

# 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 continuous 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 are provided on the filter section to 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 from Aluzino
- Thickness of insulation: 50 mm
- Door hinged on the left or right hand side
- Can accommodate 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 heigh) and half size filters (287 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			
	W	Н	D	W	Н	592x592 mm	592x287 mm	287x592 mm	287x287 mm
AD_HVAC_0.5x0.5	395	395	750	333	333	X	Х	Х	1
AD_HVAC_1x0.5	695	395	750	633	333	X	1	Х	Х
AD_HVAC_0.5x1	395	700	750	333	638	X	Х	1	Х
AD_HVAC_1x1	695	700	750	633	638	1	Х	Х	Х
AD_HVAC_1.5x1	985	700	750	923	638	1	X	1	Х
AD_HVAC_2x1	1290	700	750	1228	638	2	Х	X	Х
AD_HVAC_1x1.5	695	1020	750	633	958	1	1	Х	Х
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	Х	X
AD_HVAC_2x2	1290	1325	750	1228	1263	4	Х	Х	Х
AD_HVAC_1x2.5	695	1620	750	633	1520	2	1	Х	Х
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	Х	Х
AD_HVAC_1x3	695	1951	750	633	1889	3	X	X	Х
AD_HVAC_1.5x3	985	1951	750	885	1889	3	Х	3	Х
AD_HVAC_2x3	1290	1951	750	1228	1889	6	Х	Х	Х
AD_HVAC_3x1	1935	755	750	1833	653	3	Х	X	Х
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	Х	Х	Х

Note: Other dimensions availabe upon request

# AstroDuct HVAC

## **HOUSING AND FILTER SELECTION**

## **Selection Table**

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

## **Design examples of typical sizes**



#### **How to Order**

Item	А	В	С
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.

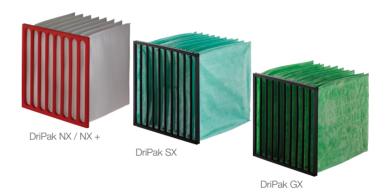
Outside filter dimensions [mm] W x H x D	Depending on the housing dimension selected, only full size (592 mm width or heigh) and half size filters (287 mm width or height) with a maximum depth of 635 mm can be installed.
Tolerance outside filter dimensions [mm]:	+ 1.5
Tolerance pressure drop (%):	± 15%
Overall efficiency:	according 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



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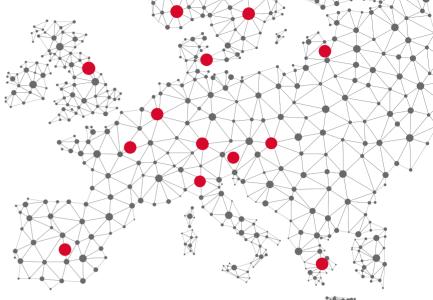
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