



# VariSorb™ XL Chemical Filter

## Pleated Compact Filter

- **Standard Dimensions**
- **Sturdy Construction**
- **Corrosion-free, non-metal construction**
- **Fully incinerable**
- **Free of halogens**
- **For Fresh Air AHU and Recirculation Units**



### Construction

VariSorb XL delivery system consist of filter elements in high impact polystyrene (HIPS) cell sides for assembly in front or rear access standardized universal holding frames or side-access track systems to fit standard dimension filter sections in air handling units. VariSorb XL comes factory-ready for installation. No special tools are needed to install or replace the filter element. The individual VariSorb XL seals and holds in the frame with the latching system or in the track with its header and the track-specific gasket system. Side seals gaskets are supplied upon request.

### Filter Elements

VariSorb XL filters are designed for effective gas-phase removal of medium and low concentrations of gas-phase contamination in fresh air and recirculation air handling systems. HIPS cell sides are fitted with pleated packs, comprising micro granulate media embedded between two non-woven synthetic support

layers. The pleat packs are arranged in a V-shape to utilize maximum amounts of media for the given face area. Each VariSorb is plastic bagged and carton packed.

### Spontaneity and Yield

Unlike traditional granular bed chemical filters, the granular microstructure ensures a much higher effective active area per kg of media, resulting in a high spontaneity of reaction. Combined with the dense packing of the microstructure, this creates a tortuous path for the contaminant, resulting in a high yield for the filter. The construction greatly reduces pressure drop, eliminates by-pass and abrasion. The entire VariSorb can easily be disposed-off and is fully incinerable. Always follow the local, state or federal regulations for disposal.

### Choice of Media

VariSorb can be supplied with a wide range of gas specific media or custom blends. These include standard SAAFCarb media,

impregnated SAAFCarb media, SAAFOxidant and SAAF Blend. For details consults our Chemical Media brochure.

### Application Guide

Always use adequate prefiltration to avoid dust settling on the chemical media. This ensures optimized lifetime of the chemical filter system without increase of pressure drop. Prefiltration should be a compact, pleated or mini-pleated filter cell.

|                             |         |
|-----------------------------|---------|
| Prefiltration to EN779:2002 | F7      |
| Relative Humidity           | < 95%   |
| Temperature                 | < 55 °C |

### Service

AAF International will be pleased to offer you a maintenance contract for your chemical filter system. This includes removal of the used elements, cleaning of the installation and installation of new elements. Disposal in accordance with regulations is part of our scope.

Better Air is Our Business®



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## Specifications

|                               |                                      |
|-------------------------------|--------------------------------------|
| Maximum operating temperature | < 55°C                               |
| Maximum relative humidity     | < 95 % r.H.                          |
| Media                         | Mini-granulate, embedded in fibermat |
| Cell Sides                    | High Impact Polystyrene (HIPS)       |
| Disposal                      | Incineration                         |

## Technical Data

| Type           | Dimensions <sup>1)</sup><br>mm<br>(HxWxD) | Airflow<br>(m <sup>3</sup> /h) |         | Initial Resistance<br>at Nominal<br>Airflow (Pa) |
|----------------|---|--------------------------------|---------|--|
|                |   | Nominal                        | Maximum |  |
| VSXL- 24.24.12 | 592 x 592 x 292                           | 1700                           | 3400    | 45   |
| VSXL- 12.24.12 | 287 x 592 x 292                           | 850                            | 1700    | 45   |

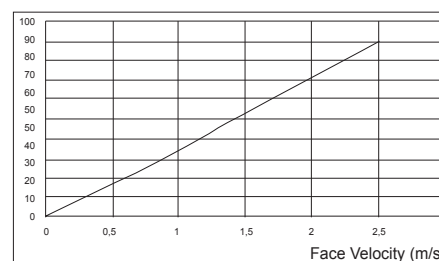
### Notes

<sup>1)</sup> Width and height are interchangeable; pleats can be either vertical or horizontal without affecting performance.

## Media

| Type        | Application             | Contaminants                      |
|-------------|-------------------------|-----------------------------------|
| SAAFCarb    | Airports, Pharma & Food | Hydrocarbons                      |
| SAAFCarb MA | Industry                | Mineral acids                     |
| SAAFCarb MB | Industry                | Ammonia, amines                   |
| SAAFCarb MS | Industry & Waste water  | H <sub>2</sub> S, SO <sub>2</sub> |

## Initial Resistance vs. Face Velocity



## Legend

| Type   | VSXL                | SAAF VariSorb XL                                      |
|--|---------------------|---|
| Nominal size code (inch)   | 242412              | Nominal sizes are 12,20,24<br>Always 12" deep         |
| Header   | -<br>A              | 25 mm header<br>20 mm header                          |
| Media  | -<br>MA<br>MB<br>MS | SAAFCarb<br>SAAFCarb MA<br>SAAFCarb MB<br>SAAFCarb MS |
| <b>EXAMPLE: SAAF VariSorb with SAAFCarb MA size 24x24x12 VSXL-242412- MA</b> |                     |   |

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AAF has a policy of continuous product research and improvement and reserves the right to change design and specifications without notice.

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