

AFP-AZ Duo

Combined Odour and Particle Filtration



CLEAN
AIR



POWER
GENERATION



CLEAN
ROOM



INDUSTRIAL

AFP-AZ Duo filters are an efficient solution to remove both particles and gaseous, odorous compounds in one filter stage. Particles and dust occur in ambient and indoor air due to natural sources, traffic and production processes.

Odours may occur in ambient air, fed to a building, by impact of car or aircraft exhaust. Moreover they occur due to material emissions and processes indoors, and as a consequence on return air.

AFP-AZ Duo removes particles from the air stream by a first layer of high efficiency synthetic fibres. This layer performs according to filter class F7 (EN 779). Moreover, AFP-AZ Duo purifies the air by 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 Duo is available in 4 standard sizes.

KEY FACTS

- Nominal air flow of 3,400 m³/h per cell: Suitable for environments with high air flows requirements
- Particle filtration and odour removal in one stage: Saves time, space and money
- 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 Duo

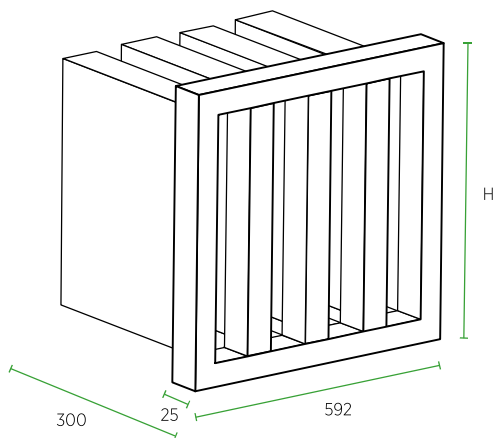
Technical Data

Technical Data	Units	610	508	420	305
Nominal Air Flow (normal service life)	m ³ /h	3,400	2,700	2,300	1,700
Pressure Drop	Pa	120	120	130	130
Nominal Air Flow (long service life)	m ³ /h	1,700	1,350	1,150	850
Pressure Drop	Pa	50	50	60	60
Total Weight Carbon Weight	Kg	9.0 4.2	7.7 3.4	6.2 2.9	4.8 1.9
Average Removal Efficiency - Em ¹⁾	%	88	88	88	88
Dust Holding Capacity (AC fine, 450 Pa)	g	550	480	350	260
Spontaneous Efficiency - Toluene ²⁾	%	> 95	> 95	> 95	> 95
Sorption Capacity ²⁾	g	950	770	640	430

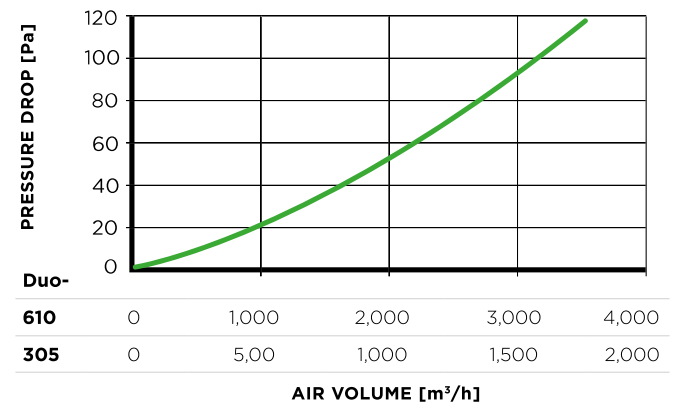
INSTALLATION AND DISPOSAL

AFP-AZ Comfort can be easily installed in standard fine dust filter frames. 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/land II, please refer to local regulations). Filters soiled by toxic and/or radioactive constituents must be disposed as hazardous waste in accordance with local regulations.

DIMENSIONS (mm)



PRESSURE DROP VERSUS AIR FLOW



Materials	
Frame Material	Polystyrene, free of halogenated compounds, incinerable ³⁾
Filter Material	Synthetic meltblown composite; synthetic fibre composite material with fine grain activated carbon embedded
Sealant	Polyurethane

Operation Conditions	
Maximum Operation Temperature ⁴⁾	< 50 °C
Recommended Operation Temperature	< 30 °C
Maximum Relative Humidity ⁴⁾	< 90 %
Recommended Relative Humidity	< 60 %

1) Filter class according to EN 779:2002. 2) Test according to DIN 71460 "Road vehicles - air filters for passenger compartments - Part 2: Test for gaseous filtration".

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

4) 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.