MANN+HUMMEL Pico-E
High performance single-stage air cleaner with very robust metal housing

Pico-E: Single-stage air cleaner with metal housing

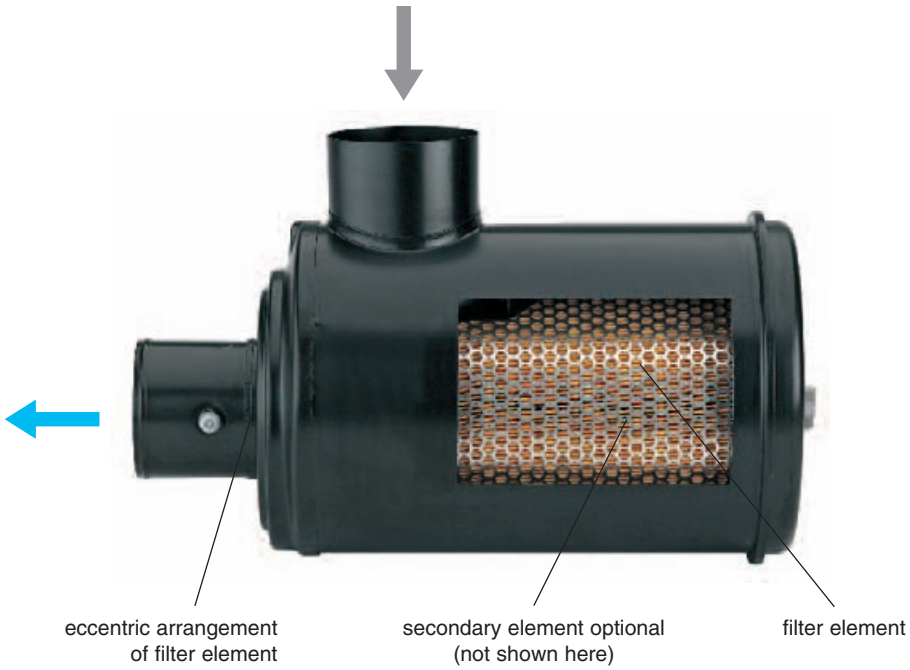
The Pico-E line from MANN+HUMMEL, with its proven single-stage air cleaners, has long been established in our range of air cleaners.

The air cleaners are particularly robust and are characterised by excellent filtration performance. They are very suitable for use in conditions with low to medium dust loads and for applications with high mechanical loads such as with stationary engines, locomotives, fire-fighting vehicles, marine applications and other applications where a low pressure drop, particularly high mechanical stability, or a flame-resistant housing are required.

Advantages at a glance:

- very robust metal design
- long filter service life with low pressure drop
- especially robust filter elements with centre tubes in metal
- secondary element available as optional extra

Sectional view



Filter elements

Filter element

- high dust capacity through special MANN+HUMMEL filter medium
- reliable pleat stabilisation prevents pleats sticking together under unfavourable conditions
- an axial tie-rod firmly welded into the housing and a fastening nut hold the element securely in the sealed position.

Secondary element

- MANN+HUMMEL synthetic fabric for a high safety margin with low pressure drop
- secure fit in housing through tie-rod and fastening nut prevent unintentional removal of the secondary element
- secondary element available as option from air cleaner size 44 114 …

The exceptionally low pressure drop of the Pico-E is made possible through the enlarged dirty air connection and eccentric arrangement of the filter element in the housing.

