

## Description

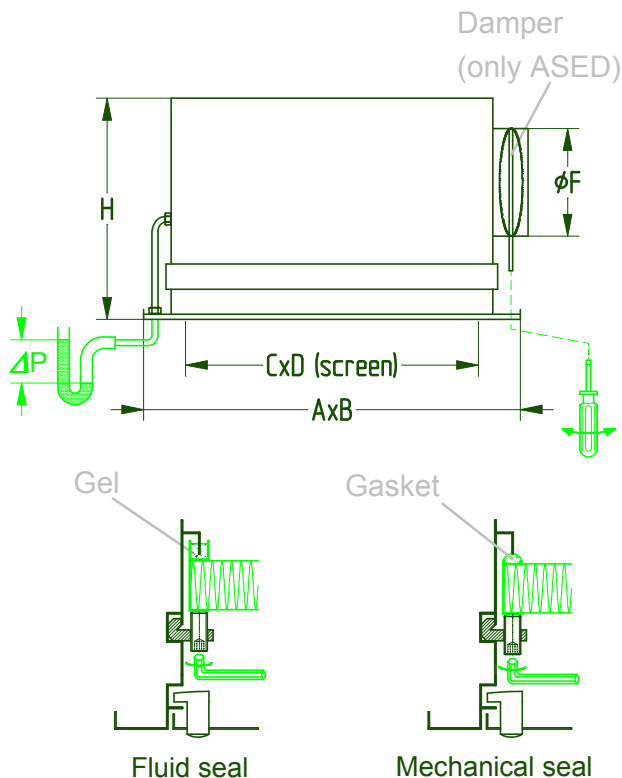
Terminal filter diffuser with lateral inlet. Lightweight and easy to install, it can house both mechanical and fluid seal filters. It can be equipped with micro-perforated protection screens or diffusion screens. The fixing of the filter element is done through rapid mounting brackets with Allen pressure screws. They are commonly employed in controlled contamination environments like air diffusion terminal systems.

## Construction

Anodised extruded aluminium frame, sealed to the upper aluminium plenum. Frontal access static-pressure tube complete with cap in order to verify the filter element's clogging. Mobile brackets (4) for hanging to the ceiling.

## Screens

- DFA** Micro-perforated anodised aluminium screen for unidirectional flow at low turbulence, available for all sizes.
- DFX** Micro-perforated stainless steel screen for unidirectional flow at low turbulence, available for all sizes.
- DREH** Painted steel-sheet double geometry diffusion screen for tangential vortex flow (with ceiling effect) suitable for summer regimen, or with free vortex flow (without ceiling effect) suitable for winter regimen (only for size 00, 04, 05, 06).



## Filter

Laminar flow absolute filters of the series MINILAM or MICROLAM can be installed both with mechanical or fluid seal (gel). The employment of models LFA-LFD-LGA-LGD, guarantees an air purity class ISO 4/5 in accordance to ISO 14644-1.

## Applications

Terminal air filtration for cleanrooms and contamination controlled environments with localised low turbulence flow (DFA, DFX) or vortex flow (DREH).

