

Allround cost-efficiency and performance: Depth-loading Filter Cartridges, TFP 95 range

The application

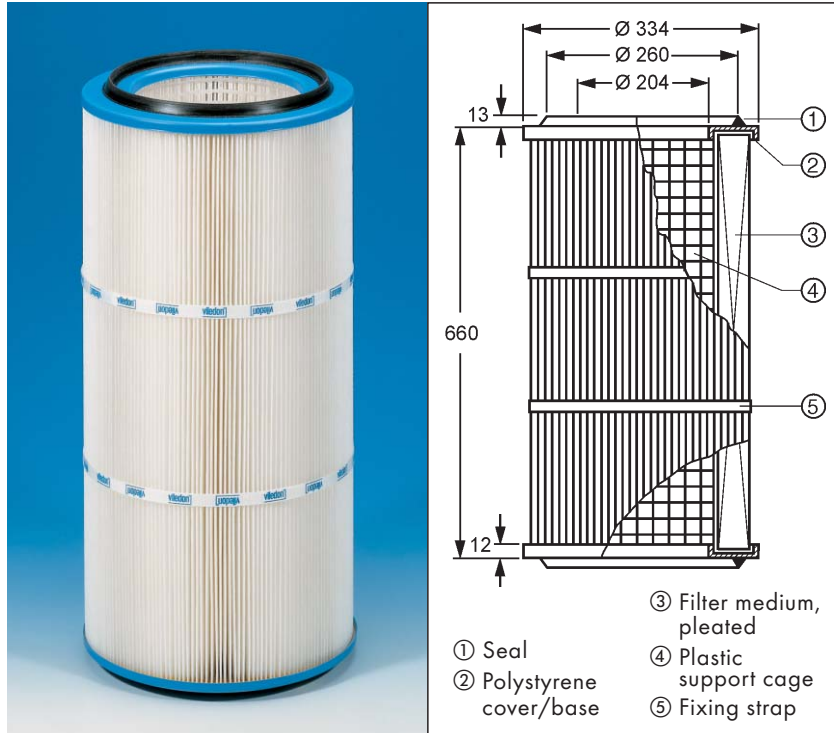
Depth-loading filter cartridges are used in supply air filtration systems for gas turbines and turbo-compressors both on and off-shore.

The concept

Viledon depth-loading filter cartridges, with their optimum pressure drop characteristics and maximized useful lifetimes, significantly enhance the cost-efficiency of turbo-machinery. They are particularly successful whenever the cleaning of surface filter cartridges does not produce any effective reduction in pressure drop, because the dust concentrations are too low and/or the dusts concerned are too sticky. Depth-loading filter cartridges are not designed for pulse-jet cleaning.

The filter medium and the design

► We use 3-layer, high-performance non-wovens from in-house production, made of synthetic-organic fibers and microfibers.
► The medium is progressive in structure, i.e. the layers of fibers become finer and denser towards the clean-air side, thus achieving an optimum in filter performance.



viledon®

Result: high arrestance, high dust holding capacity, low pressure drop, high cost-efficiency.

► The filter cartridges provide an optimized ratio between filtering area, fold depth and number of folds. The filter medium is sufficiently rigid to prevent the folds from collapsing even at high pressure drops. **Result:** the active filtering area remains fully effective throughout the entire period of operation.
► The pleated medium and the support cage are cast into the polystyrene cover and base for a leak-proof configuration.

Technical data for	TFP 95 P 66 P 2
Filtering area	11 m ²
Thermal stability	70 °C
Temporary peaks	80 °C
Moisture resistance / rel. humidity	up to 100 %
Technical filter data in broad conformity with EN 779*	
Average arrestance	> 99 %
Average efficiency	92 %
Filter class	F 8
Nominal volume flow rate	1000 m ³ /h
Initial pressure drop	approx. 110 Pa
Recommended final pressure drop	800 Pa

► The foamed-on polyurethane seal ensures optimized sealing against the mounting plate.