Pico-E

Dimensions and part numbers

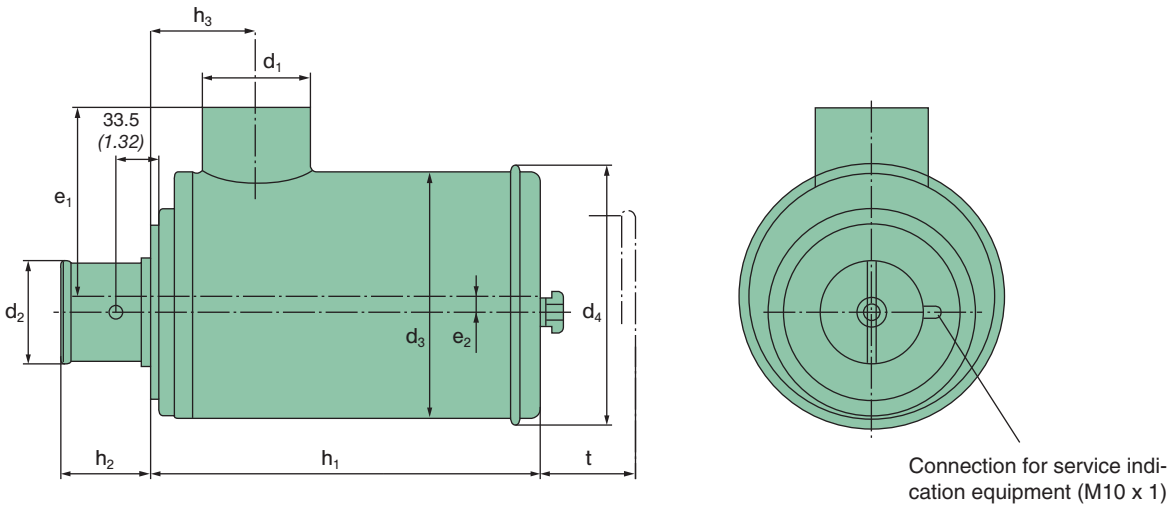


Fig. 1

Part No. without secondary element	Part No. with secondary element	Fig.	Nominal flow rate [1] [m³/min]	Replacement filter element MANN-FILTER main element	Replacement filter element MANN-FILTER secondary element	Approx. weight [2] [kg]
44 076 75 204	**–**	1	3	**C 1176/3**	**–**	1.8
44 114 75 204	**–**	1	4.5	**C 13 114/4**	**–**	2.6
44 165 75 204	**44 165 75 304**	1	6	**C 15 165/3**	**CF 700**	3.9
44 225 75 204	**–**	1	8	**C 17 225/3**	**–**	4.7
44 325 75 204	**44 325 75 304**	1	12	**C 20 325/2**	**CF 1000**	6.8
44 440 75 204	**44 440 75 304**	1	15	**C 23 440/1**	**CF 1200**	8.5
44 650 75 204	**44 650 75 304**	1	21	**C 24 650/1**	**CF 1300**	12
44 880 75 204	**44 880 75 304**	1	28	**C 30 850/2**	**CF 1600**	15
44 920 75 204	**44 920 75 304**	1	40	**C 33 920/3**	**CF 2100**	20
45 950 75 104	**–**	2	60	**C 45 4444**	**–**	57

[1] The nominal flow rate relates to a flow resistance [Δp]] of approx. 15 mbar (1.5 kPa), for air cleaners with secondary element up to approx. 22 mbar (2.2 kPa).
[2] Weight valid for versions with last digits ... 204.