## Special executions

- ASED** with adjustable damper on inlet
- ARE** with rectangular lateral inlet

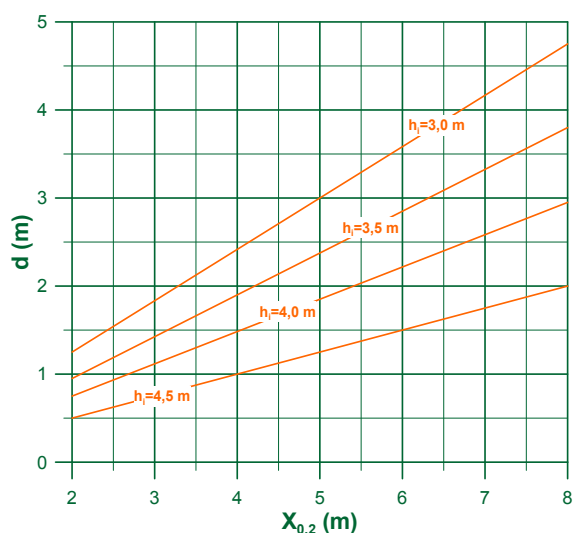
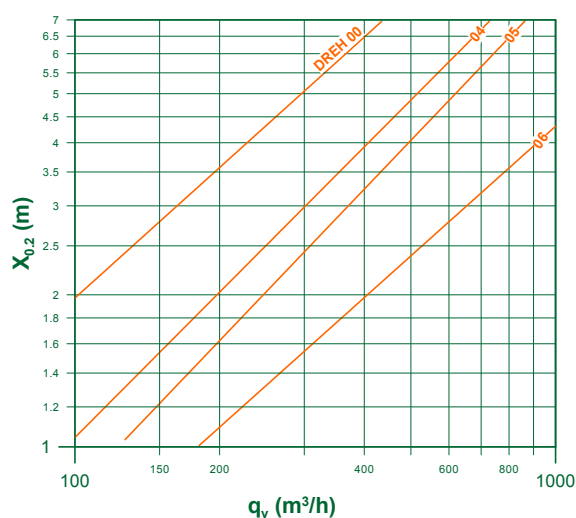
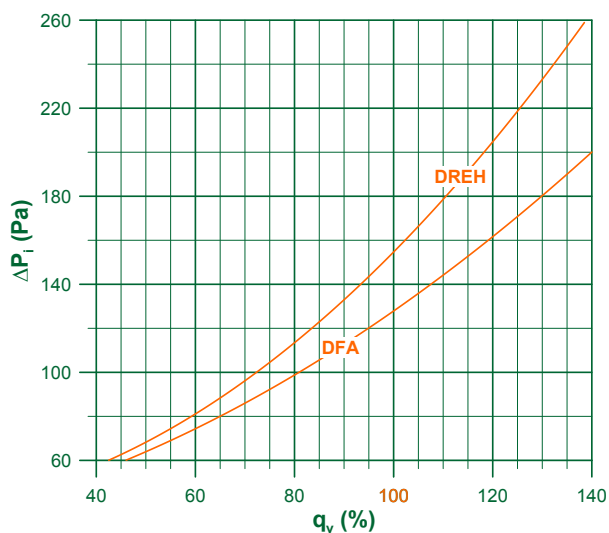
## Related products

- BST** Modular counter-ceiling, series **BIO-SYSTEM**

| Type | A<br>(mm) | B<br>(mm) | C<br>(mm) | D<br>(mm) | ØF*<br>(mm) | H<br>(mm) | M<br>(kg) |
|------|-----------|-----------|-----------|-----------|-------------|-----------|-----------|
| 00   | 373       | 373       | 321       | 321       | 150         | 360       | 5         |
| 03   | 373       | 678       | 321       | 626       | 200         | 360       | 6         |
| 04   | 525       | 525       | 473       | 473       | 200         | 360       | 7         |
| 05   | 594       | 594       | 542       | 542       | 200         | 360       | 7         |
| 06   | 678       | 678       | 626       | 626       | 200         | 360       | 8         |
| 09   | 678       | 983       | 626       | 931       | 250         | 420       | 10        |
| 12   | 678       | 1288      | 626       | 1236      | 250         | 420       | 11        |

\* on 678 mm side, in rectangular versions

M mass



### Key to symbols

- $h_i$  installation height
- $d$  distance from the wall to which the jet flows
- $q_v$  volume air flow
- $X_{0,2}$  horizontal isotherm throw (isotachia 0,2 m/s)
- $DP$  pressure drop



| Type      | Filter dimensions (mm) |             |
|-----------|------------------------|-------------|
|           | mechanical seal        | fluid seal  |
| <b>00</b> | 305x305x68             | 305x305x78  |
| <b>03</b> | 610x305x68             | 610x305x78  |
| <b>04</b> | 457x457x68             | 457x457x78  |
| <b>05</b> | 525x525x68             | 525x525x78  |
| <b>06</b> | 610x610x68             | 610x610x78  |
| <b>09</b> | 610x915x68             | 610x915x78  |
| <b>12</b> | 610x1220x68            | 610x1220x78 |

| Type      | ASE + DFA/DFX |         |    |
|-----------|---------------|---------|----|
|           | $q_v$ (m³/h)  | DP (Pa) | %  |
| <b>00</b> | 150           | 130     | 40 |
| <b>03</b> | 300           | 130     | 40 |
| <b>04</b> | 335           | 130     | 40 |
| <b>05</b> | 450           | 130     | 40 |
| <b>06</b> | 600           | 130     | 40 |
| <b>09</b> | 900           | 130     | 40 |
| <b>12</b> | 1200          | 130     | 40 |

$q_v$  nominal volume air flow (with LFA filter)  
 $DP$  initial pressure drop ( $\pm 20$  Pa) at  $q_v$   
 $\%$  air passage screen (empty on full)

| Type      | ASE + DREH   |         |    |
|-----------|--------------|---------|----|
|           | $q_v$ (m³/h) | DP (Pa) | N  |
| <b>00</b> | 150          | 150     | 10 |
| <b>04</b> | 335          | 150     | 20 |
| <b>05</b> | 450          | 150     | 32 |
| <b>06</b> | 600          | 150     | 44 |

$q_v$  nominal volume air flow (with LFA filter)  
 $DP$  initial pressure drop ( $\pm 20$  Pa) at  $q_v$   
 $N$  screen deflectors number

