

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

Applications:

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

- Automobile industry
 (applications of lacqer 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

adsorption stage inner support fleece

Adsorption filter design

Technical alterations reserved (R01/ 2010/02/05)

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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:	iterials:		
Adsorption	Activated carbon		
stage	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-	Stainless steel		
sleeves	1.4301/ 304		

Adsorption effiency Some example:	of AKP	
Ethane	D	
Toluene	А	
Acetic acid	А	
Methanol	В	
Acetone	В	
Isopropyl ether	A	
Methyl acetate	В	
Sulphuric acid	А	
Hydrogen sulphide	С	
Chlorine	В	
Freon	С	
Ammonia	С	
Citrus fruits	A	
Perfumes	A	
Кеу:		
A= very good		
B= good		

C= poor

D= slight

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

Residual oil content < 0,01 mg/m³, e.g. by sub microfilter SMFP

Retention rate:

Residual oil content < 0,003 mg/m³, at appropriate pre purification

Initial differential	pressure at
nominal flow:	

0,07 bar