

Air through perfection

# Perforated grille with access

## PF-D



**ACP**  
Access grilles

## Perforated grille with access PF-D



### Description

Perforated grille with access door, used for introducing or evacuating air.  
The PF-D grille is intended for wall or false ceiling mounting.

### Technical specifications

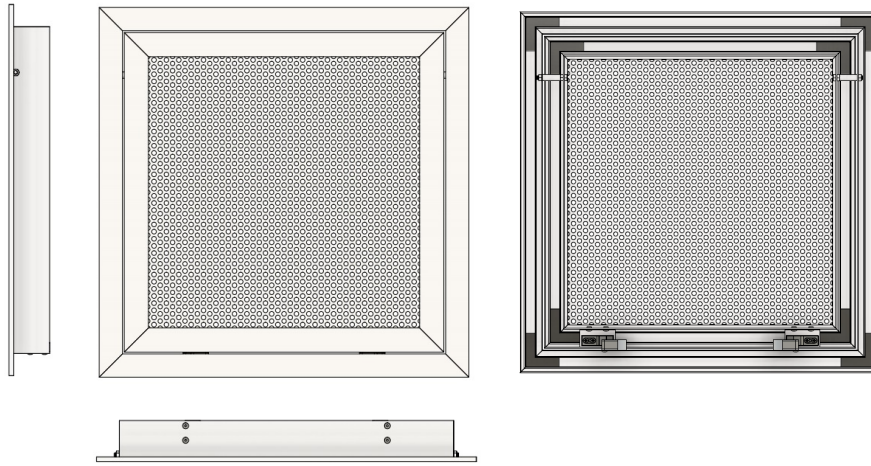
#### Characteristics

The opening system is click type (opening/closing by pressing) which facilitates access.  
The central part of the grille is provided with circular perforations with a diameter of 5 mm.  
The grille is produced as standard without mounting holes. Optionally, mounting holes can be requested on the visible grille frame.

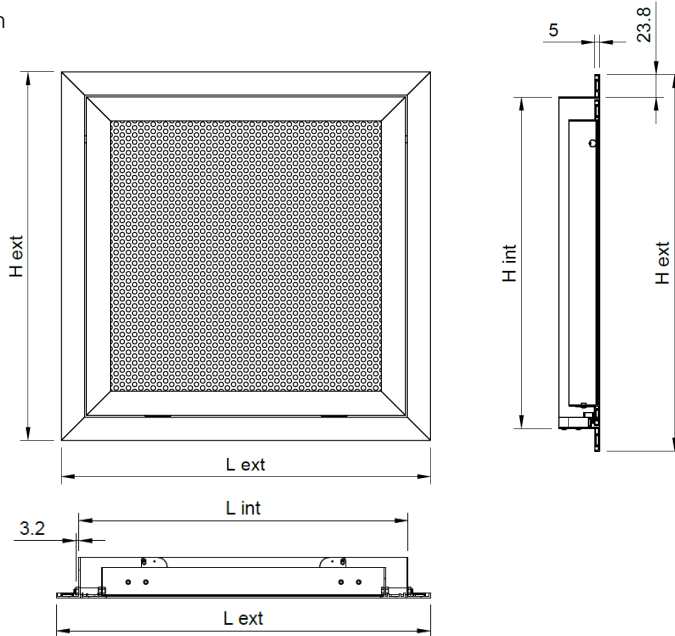
#### Materials

The grille is made of extruded aluminum profiles (frame) with the perforated central part in galvanized steel sheet.  
Standard grille is electrostatic field painted in glossy white RAL9016.  
Other RAL colours are available on request.

