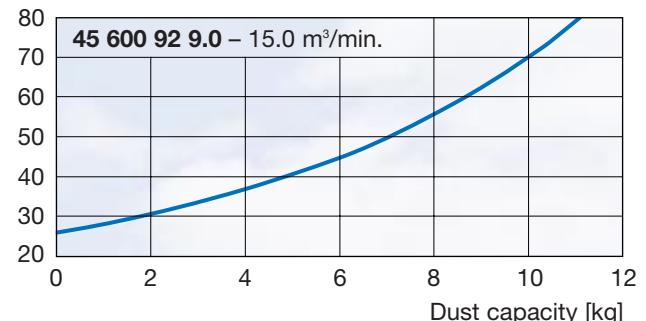
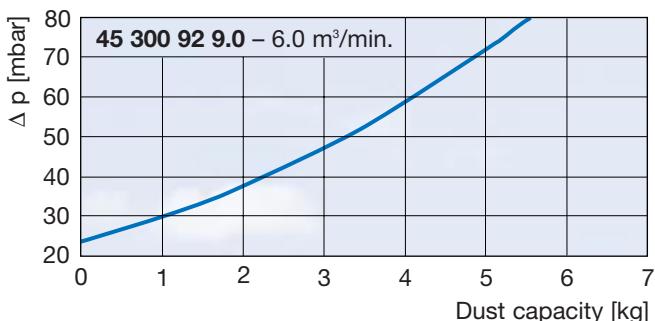
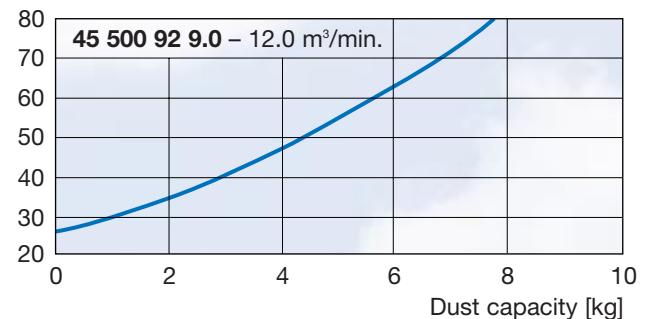
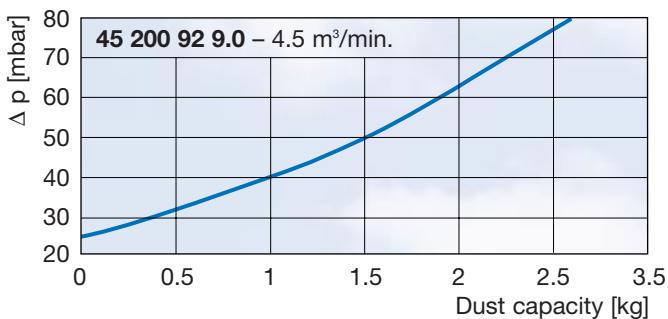
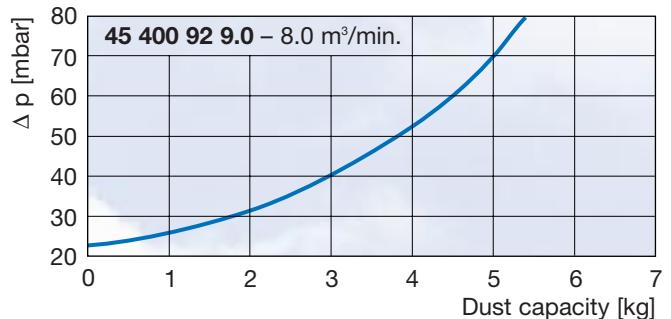
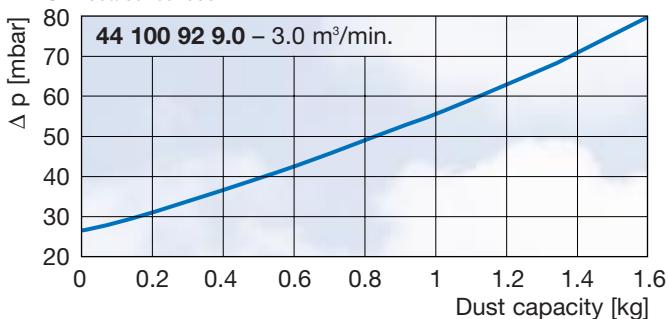
Flow characteristics without secondary element ...

