

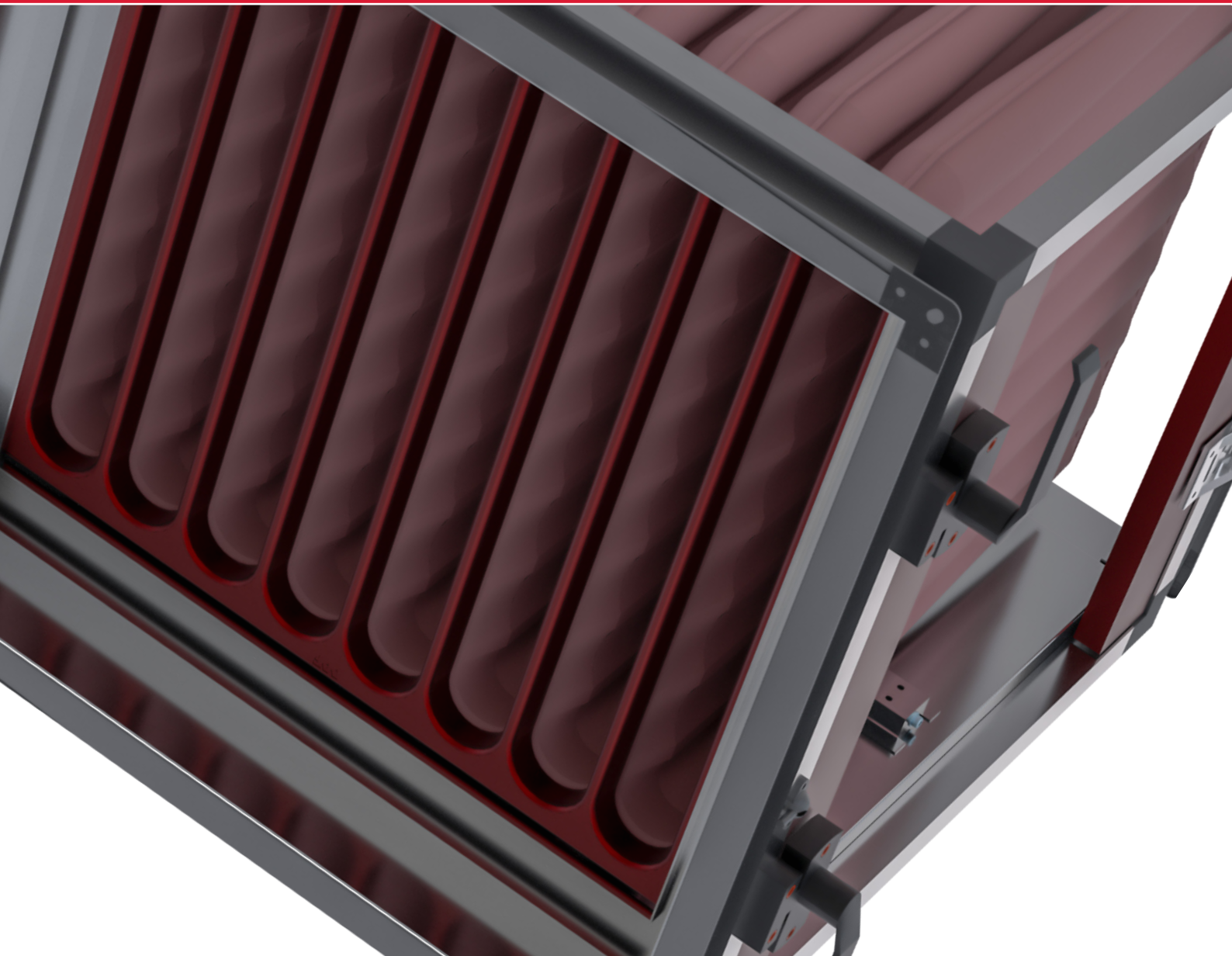


Bringing clean air to life®

# High Purity Filtration Solutions

## Cleanroom Components

### AstroDuct HVAC® Ducted Filter Housing for HVAC Filters



# AstroDuct HVAC

## FILTER HOUSING

### Product description

AstroDuct HVAC is a flexible and compact range of filter housings for bag filters and other filter types with a 25 mm frame. The housing walls is a sandwich design with 50 mm heat and condensation insulation between, covered with aluzinc sheet metal inside and outside (corrosivity class C4). The service hatch is hinged mounted. The endless gasket on the inside of the service hatch makes it highly airtight. The filter housing is supplied with a guide connection and a flange connection is available as an option. Hinged access doors that are provided on the filter section allow ease of access to and installation and removal of particulate and/or gas phase filters. Access doors shall have the same construction as the enclosure panels described above. The access doors are equipped with "twist and clamp" style locking handles that clamp the door into position after the door has been closed.

