

AFP-AZ Comfort

Rigid Pocket Filter for Odour Removal



CLEAN
AIR



POWER
GENERATION



CLEAN
ROOM



INDUSTRIAL

Odour removal filter AFP-AZ Comfort is an efficient solution for removing gaseous, odorous compounds from room air. Odours may occur in ambient air, fed to a building, due to impact from a car or airplane exhaust. Moreover they occur due to material emissions and processes indoors.

AFP-AZ Comfort removes odours efficiently and for a long service time. It improves the air quality and positively affects symptoms relating to "Sick Building Syndrome".

AFP-AZ Comfort purifies the air by making use of a high-quality activated carbon composite material. The composite material is based on fine grain granular adsorbents embedded into a synthetic textile matrix.

AFP-AZ Comfort filters can be supplied in 4 standard sizes.

KEY FACTS

- Nominal air flow of 3,400 m³/h per cell: Suitable for environments with high air flows requirements
- Low Pressure Drop: Reduces energy consumption and lowers operating costs
- Large filter surface of 10 m²: For a longer life and high retention capacity
- Activated carbon composite material: No dust generation
- Fully incinerable, plastic cavity profile frame: For simple, environmentally-friendly disposal
- Lightweight: Simplifies handling, installation and removal
- Compact - installation depth only 300 mm: Installed in standard bag filter framework
- Self supporting and rigid: For reliability in operation



AFP-AZ Comfort Design and Installation

DESIGN

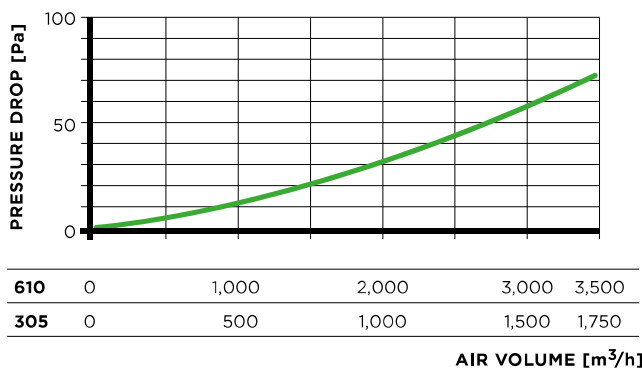
AFP filters are designed as rigid cellular 4-V filters with mini-pleated media in a header frame, to fulfil the demands of industrial applications.

Using a mini-pleated composite media, there is no risk of settlement of sorbent material and leakage as in systems using sorbents in bulk form. The design of the composite filter material, the production parameters and the optimised flow design of the rigid cell, provide the best possible conditions for low and stable pressure drop in operation, as well as homogeneous filter flow. Generally polyurethane is being used to cast the activated carbon pleat packs to the frame. With the implementation of self-sealing pleat packs this is not necessary anymore with the advantage that undesired outgassing of the polyurethane can be avoided.¹⁾

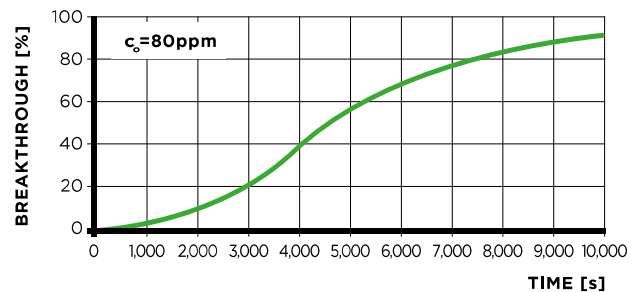
INSTALLATION AND DISPOSAL

AFP-AZ Comfort can be easily installed in standard fine dust filter frames. Install the filter in a vertical position (Vertical V's). Service life should be two years under normal conditions of climate and air contamination, but filters should be changed and serviced according to national hygienic standards for air handling units. Filters that have been used under standard environmental conditions can be disposed as industrial waste (incineration/landfill, please refer to local regulations). Filters soiled by toxic and/or radioactive constituents must be disposed as hazardous waste in accordance with local regulations.

PRESSURE DROP VERSUS AIR FLOW



TOLUENE ABSORPTION (FOR AZ-610)



¹⁾ Operational pressure should not exceed 500 Pa.

AFP-AZ Comfort

Technical Data

Technical Data	Unit	610	508	420	305
Nominal Air Flow (normal service life)	m ³ /h	3,400	2,700	2,300	1,700
Pressure Drop	Pa	70	70	75	75
Nominal Air Flow (long service life)	m ³ /h	1,700	1,350	1,150	850
Pressure Drop	Pa	22	22	25	30
Total Weight Carbon Weight	Kg	8.8 5.1	7.6 4.2	6.6 3.3	5.2 2.3
Spontaneous Efficiency - toluene ¹⁾	%	> 95	> 95	> 95	> 95
Adsorption Capacity ¹⁾	g	950	750	600	400

Operation Conditions	
Maximum Operation Temperature	< 50 °C
Recommended Operation Temperature ³⁾	< 30 °C
Maximum Relative Humidity ³⁾	< 90 %
Recommended Relative Humidity	< 60 %

Materials	
Frame Material	Polystyrene, free of halogenated compounds, incinerable ²⁾
Filter Material	Synthetic meltblown composite; synthetic fibre composite material with fine grain activated carbon embedded

1) For toluene c₀=80 ppm, acc. to ISO 11155-2, capacity until 95% breakthrough.

2) Flammability classification of materials used: F1/K1 according to DIN 53438.

3) Deviations from the operation condition cause a reduction of efficiency.

Deviation from more than one of the operation conditions would cause a significant loss of performance.

DIMENSIONS (mm)

