

Ultrac AKP

Silicone free adsorption filter for removal of oil vapour and hydrocarbons as well as odours

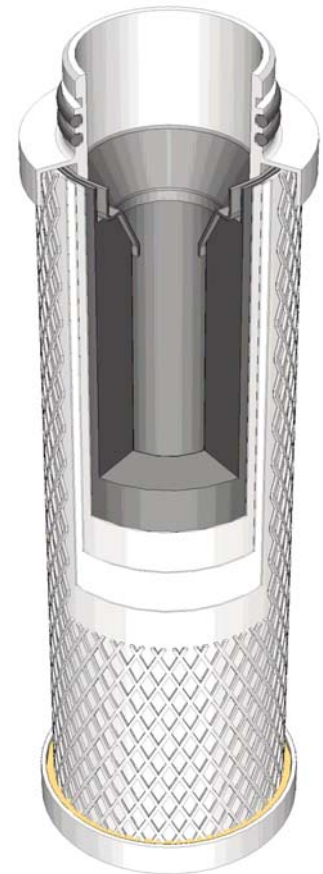
Product description:

The silicone free adsorption filter Ultrac AKP consists of 2 filter stages. At the adsorption stage oil vapour, hydrocarbons and odours are removed by adsorption at activated carbon. Particles are removed at the depth filter stage, consisting of microfibre fleece. In addition, support fleece and an outer stainless steel support sleeve ensure the adjustment of the adsorption and filter stage.

Characteristics:

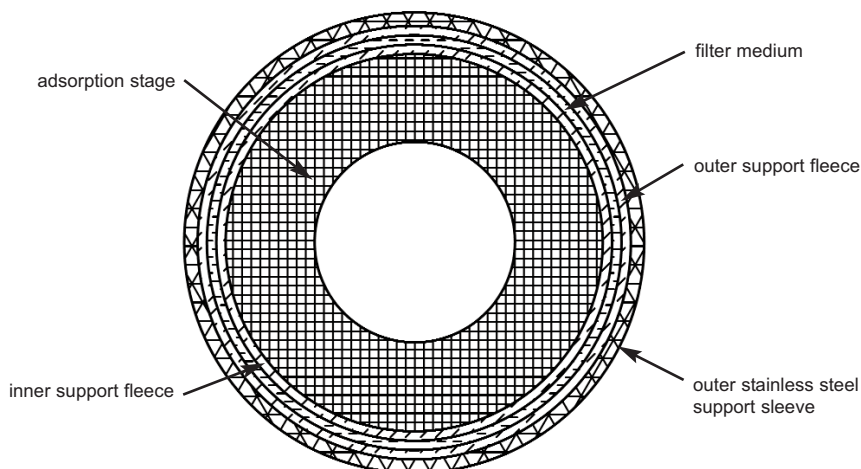
A special flow insert ensures optimum flow distribution at flow direction through the filter from inside to outside. This creates minimum pressure loss and ensures fully utilization of the filter material.

At appropriate pre purification (see „Recommended pre purification“) a residual oil content of $< 0,003 \text{ mg/m}^3$ is achieved.



Cross section of the Ultrac adsorption filter

Adsorption filter design



Applications:

The Ultrac adsorption filter is for example being used in the following industries

- Automobile industry (applications of lacquer finishes)
- Chemical industry
- Petrochemical industry
- Pharmaceutical industry
- Breathing air supply
- Prefiltration of sterile air
- Filling machines
- Packaging machines
- Food industry
- Beverage industry
- Process industry for instrumentation and control air

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Features:	Benefits:
High packing density and inner surface of activated carbon foam	High adsorption capacity and improved efficiency guarantee optimum purification performance over the whole life time
Flow distributor at filter inlet	Reduces flow resistance and ensure optimum oncoming flow of the adsorption material
Activated carbon incorporated into support foam	Prevention of activated carbon abrasion
Microfibre fleece depth filter stage at filter outlet	Improvement of particle retention - class 2 acc. to ISO8573- 1 achievable

Materials:	
Adsorption stage	Activated carbon granulate, embedded into PUR ester foam
Filter medium	Binderfree borosilicate
Support fleece	Polyamide fleece
Bonding	Polyurethane
End caps	Aluminium
2 O-Rings	Viton, labs-free
Support-sleeves	Stainless steel 1.4301/ 304

Adsorption efficiency of AKP	
Some example:	
Ethane	D
Toluene	A
Acetic acid	A
Methanol	B
Acetone	B
Isopropyl ether	A
Methyl acetate	B
Sulphuric acid	A
Hydrogen sulphide	C
Chlorine	B
Freon	C
Ammonia	C
Citrus fruits	A
Perfumes	A

Key:
A= very good
B= good
C= poor
D= slight

Recommended application temperature:
+10°C...+40°C (Tmax = +60°C)

Recommended pre purification:
Residual oil content < 0,01 mg/m ³ , e.g. by sub microfilter SMFP

Retention rate:
Residual oil content < 0,003 mg/m ³ , at appropriate pre purification

Initial differential pressure at nominal flow:
0,07 bar