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Dimensions and part numbers

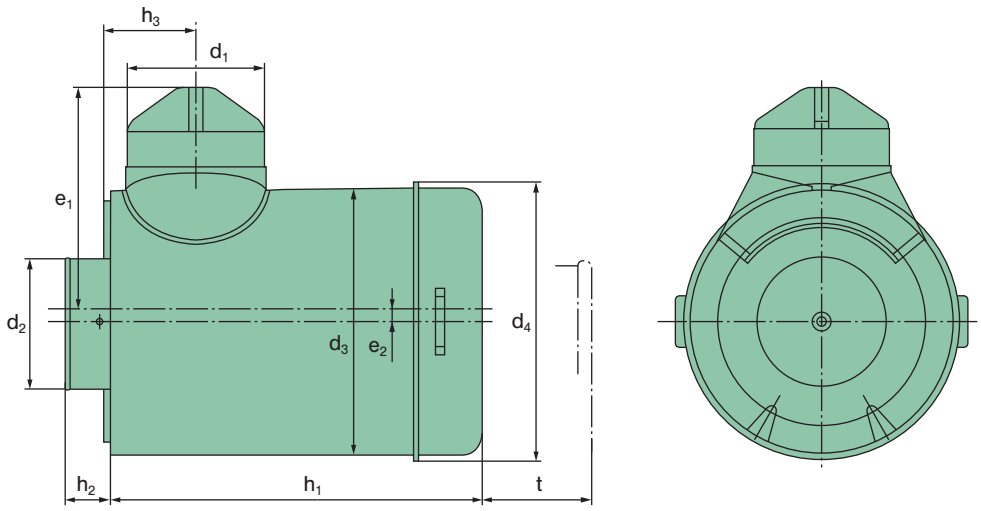

Fig. 2

Part No. without secondary element	Part No. with secondary element	Dimensions in mm *(dimensions in inches)* d_1	d_2	d_3	d_4	e_1	e_2	h_1	h_2	h_3	t [1]
44 076 75 204	–	62 *(2.44)*	50 *(1.97)*	130 *(5.12)*	148 *(5.83)*	110 *(4.33)*	5 *(0.20)*	235 *(9.25)*	70 *(2.76)*	70 *(2.76)*	235 *(9.25)*
44 114 75 204	–	68 *(2.68)*	60 *(2.36)*	150 *(5.91)*	168 *(6.61)*	125 *(4.92)*	6 *(0.24)*	303 *(11.93)*	70 *(2.76)*	75 *(2.95)*	300 *(11.81)*
44 165 75 204	**44 165 75 304**	82 *(3.23)*	70 *(2.76)*	170 *(6.69)*	188 *(7.40)*	140 *(5.51)*	6 *(0.24)*	345 *(13.58)*	80 *(3.15)*	85 *(3.35)*	345 *(13.58)*
44 225 75 204	–	102 *(4.02)*	80 *(3.15)*	190 *(7.48)*	208 *(8.19)*	155 *(6.10)*	7 *(0.28)*	360 *(14.17)*	80 *(3.15)*	95 *(3.74)*	355 *(13.98)*
44 325 75 204	**44 325 75 304**	110 *(4.33)*	100 *(3.94)*	240 *(9.45)*	258 *(10.16)*	185 *(7.28)*	16 *(0.63)*	385 *(15.16)*	90 *(3.54)*	105 *(4.13)*	385 *(15.16)*
44 440 75 204	**44 440 75 304**	132 *(5.20)*	110 *(4.33)*	270 *(10.63)*	288 *(11.34)*	210 *(8.27)*	16 *(0.63)*	400 *(15.75)*	100 *(3.94)*	115 *(4.53)*	390 *(15.35)*
44 650 75 204	**44 650 75 304**	150 *(5.91)*	130 *(5.12)*	290 *(11.42)*	308 *(12.13)*	230 *(9.06)*	16 *(0.63)*	505 *(19.88)*	105 *(4.13)*	125 *(4.92)*	500 *(19.69)*
44 880 75 204	**44 880 75 304**	180 *(7.09)*	150 *(5.91)*	345 *(13.58)*	363 *(14.29)*	265 *(10.43)*	16 *(0.63)*	490 *(19.29)*	105 *(4.13)*	142 *(5.59)*	485 *(19.09)*
44 920 75 204	**44 920 75 304**	210 *(8.27)*	200 *(7.87)*	370 *(14.57)*	388 *(15.28)*	290 *(11.42)*	16 *(0.63)*	635 *(25.00)*	105 *(4.13)*	160 *(6.30)*	615 *(24.21)*
45 950 75 104	–	315 *(12.40)*	300 *(11.81)*	610 *(24.02)*	642 *(25.28)*	445 *(17.52)*	–	850 *(33.46)*	120 *(4.72)*	185 *(7.28)*	630 *(24.80)*

[1] Removal height of the filter elements

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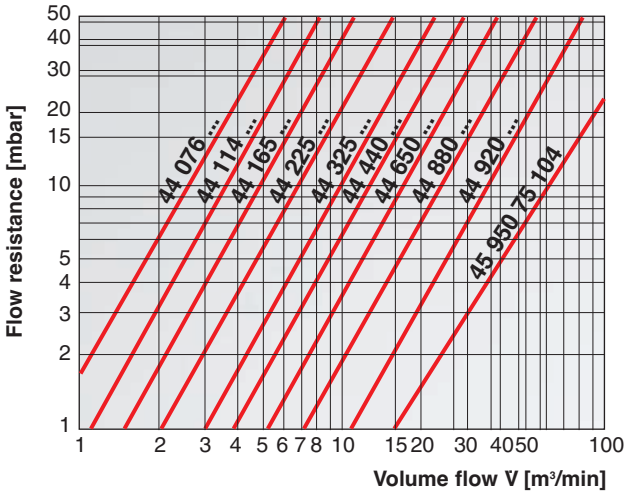
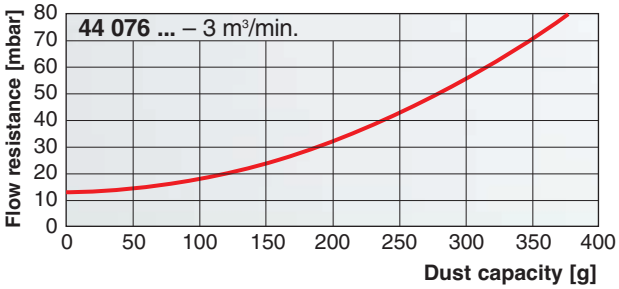
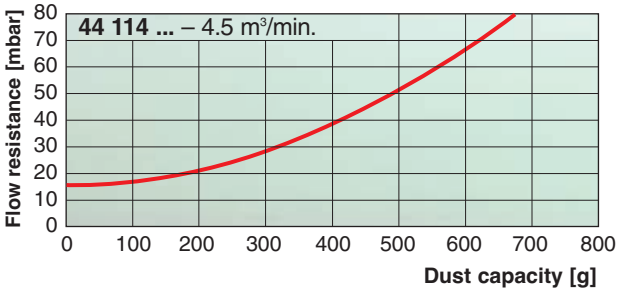
Flow characteristics without secondary element ...

