

# Filter mats of the P 15 series

## The ultra-durable filter mats



Filter type	Filter class	Nominal media velocity [m/s]	Test standard
P 15 / 150 S	G 2	2	EN 779
P 15 / 350 S	G 3	1.5	EN 779
P 15 / 500 S	G 4	1	EN 779



### The application

The P15 series comprises the following familiar and yet continually enhanced Viledon® filter mats

- P15 / 150 S
- P15 / 350 S
- P15 / 500 S

All the types in this series are tough, high performance products, suitable for filtration in all kinds of ventilation systems.

### The media and their characteristic features

- The mats are made of **high performance nonwovens produced inhouse** from **elastic, break-resistant polyolefine fibers with thermal bonding**.

- P 15/350 S and P 15/500 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 F1 according to DIN 53438 and are thus **self-extinguishing**.
- **Certified quality:** P 15 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 P 15 series

- High arrestance throughout their entire useful lifetime, thus providing **maximized operational reliability**.
- The **high mechanical strength of the material** used offers **good dimensional stability throughout the operational lifetime**, even when handling large air volumes, thus ensuring dependable operation of the filter system concerned.
- Thanks to the polyolefine fibers used in the medium, P 15 filter mats are **widely resistant to chemicals** like solvents, acids and alkalis. They must be protected against continuous UV radiation.
- The filter mats are **cleanable by careful washing, beating or spraying**. Even after washing, the filter mats remain dimensionally stable, thus retaining their technical filtering properties.
- Our environment-friendly filter series for users interested in **avoiding waste and cutting their filter costs**.

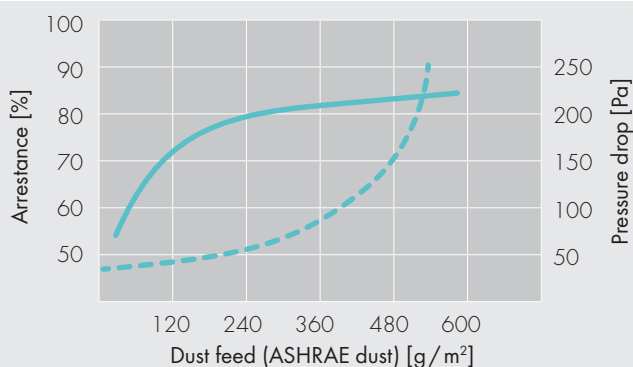
Available geometries		P15 / 150 S	P15 / 350 S	P15 / 500 S
Weight, approx.	g / m <sup>2</sup>	100	200	350
Thickness, approx.	mm	8	14	20
Thermal stability	°C	up to 100	up to 100	up to 100
Moisture-resistance (rel. hum.)	%	up to 100	up to 100	up to 100
Supplied as rolls, useful width / length	mm / m	2,000 / 40	2,000 / 30	2,000 / 20
Supplied as cut pieces / rolls	mm	to customer's specification		

# Technical filter test data to EN 779

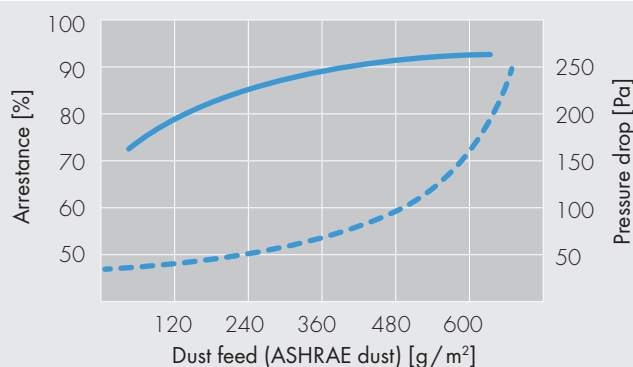
## Arrestance and pressure drop

plotted against dust feed at nominal media velocity

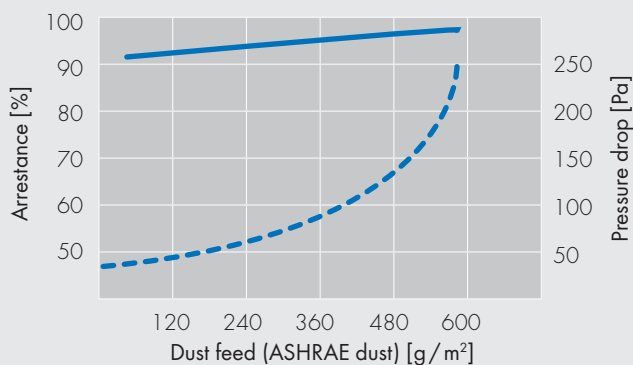
Arrestance P 15/ 150 S —  
Pressure drop P 15/ 150 S - - -



Arrestance P 15/ 350 S —  
Pressure drop P 15/ 350 S - - -



Arrestance P 15/ 500 S —  
Pressure drop P 15/ 500 S - - -

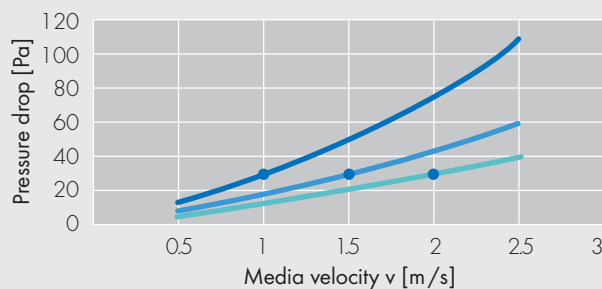


## Pressure drop curves

plotted against the media velocity

Nominal media velocity ●

P 15/ 150 S — P 15/ 350 S — P 15/ 500 S —



Key data			P 15/ 150 S	P 15/ 350 S	P 15/ 500 S
Effective filtering area		m <sup>2</sup>	0.37	0.37	0.37
Average arrestance	A <sub>a</sub>	%	75	84	94
Average efficiency	E <sub>a</sub>	%	< 20	< 20	< 20
Nominal media velocity	●	m/s	2	1.5	1
Initial pressure drop		Pa	30	30	30
Final pressure drop*		Pa	250	250	250
Dust holding capacity		g/m <sup>2</sup>	600	600	600

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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