### Features and Benefits

- Filter housing for HVAC filters with 25 mm header
- Made of Aluzinc
- Thickness of insulation: 50 mm
- Door hinged on the left or right hand side
- For multiple filters
- Aluminum profile construction
- Alternative design as a filter housing for carbon cylinders or cassettes is easily possible



Designed to take full size (592 mm width or height) and half size filters (296 mm width or height) with a maximum depth of 635 mm. Installation of V-shaped filters is also possible

### Applications

- Intended for regular airflow in commercial, industrial and institutional applications
- Pre- or final filtration in general air handling units
- Pre-filtration for critical cleanroom applications
- Upgrading of existing systems for better indoor climate and energy efficiency



Commercial



Industrial



Institutional



AHU



CleanRooms

## Filter Housing configuration

|                        |                                                                                    |
|------------------------|------------------------------------------------------------------------------------|
| Housing                | Manufactured with profiles with insulated panels in between                        |
| Panels                 | 50 mm insulated panels with a metal thickness of 0.8 mm                            |
| Construction           | Profile construction                                                               |
| Flanges                | P 20 connections                                                                   |
| Pressure drop fittings | Includes for 2 pressure tapping point to monitor the pressure drop over the filter |
| Filter clamping        | Filter clamping arrange suitable for 25 mm flanges                                 |
| Door                   | Door is airtight secured to the housing by means of twist and clamp                |
| Leakage class          | L1 according to EN 1886:2007                                                       |

## Technical data

| Housing Name         | Housing Dimensions (mm) |      |     | Flange dimensions (mm) |      | Pocket filters (mm) |         |         |         |
|----------------------|-------------------------|------|-----|------------------------|------|---------------------|---------|---------|---------|
|                      | W                       | H    | D   | W                      | H    | 592x592             | 592x287 | 287x592 | 287x287 |
| Profile construction |                         |      |     |                        |      |                     |         |         |         |
| AD_HVAC_0.5x0.5      | 395                     | 395  | 750 | 333                    | 333  | x                   | x       | x       | x       |
| AD_HVAC_1x0.5        | 695                     | 395  | 750 | 633                    | 333  | x                   | 1       | x       | x       |
| AD_HVAC_0.5x1        | 395                     | 700  | 750 | 333                    | 638  | x                   | x       | 1       | x       |
| AD_HVAC_1x1          | 695                     | 700  | 750 | 633                    | 638  | 1                   | x       | x       | x       |
| AD_HVAC_1.5x1        | 985                     | 700  | 750 | 923                    | 638  | 1                   | x       | 1       | x       |
| AD_HVAC_2x1          | 1290                    | 700  | 750 | 1228                   | 638  | 2                   | x       | x       | x       |
| AD_HVAC_1x1.5        | 695                     | 1020 | 750 | 633                    | 958  | 1                   | 1       | x       | x       |
| AD_HVAC_1.5x1.5      | 985                     | 1020 | 750 | 885                    | 958  | 1                   | 1       | 1       | 1       |
| AD_HVAC_1x2          | 695                     | 1325 | 750 | 633                    | 1263 | 2                   | x       | x       | x       |
| AD_HVAC_1.5x2        | 985                     | 1325 | 750 | 885                    | 1263 | 2                   | x       | 2       | x       |
| AD_HVAC_2x1.5        | 1290                    | 1020 | 750 | 1228                   | 958  | 2                   | 2       | x       | x       |
| AD_HVAC_2x2          | 1290                    | 1325 | 750 | 1228                   | 1263 | 4                   | x       | x       | x       |
| AD_HVAC_1x2.5        | 695                     | 1620 | 750 | 633                    | 1520 | 2                   | 1       | x       | x       |
| AD_HVAC_1.5x2.5      | 985                     | 1620 | 750 | 885                    | 1520 | 2                   | 1       | 2       | 1       |
| AD_HVAC_2x2.5        | 1290                    | 1620 | 750 | 1228                   | 1520 | 4                   | 2       | x       | x       |
| AD_HVAC_1x3          | 695                     | 1951 | 750 | 633                    | 1889 | 3                   | x       | x       | x       |
| AD_HVAC_1.5x3        | 985                     | 1951 | 750 | 885                    | 1889 | 3                   | x       | 3       | x       |
| AD_HVAC_2x3          | 1290                    | 1951 | 750 | 1228                   | 1889 | 6                   | x       | x       | x       |
| AD_HVAC_3x1          | 1935                    | 755  | 750 | 1833                   | 653  | 3                   | x       | x       | x       |
| AD_HVAC_3x1.5        | 1935                    | 1060 | 750 | 1833                   | 958  | 3                   | 3       | x       | x       |
| AD_HVAC_3x2          | 1935                    | 1365 | 750 | 1833                   | 1263 | 6                   | x       | x       | x       |
| AD_HVAC_3x2.5        | 1935                    | 1670 | 750 | 1833                   | 1568 | 6                   | 3       | x       | x       |
| AD_HVAC_3x3          | 1935                    | 1975 | 750 | 1833                   | 1873 | 9                   | x       | x       | x       |