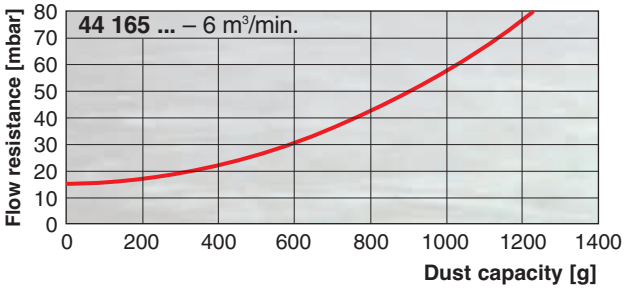
... for flow rates as per ISO 5011

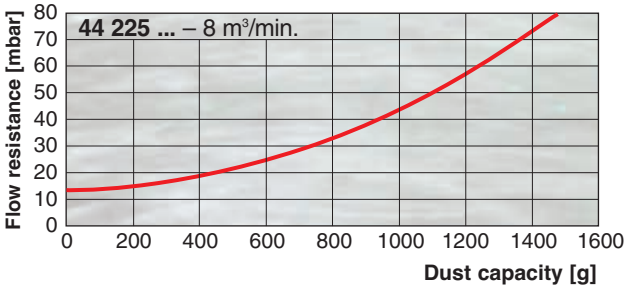


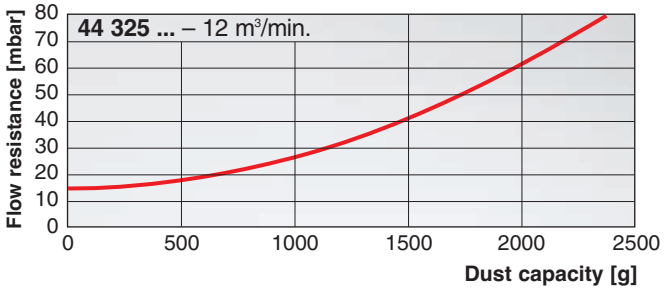
... for dust capacity as per ISO 5011
with SAE coarse test dust