... for the flow rate as per ISO 5011



... for the dust capacity as per ISO 5011

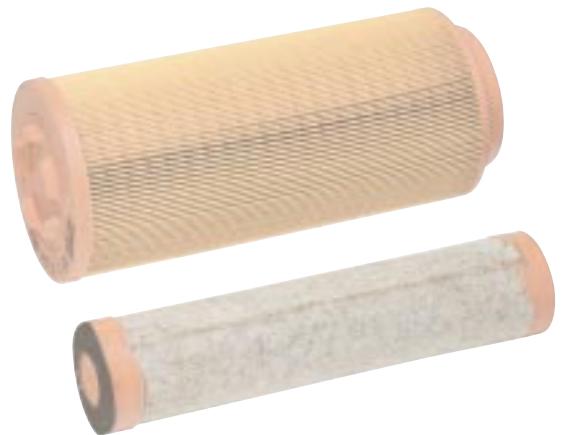
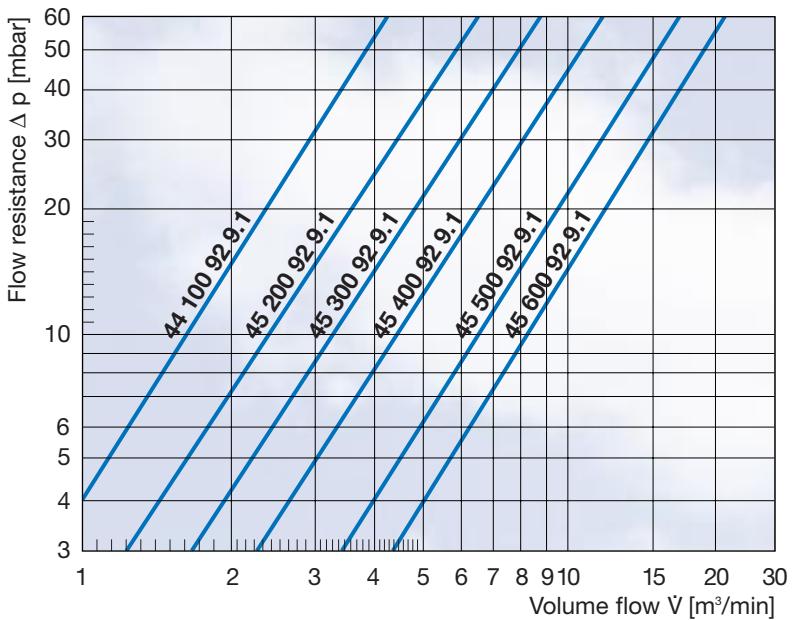
with SAE coarse test dust



