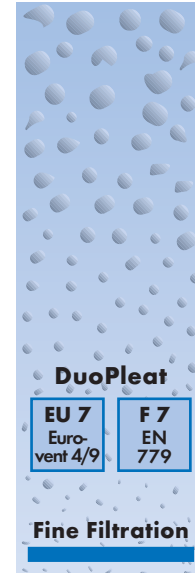
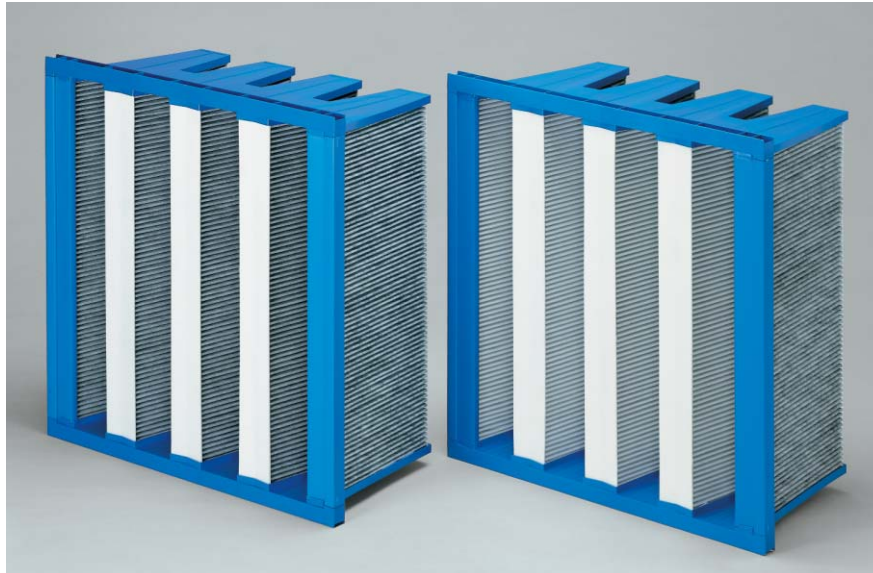


Active opposers of gases and odours: Viledon CarboPleat and DuoPleat Filters



viledon®

The application

CarboPleat activated-carbon and DuoPleat combination filters improve indoor air quality, alleviate feelings of ill-health in connection with the Sick Building Syndrome, and protect people as well as sensitive products, processes and equipment, by eliminating or reducing pollutant gases and unwanted odours.

They are used in intake, exhaust and recirculated air filtration involving special requirements for clean air quality, e. g.

- ▶ in state-of-the-art air-conditioning and indoor climate control systems (hospitals, laboratories, printshops, catering kitchens, museums, airports, shopping malls, hotels, banks, office buildings, etc.)
- ▶ in compact air-conditioners
- ▶ as prefilters for HEPA and ULPA filters.

The special features and benefits

- ▶ The activated-carbon media in both filters are secured in an open structure by a **newly developed, patented bonding process**, achieving **maximized active surface for gas adsorption**.
- ▶ DuoPleat filters are activated-carbon and particle filters in one: their unique filter media combine the special activated-carbon medium with a triple-layered high-performance nonwoven of synthetic-organic fibers and microfibers on the upstream side. This enables **Class F7 particle filtration and effective gas adsorption**