Note: Other dimensions available upon request

# AstroDuct HVAC

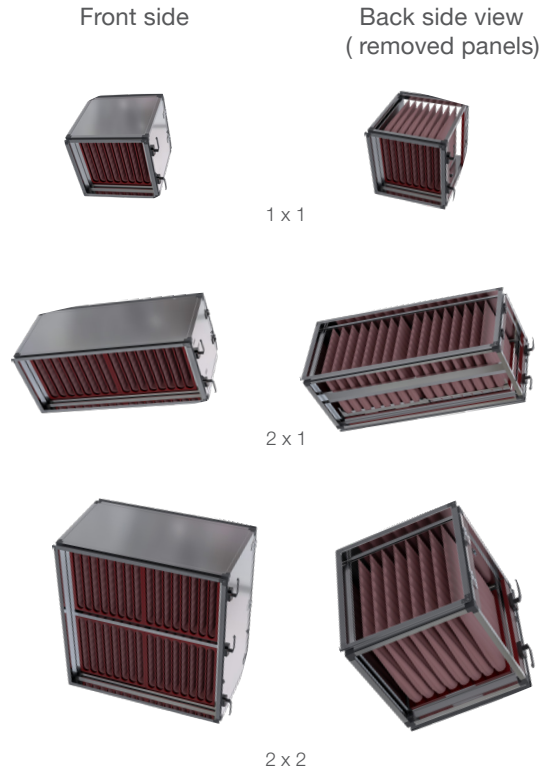
## HOUSING AND FILTER SELECTION

### Selection Table

| Item | Component       | Component Code Definition           |         |
|------|-----------------|-------------------------------------|---------|
| A    | Housing Type    | AD HVAC                             |         |
| B    | Filter Type     | HVAC Filters with 25 mm Header      |         |
|      |                 | SAAF Canister Carbon filters        |         |
|      |                 | SAAF Cassette HD (Heavy Duty)       |         |
|      |                 | SAAF Cassette MD (Medium Duty)      |         |
|      |                 | SAAF Cassette CG (Commercial Grade) |         |
| C    | Size of Housing | 0.5x0.5                             | 1x2.5   |
|      |                 | 1x0.5                               | 1.5x2.5 |
|      |                 | 0.5x1                               | 2x2.5   |
|      |                 | 1x1                                 | 1x3     |
|      |                 | 1.5x1                               | 1.5x3   |
|      |                 | 2x1                                 | 2x3     |
|      |                 | 1x1.5                               | 3x1     |
|      |                 | 1.5x1.5                             | 3x1.5   |
|      |                 | 2x1.5                               | 3x2     |
|      |                 | 1x2                                 | 3x2.5   |
|      |                 | 1.5x2                               | 3x3     |
|      |                 | 2x2                                 |         |

All housings are made of Aluzinc

### Design examples of typical sizes



### How to Order

| Item      | A       | B                             | C   |
|-----------|---------|-------------------------------|-----|
| Component | AD HVAC | HVAC Filter with 25 mm Header | 1x2 |

### Filter options

Particulate filters shall be supported in side access clamping arrangements designed solely for flanged filters. The clamping arrangement is designed to hold 25 mm flanges as on AAF DriPak, VariCel VXL(E), Varicel MPak, and Varisorb filter series.