MANN Europiclon

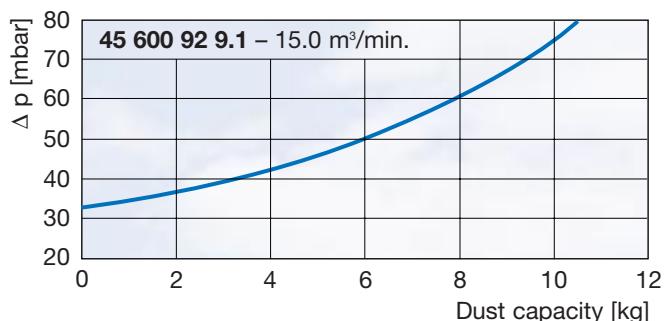
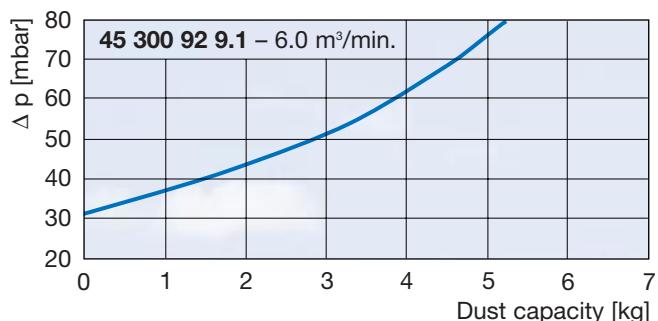
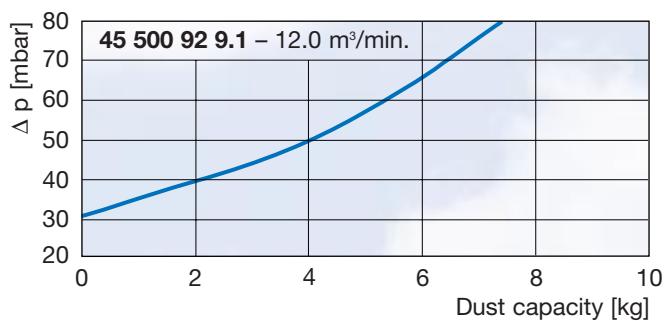
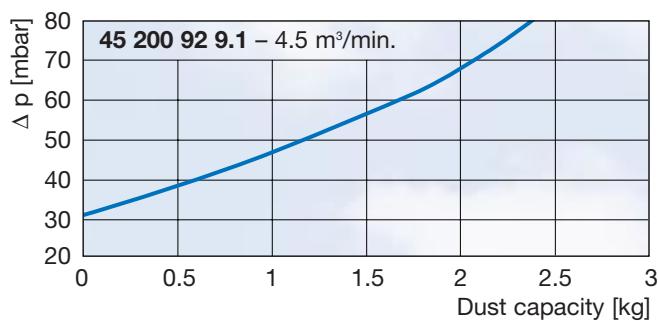
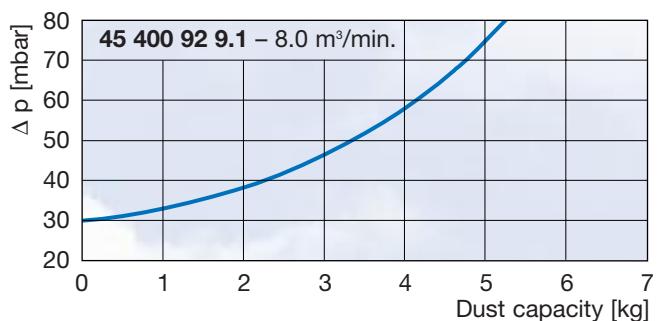
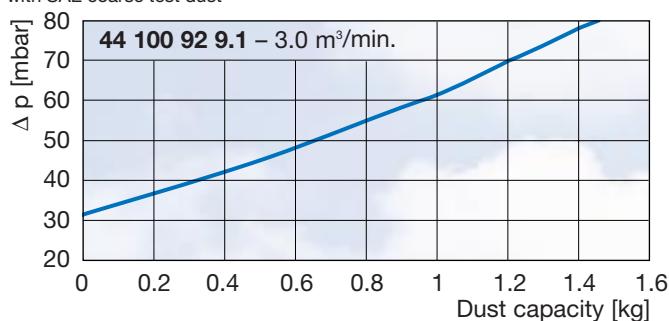
Flow characteristics with secondary element ...

... for the flow rate as per ISO 5011



... for the dust capacity as per ISO 5011

with SAE coarse test dust



MANN Europiclon for vacuum application

A vacuum filter has been developed, for use in heavy duty conditions with high dust levels and mechanical load. E.g. for construction site lorries, based on the successful Europiclon line.