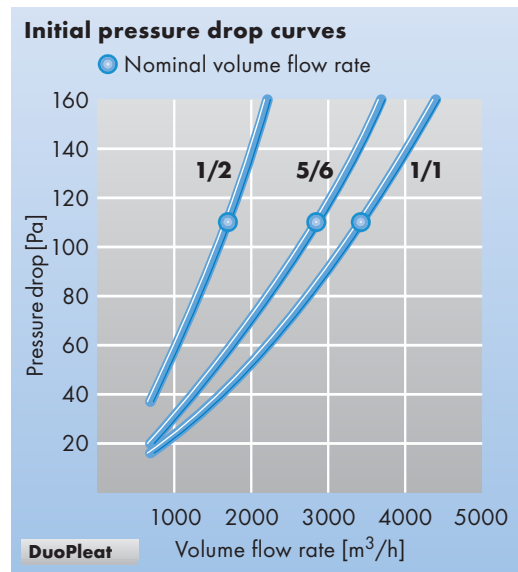
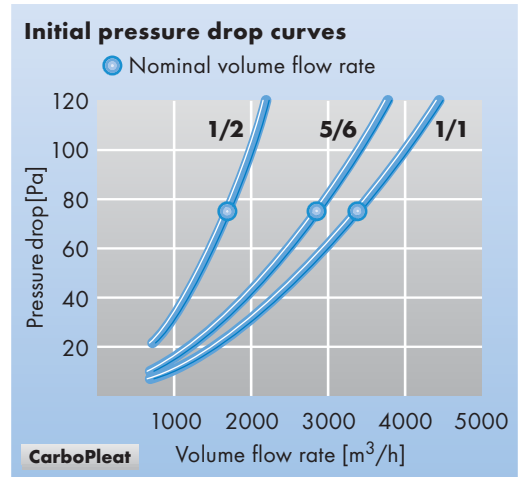
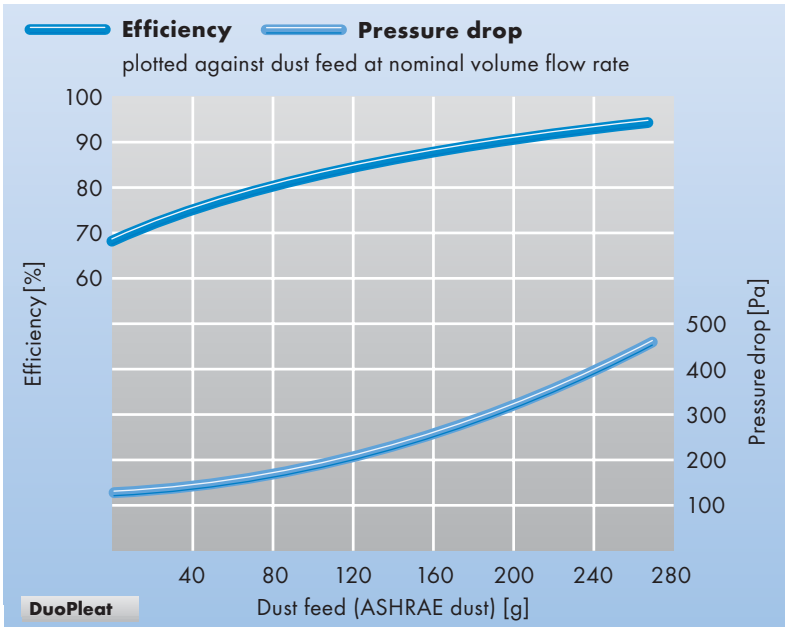
CarboPleat / DuoPleat		1/1	5/6	1/2
▶ Dimensions	mm	592x592x318	592x490x318	592x287x318
▶ Weight, approx.	kg	9.0 / 9.7	7.9 / 8.5	4.8 / 5.1
▶ Activated carbon weight, approx.	kg	4.4	3.5	1.9
▶ Thermal stability	°C	70	70	70
▶ Filtering area	m ²	9.8	7.9	4.3
▶ Recommended application				
- temperature	°C	≤30	≤30	≤30
- relative humidity	%	≤60	≤60	≤60
▶ for mounting frames	mm	610x610	610x508	610x305

tion to be handled in a **single filter stage**, i.e. without any structural modifications to existing systems.

- ▶ The pleated filter media are mounted in a plastic-framed V-configuration, and cast-sealed to preclude leaks. The large filtering area installed, together with the unique structure of the filter media, provides not only a particularly high storage capacity and a long useful lifetime, but also very low pressure drops. **Your benefit: exceptionally cost-efficient and reliable operation.**
- ▶ The filters are glassfiber-free, self-extinguishing to DIN 53438 (Fire Classes F1/K1), as well as non-corrosive and fully incinerable, since metal-free.
- ▶ Our Modern quality management to ISO 9001 ensures consistently high quality for every filter.

Freudenberg

Technical filter test data to EN 779 and E DIN 71460/2



Key data			CarboPleat	DuoPleat
▶ Average efficiency	E_m	%	—	85
▶ Nominal volume flow rate	●	m ³ /h	3400	3400
▶ Maximum volume flow rate		m ³ /h	4250	4250
▶ Initial pressure drop		Pa	75	110
▶ Final pressure drop*		Pa	—	450
▶ Filter capacity **				
– organic substance Toluene		g	910	910
– organic substance n-Butane		g	105	105
– inorganic substance SO ₂		g	210	210
▶ Dust holding capacity (AC Fine/450 Pa)		g	—	530

* For cost-efficiency or system-specific reasons it may be appropriate to change the filters before reaching the stated final pressure drop. It can also be exceeded in certain applications.

** The filter capacity was determined for upstream concentrations of the substances according to DIN 71460 / part 2 (draft): "Air filters for motor vehicle compartments / Test method for adsorptive filters". Use at lower concentrations will result in lower filter capacity as well.

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

Subject to technical alterations.

You will find instructions on how to handle and dispose of loaded filters in our information on product safety and eco-compatibility.