|                                             |                                                                                                                                                                                      |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Outside filter dimensions [mm]<br>W x H x D | Depending on the housing dimension selected, only full size (592 mm width or height) and half size filters (296 mm width or height) with a maximum depth of 635 mm can be installed. |
| Tolerance outside filter dimensions [mm]:   | + 1.5                                                                                                                                                                                |
| Tolerance pressure drop (%):                | ± 15%                                                                                                                                                                                |
| Overall efficiency:                         | according to ISO 16890:2017                                                                                                                                                          |

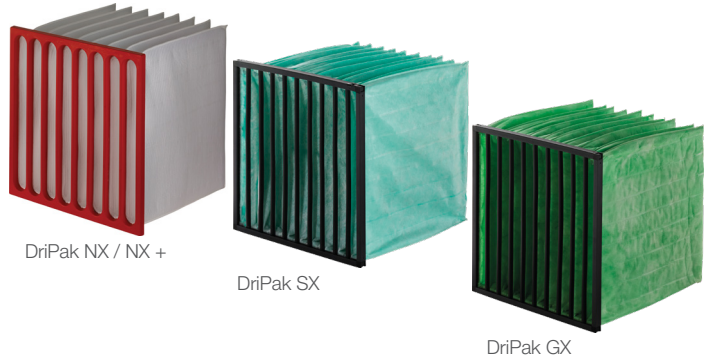


# Filter Recommendations

## PROVIDING HIGH-EFFICIENCY

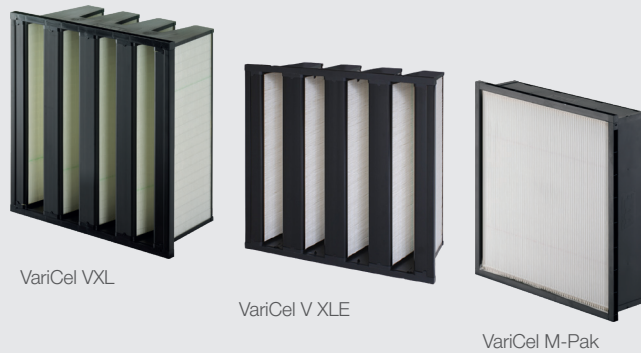
### DriPak NX / NX+ / SX / GX

- Available in ISO 16890 efficiency classes ePM10 up to ePM1
- Filter class EN779:2012: M5 up to F9
- Proprietary AAF design with stable tapered pockets for optimum airflow
- Exceptionally low pressure drop for extremely low energy use
- Synthetic or Glass media



### VariCel VXL / VXL / M-Pak

- Available in ISO16890 efficiency classes ePM10 up to ePM1
- Filter class EN779:2012: M5 up to F9
- High dust holding capacity for facilitating a long service life and fewer changeouts
- Large media area provides greater airflow capacity and low resistance
- Fibreglass media pack with uniform pleat spacing for reduced operating resistance and energy consumption
- Sturdy construction for handling high airflow rates
- Delivers comparable efficiency, pressure drop, and overall performance in half the footprint



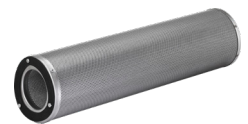
### VariSorb XL

- Highest-activity carbon
- Effective in removing VOCs, SOx, NOx and Ozone
- Energy-efficient mini-pleat design
- Corrosion-free, non-metal construction
- Easy to retrofit particulate installations
- Fully incinerable



### SAAF Canisters / Cassettes

- Designed to take wide range of chemical media
- Sturdy construction in metal or plastic
- High ease of use



- Designed for full media utilisation
- Improves fit and sealing integrity in any cassette holding system
- Glue-free design eliminates off-gassing, bypass and leakage





## AAF International Plant Locations

AAF, the world's largest manufacturer of air filtration solutions, operates production, warehousing and distribution facilities in 22 countries across four continents. With its global headquarters in Louisville, Kentucky, AAF is committed to protecting people, processes and systems through the development and manufacturing of the highest quality air filters, filtration equipment, and associated housing and hardware available today.

Contact your local AAF representative for a complete list of AAF Air Filtration Product Solutions.

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Bringing clean air to life:

**AAF International**  
European Headquarters  
Odenwaldstrasse 4, 64646 Heppenheim  
Tel: +49 (0)6252 69977- 0  
aafeurope.com

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