

# Ultrac® AK

The adsorption filter for the removal of oil vapour and other hydrocarbons with absolute retention efficiency.

## Product description:

The adsorption filter AK offers double security due to the filter medium Ultrac®. A two stage adsorption process within the filter element ensures that all vapour and gaseous hydrocarbons or other odours are being retained effectively.

## Characteristics:

The two stage adsorption efficiency offers a large adsorption surface and thus a longer service life time and a high economy of operation. The stainless steel support sleeves as well as the filter material securely hold the activated carbon and ensure that no activated carbon particles are being passed on into the process.



Cross section of the Ultrac® adsorption filter

## Applications:

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

- 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

## Ultrac® AK

| Features:   | Benefits:                                   |
|---|---|
| Special unique design of the activated carbon within the filter element | Improved efficiency by long adsorption time |
| Recommended temperature range: 50-104°F (T max. = 150°F)                | Optimum adsorption efficiency               |

| Materials :                       |   |
|-----------------------------------|---|
| Filter medium                     | Finest grounded activated carbon being imbedded between binderfree micro fibre fleece |
| Bonding                           | Polyurethane  |
| End caps                          | Aluminium   |
| 2 O-Rings                         | Perbunan-silicon-free and free of compound (standard)                                 |
| Support-sleeves - inner and outer | Stainless steel 1.4301/ 304   |

| Adsorption efficiency of AK<br>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= sight     |

| Retention rate:   |
|---|
| Residual oil content 0.003 ppm, in combination with SMF |

| Max. differential pressure:                       |
|---|
| 72.5 psi at 68°F, irrespective of system pressure |

| Initial differential pressure at nominal flow: |
|--|
| 1.16 psi                                       |

| Element-Type | Correction factor Filter surface KF |
|--------------|-------------------------------------|
| 02/05        | 0.08                                |
| 03/05        | 0.10                                |
| 03/10        | 0.12                                |
| 04/10        | 0.17                                |
| 04/20        | 0.19                                |
| 05/20        | 0.25                                |
| 05/25        | 0.32                                |
| 07/25        | 0.47                                |
| 07/30        | 0.68                                |
| 10/30        | 1.0                                 |
| 15/30        | 1.55                                |
| 20/30        | 2.10                                |
| 30/30        | 3.20                                |
| 30/50        | 5.65                                |