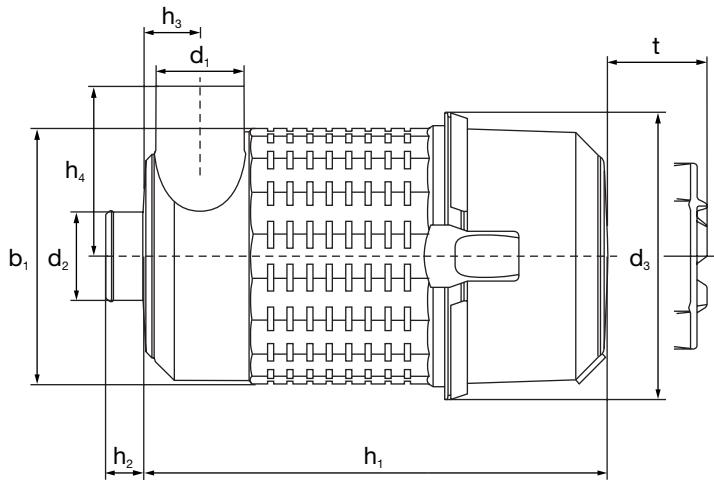
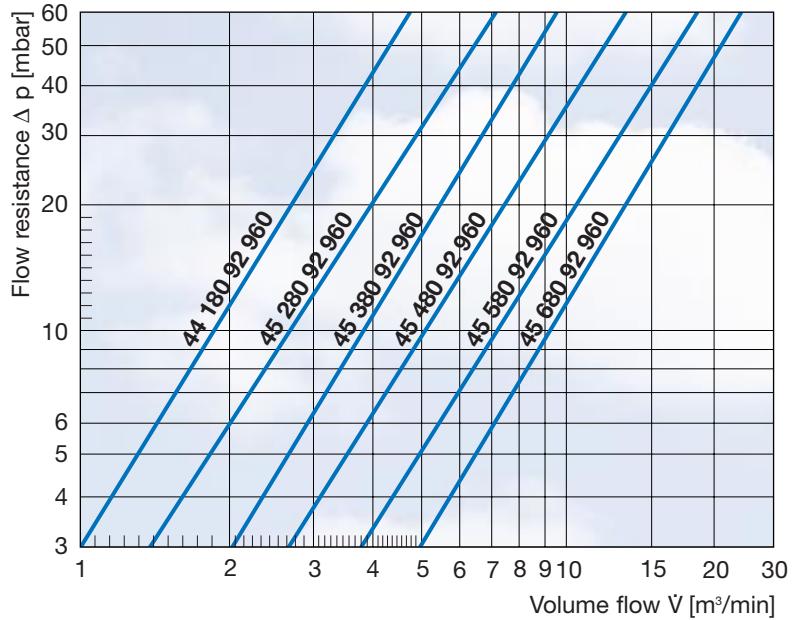


Fig. 1
Cover with snap fastener

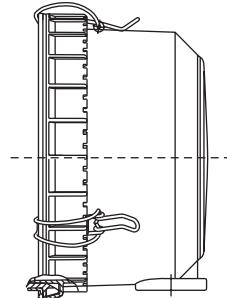


Fig. 2
Cover with wire clamps

Part No.	Fig.	Flow rate range [m ³ /min]	Dimensions in mm										Weight approx. [kg]
			b_1	b_2	d_1	d_2	d_3	h_1	h_2	h_3	h_4	t	
44 180 92 960	1	1 – 3	158	45	54	50	188	260	27	38	104	237	0.9
45 280 92 960	2	2 – 4.5	173	48	62	60	198	327	27	42	112	304	1.7
45 380 92 960	2	3 – 6	203	59	70	70	228	367	30	45	135	344	2.1
45 480 92 960	2	4 – 8	223	63	82	80	253	383	32	52	144	359	3.0
45 580 92 960	2	6 – 12	264	73	102	100	293	408	37	62	174	384	3.8
45 680 92 960	2	7.5 – 15	295	87	110	110	323	414	27	65	190	384	5.0