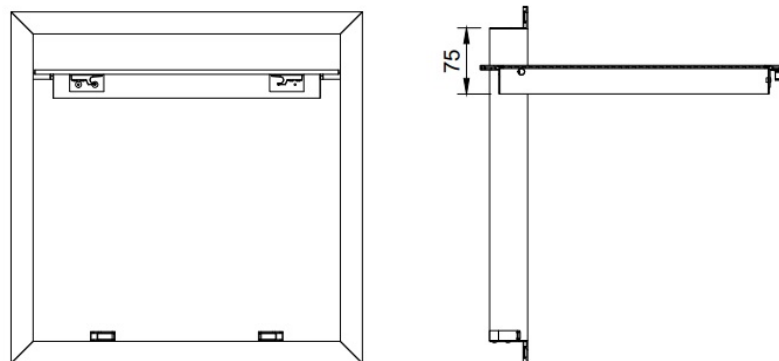
Technical drawing



Grille in closed position



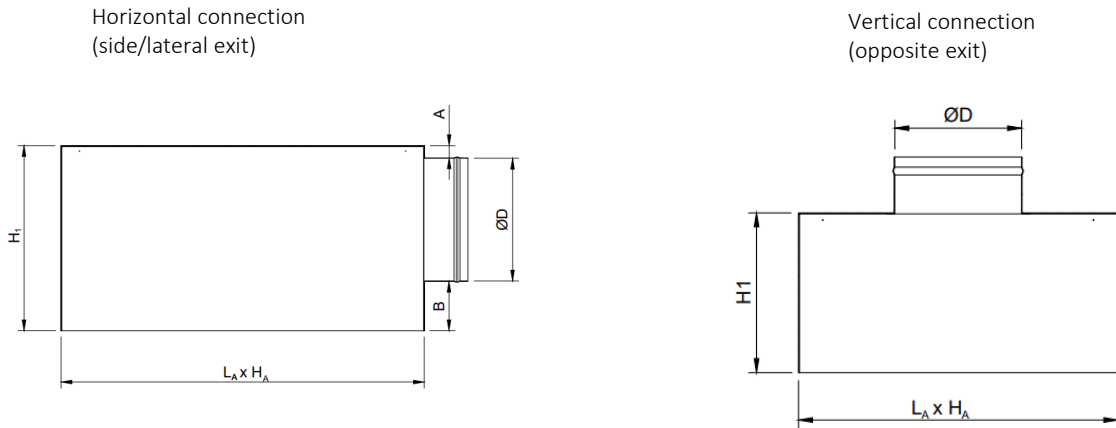
Grille in open position



## Accessories

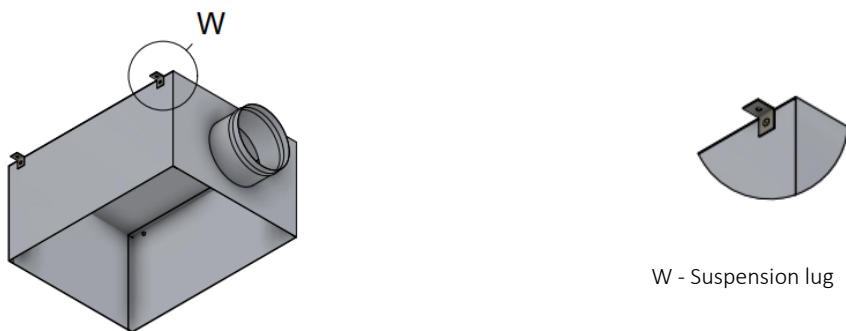
The grille can be delivered with a connecting plenum to the circular duct, with horizontal or vertical connection. The plenum is provided with suspension elements (lugs) and bead roll on the spigot, for easy fixing of the flexible duct. On request, the product can be delivered with G4 air filter or adjustment damper.

### Adapter (plenum box)



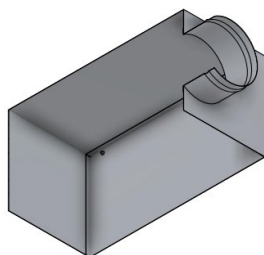
$L_A \times H_A$  = Lint x Hint grille + 7 mm  
 $A, B, H1$  - depending on demand and  $\varnothing D$

The adapter is made of Z140 galvanized sheet metal and is equipped with lugs for mounting.

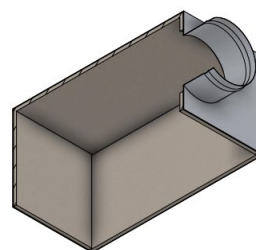


W - Suspension lug

The plenum is available in two options, uninsulated or insulated with 6 mm thick elastomeric rubber.



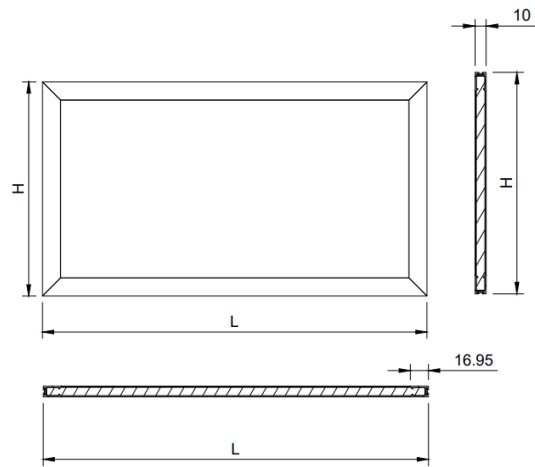
AN - Uninsulated adapter



AIZ - Insulated adapter

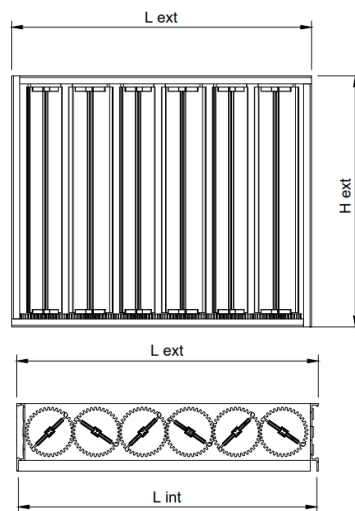
G4 air filter with frame (F-R)

G4 air filter with frame, made of aluminum, used for air filtration with mounting on the grille.



Opposed blade damper (OBD)

The control damper is provided with opposable blades and gears, it is mounted on the grille connection.



