

Filter mats of the PSB series

The classic filter mats



Filter type	Filter class	Nominal media velocity [m/s]	Test standard
PSB / 145 S	G 2	2	EN 779
PSB / 275 S	G 3	1.5	EN 779
PSB / 290 S	G 4	1	EN 779



The application

The PSB series comprises the following filter mats

- PSB / 145 S
- PSB / 275 S
- PSB / 290 S

PSB filter mats are used for intake air filtration in all kinds of ventilation systems, particularly for coarse dust arrestance and as prefilter stages.

The media and their characteristic features

- The mats are made of **high performance nonwovens produced inhouse** from **elastic, break-resistant polyester fibers with thermal bonding**.
- PSB/275 S and PSB/290 S are **progressive** in structure, with layers being arranged

behind each other so as to ensure that the density of the fiber layers increases towards the clean air side. This optimizes the defined filter performance and the dust holding capacity, resulting in **longer useful lifetime for the filter** concerned.

- **Fire behaviour:** Viledon® filter media satisfy the stringent requirements of Fire Class F 1 according to DIN 53438 and are thus **self-extinguishing**.
- **Certified quality:** PSB filter mats have been **tested according to EN 779** and are manufactured under our certified quality management system to ISO 9001. This offers all users the reassuring certainty that all filters will be supplied in consistently high standardized quality, documented by marking the filter mat with brand name, type designation and filter class.

The special features of the PSB series

- Due to their **high dust holding capacity** and their **resultant long useful lifetimes**, PSB filter mats are **particularly cost-efficient**.
- All types of this series are especially effective in applications requiring **stable arrestance in spite of high dust loading and high air flow rates**.
- When used in exhaust air filtration, the advantage of the PSB series is that **arrestance and dust holding capacity are very well harmonized**.

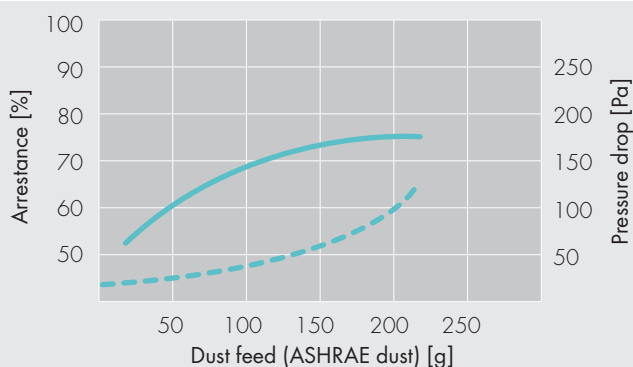
Available geometries		PSB / 145 S	PSB / 275 S	PSB / 290 S
Weight, approx.	g / m ²	120	180	300
Thickness, approx.	mm	10	15	20
Thermal stability	°C	up to 100	up to 100	up to 100
Moisture-resistance (rel. hum.)	%	up to 100	up to 100	up to 100
Supplied as rolls, useful width/length	mm / m	2,000 / 40	2,000 / 30	2,000 / 20
Supplied as cut pieces / rolls	mm	to customer's specification		

Technical filter test data to EN 779

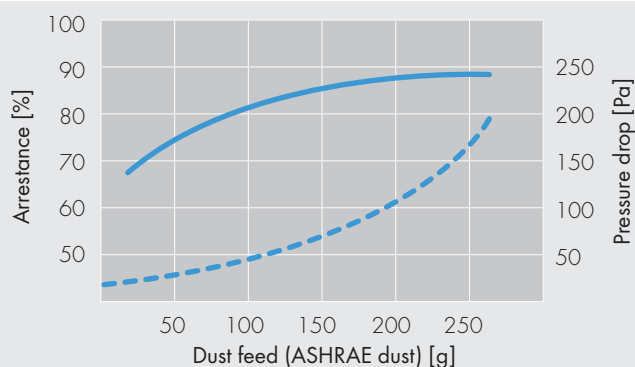
Arrestance and pressure drop

plotted against dust feed at nominal media velocity

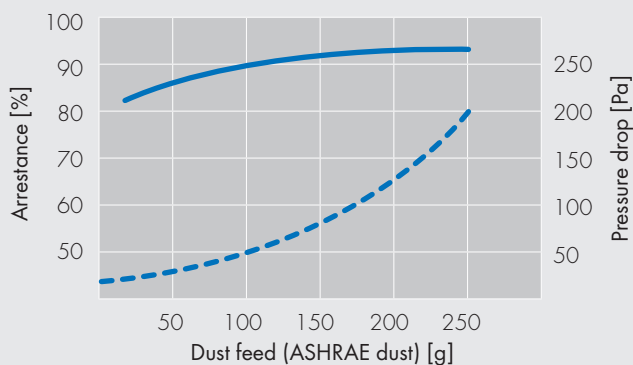
Arrestance PSB / 145 S —
Pressure drop PSB / 145 S - - -



Arrestance PSB / 275 S —
Pressure drop PSB / 275 S - - -



Arrestance PSB / 290 S —
Pressure drop PSB / 290 S - - -

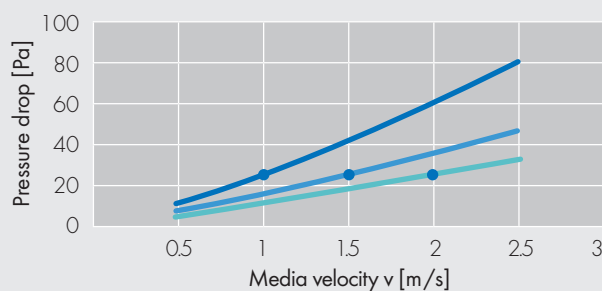


Pressure drop curves

plotted against the media velocity

Nominal media velocity ●

PSB / 145 S — PSB / 275 S — PSB / 290 S —



Key data		PSB / 145 S	PSB / 275 S	PSB / 290 S
Effective filtering area	m ²	0.37	0.37	0.37
Average arrestance A_o	%	70	83	91
Average efficiency E_o	%	< 20	< 20	< 20
Nominal media velocity ●	m/s	2	1.5	1
Initial pressure drop	Pa	22	22	22
Final pressure drop*	Pa	250	250	250
Dust holding capacity	g/m ²	600	700	750

The figures given are mean values, subject to tolerances due to normal production fluctuation. Our explicit written confirmation is always required for the correctness and applicability of the information involved in any particular case. Subject to technical alterations.

* For cost-efficiency or system-specific reasons, it may be appropriate to change the filters before reaching the final pressure drop stated. Exceeding those limits may also be possible in certain applications.

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