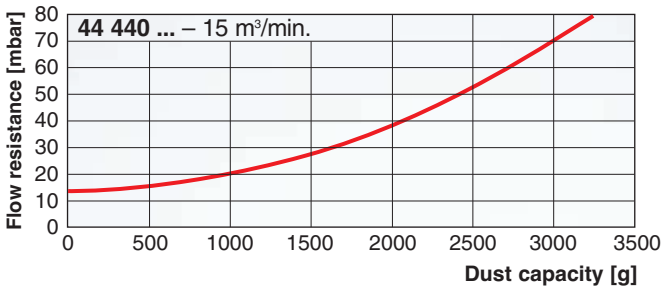


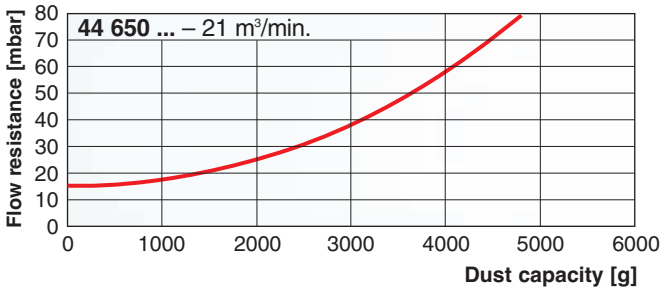


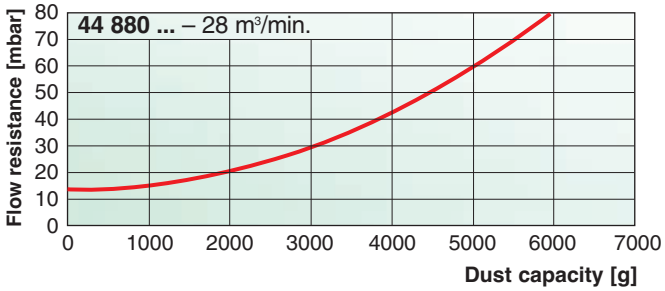


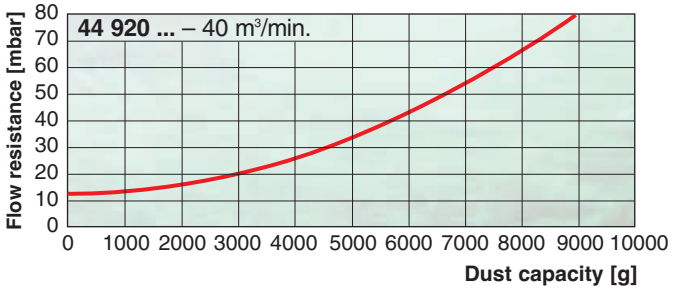


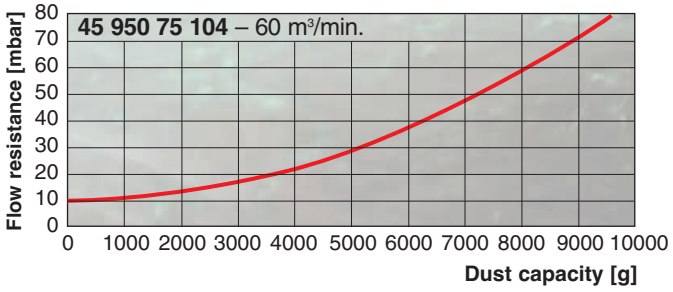












Versions for volume flows below 4.5 m³/min available on request.

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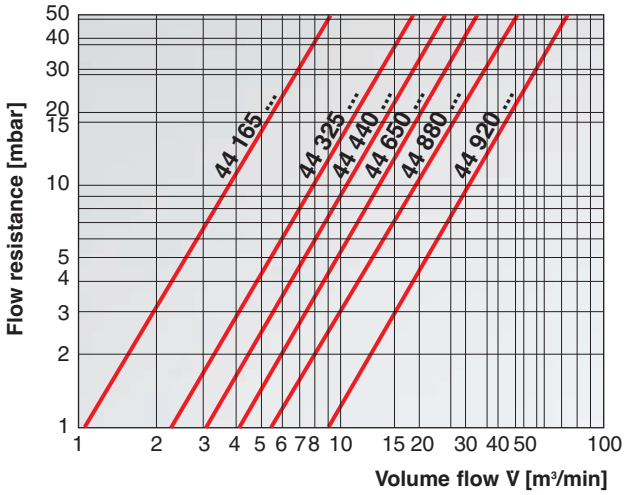
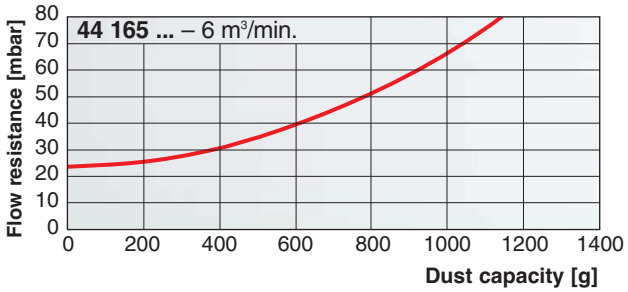
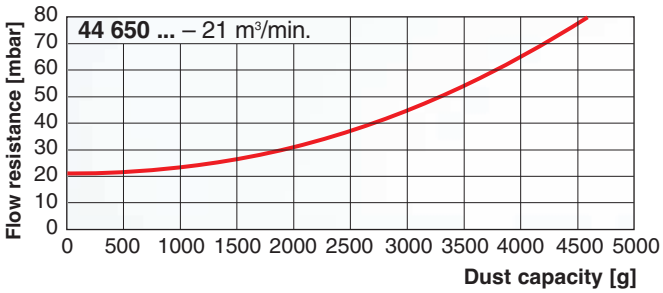
Flow characteristics with secondary element ...