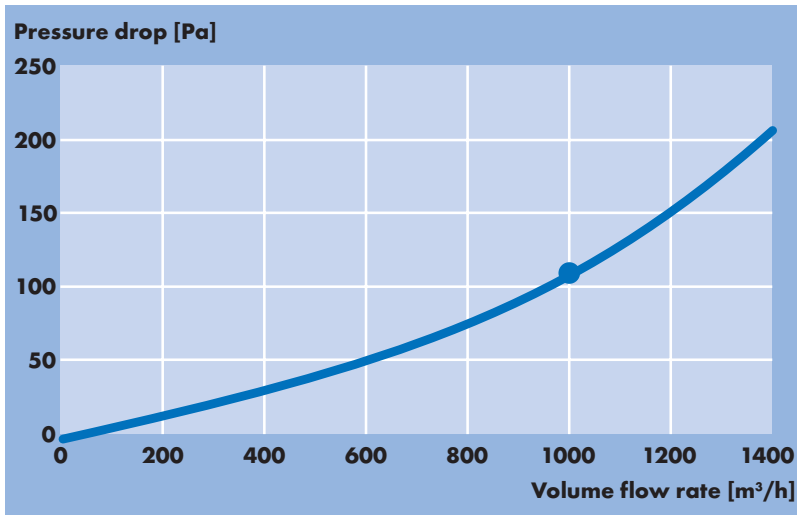
► Specially designed for locations with high fine-dust concentrations in the ambient air.

* Contrary to the standard, the cartridge is installed in the test channel using an adapter, which fits the cylindrical cartridge into the rectangular test channel.

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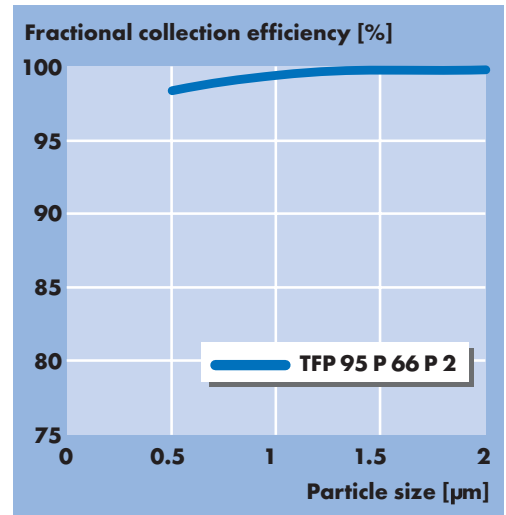
Technical filter test data for Type TFP 95 P 66 P 2

Initial pressure drop *



* These initial pressure drop values can differ from values measured in installations, as deflectors, diffusors or venturi-nozzles create an additional pressure drop.

Fractional collection efficiency **



** Test conditions:

Test at nominal volume flow rate

Operational pressure drop: 300 Pa

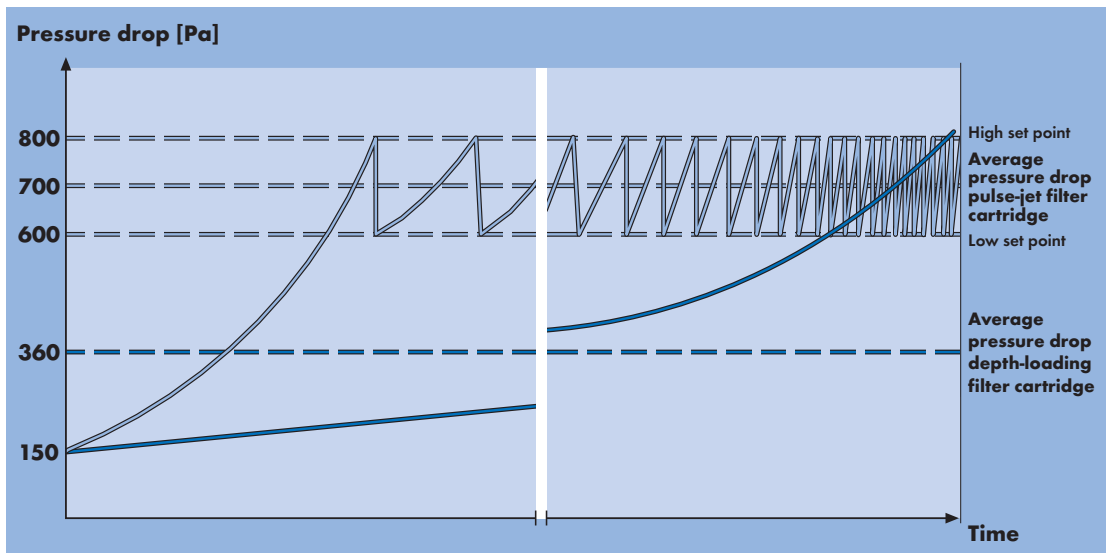
Test aerosol: DEHS

Test with laser particle counter in test channel according to EN 779

Deposited dust: ASHRAE

Comparison of pressure drops:

Pulse-jet filter cartridge – Viledon depth-loading filter cartridge



The figures given are mean values subject to tolerances due to the normal production variations. The accuracy of the data given when applied to individual cases requires our express written confirmation. Viledon® is a registered and protected trademark of Carl Freudenberg.

Further variants (e.g. metal version) and adapters (bayonet, tenkay etc.) are available on request.

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