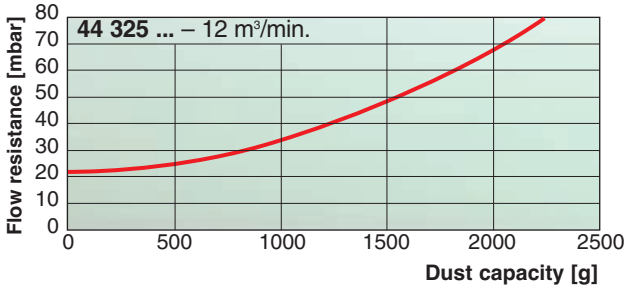
... for flow rates as per ISO 5011

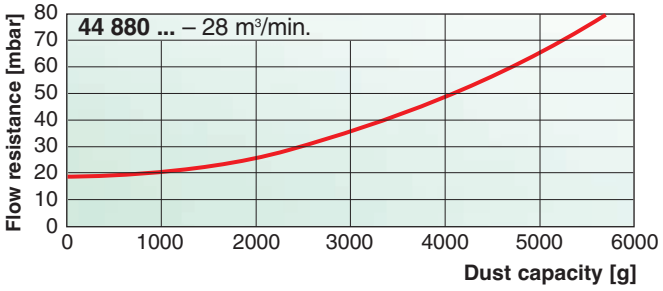


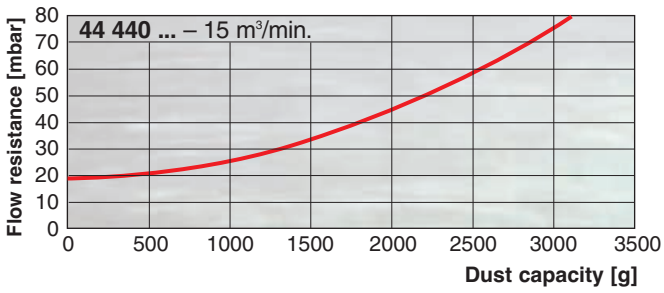
... for dust capacity as per ISO 5011
with SAE coarse test dust

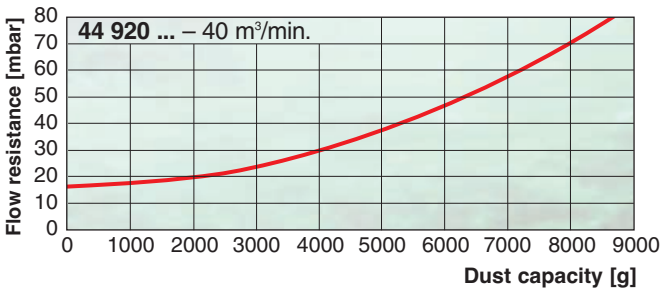












Pico-E Accessories

	Bracket (p. 97)	Rain cap design B * (p. 99)	Straight pipes connection for service indicator/service switch integrated in housing (p. 105)	90° elbow connection for service indicator/service switch integrated in housing (p. 104)
Pico-E 44 076 ...	**45 076 38 980**	**39 028 67 900**	**39 100 27 999**	**39 100 25 999**
Pico-E 44 114 ...	**45 114 38 990**	**39 040 67 900**	**39 200 27 999**	**39 200 25 999**
Pico-E 44 165 ...	**45 165 38 980**	**39 056 67 900**	**39 300 27 999**	**39 300 25 999**
Pico-E 44 225 ...	**45 225 38 990**	**39 080 67 900**	**39 400 27 999**	**39 400 25 999**
Pico-E 44 325 ...	**39 056 38 980**	**39 100 67 020**	**39 500 27 999**	**39 500 25 999**
Pico-E 44 440 ...	**45 440 38 990**	**39 160 67 020**	**39 600 27 999**	**39 600 25 999**
Pico-E 44 650 ...	**39 440 38 990**	**45 880 67 100**	**39 700 27 999**	**39 700 25 999**
Pico-E 44 880 ...	**39 880 38 940**	**39 220 67 100**	**39 800 27 999**	**39 800 25 999**
Pico-E 44 920 ...	**45 880 38 990**	**39 320 67 100**	**39 000 27 345**	**39 000 25 270**
Pico-E 45 950 ...	**45 940 38 841**	**39 640 67 100**	**–**	**–**

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

* Alternative design A possible (see page 98)