## Functional parameters

### Supply

| Air flow<br>[m³/h] | LxH        | 350X350 | 450X450 | 550X550 | 650X650 |
|--------------------|------------|---------|---------|---------|---------|
|                    | Ak [m²]    | 0.030   | 0.056   | 0.088   | 0.132   |
| 160                | Veff [m/s] | 1.5     |         |         |         |
|                    | X [m]      | 0.9     |         |         |         |
|                    | NR [dB(A)] | 22.0    |         |         |         |
|                    | ΔPt [Pa]   | 9.0     |         |         |         |
| 200                | Veff [m/s] | 1.8     | 1.0     |         |         |
|                    | X [m]      | 1.1     | 0.8     |         |         |
|                    | NR [dB(A)] | 31.0    | < 20    |         |         |
|                    | ΔPt [Pa]   | 14.0    | 4.0     |         |         |
| 300                | Veff [m/s] | 2.8     | 1.5     |         |         |
|                    | X [m]      | 1.7     | 1.2     |         |         |
|                    | NR [dB(A)] | 44.0    | 25.0    |         |         |
|                    | ΔPt [Pa]   | 31.0    | 8.0     |         |         |
| 400                | Veff [m/s] | 3.7     | 2.0     | 1.3     |         |
|                    | X [m]      | 2.1     | 1.6     | 1.3     |         |
|                    | NR [dB(A)] | 53.0    | 35.0    | 20.0    |         |
|                    | ΔPt [Pa]   | 53.0    | 15.0    | 5.0     |         |
| 500                | Veff [m/s] | 4.6     | 2.5     | 1.6     |         |
|                    | X [m]      | 2.5     | 2.0     | 1.6     |         |
|                    | NR [dB(A)] | 61.0    | 42.0    | 27.0    |         |
|                    | ΔPt [Pa]   | 81.0    | 23.0    | 8.0     |         |
| 700                | Veff [m/s] |         | 3.5     | 2.2     | 1.5     |
|                    | X [m]      |         | 2.2     | 2.2     | 1.8     |
|                    | NR [dB(A)] |         | 52.0    | 39.0    | 27.0    |
|                    | ΔPt [Pa]   |         | 45.0    | 16.0    | 7.0     |
| 1000               | Veff [m/s] |         | 5.0     | 3.2     | 2.1     |
|                    | X [m]      |         | 3.1     | 2.4     | 2.6     |
|                    | NR [dB(A)] |         | 63.0    | 51.0    | 39.0    |
|                    | ΔPt [Pa]   |         | 90.0    | 30.0    | 15.0    |
| 1600               | Veff [m/s] |         |         |         | 3.4     |
|                    | X [m]      |         |         |         | 3.1     |
|                    | NR [dB(A)] |         |         |         | 54.0    |
|                    | ΔPt [Pa]   |         |         |         | 36.0    |

### Extraction

| Air flow<br>[m³/h] | LxH        | 350X350 | 450X450 | 550X550 | 650X650 |
|--------------------|------------|---------|---------|---------|---------|
|                    | Ak [m²]    | 0.030   | 0.056   | 0.088   | 0.132   |
| 160                | Veff [m/s] | 1.5     |         |         |         |
|                    | NR [dB(A)] | 19.0    |         |         |         |
|                    | ΔPt [Pa]   | 20.0    |         |         |         |
|                    |            |         |         |         |         |
| 200                | Veff [m/s] | 1.8     |         |         |         |
|                    | NR [dB(A)] | 20.0    |         |         |         |
|                    | ΔPt [Pa]   | 31.0    |         |         |         |
|                    |            |         |         |         |         |
| 300                | Veff [m/s] | 2.8     |         |         |         |
|                    | NR [dB(A)] | 26.0    |         |         |         |
|                    | ΔPt [Pa]   | 76.0    |         |         |         |
|                    |            |         |         |         |         |
| 400                | Veff [m/s] | 3.7     | 2.0     |         |         |
|                    | NR [dB(A)] | 35.0    | <20     |         |         |
|                    | ΔPt [Pa]   | 125.0   | 33.0    |         |         |
|                    |            |         |         |         |         |
| 500                | Veff [m/s] | 4.6     | 2.5     |         |         |
|                    | NR [dB(A)] | 42.0    | 23.0    |         |         |
|                    | ΔPt [Pa]   | 185.0   | 47.0    |         |         |
|                    |            |         |         |         |         |
| 700                | Veff [m/s] |         | 3.5     | 2.2     |         |
|                    | NR [dB(A)] |         | 34.0    | 20.0    |         |
|                    | ΔPt [Pa]   |         | 95.0    | 37.0    |         |
|                    |            |         |         |         |         |
| 1000               | Veff [m/s] |         |         | 3.2     | 2.1     |
|                    | NR [dB(A)] |         |         | 31.0    | 20.0    |
|                    | ΔPt [Pa]   |         |         | 73.0    | 33.0    |
|                    |            |         |         |         |         |
| 1600               | Veff [m/s] |         |         |         | 3.4     |
|                    | NR [dB(A)] |         |         |         | 36.0    |
|                    | ΔPt [Pa]   |         |         |         | 85.0    |
|                    |            |         |         |         |         |

#### The legend

Ak [m²] - The free surface

Veff [m/s] - Air velocity in the grille

NR [dB (A)] - Noise level without room attenuation

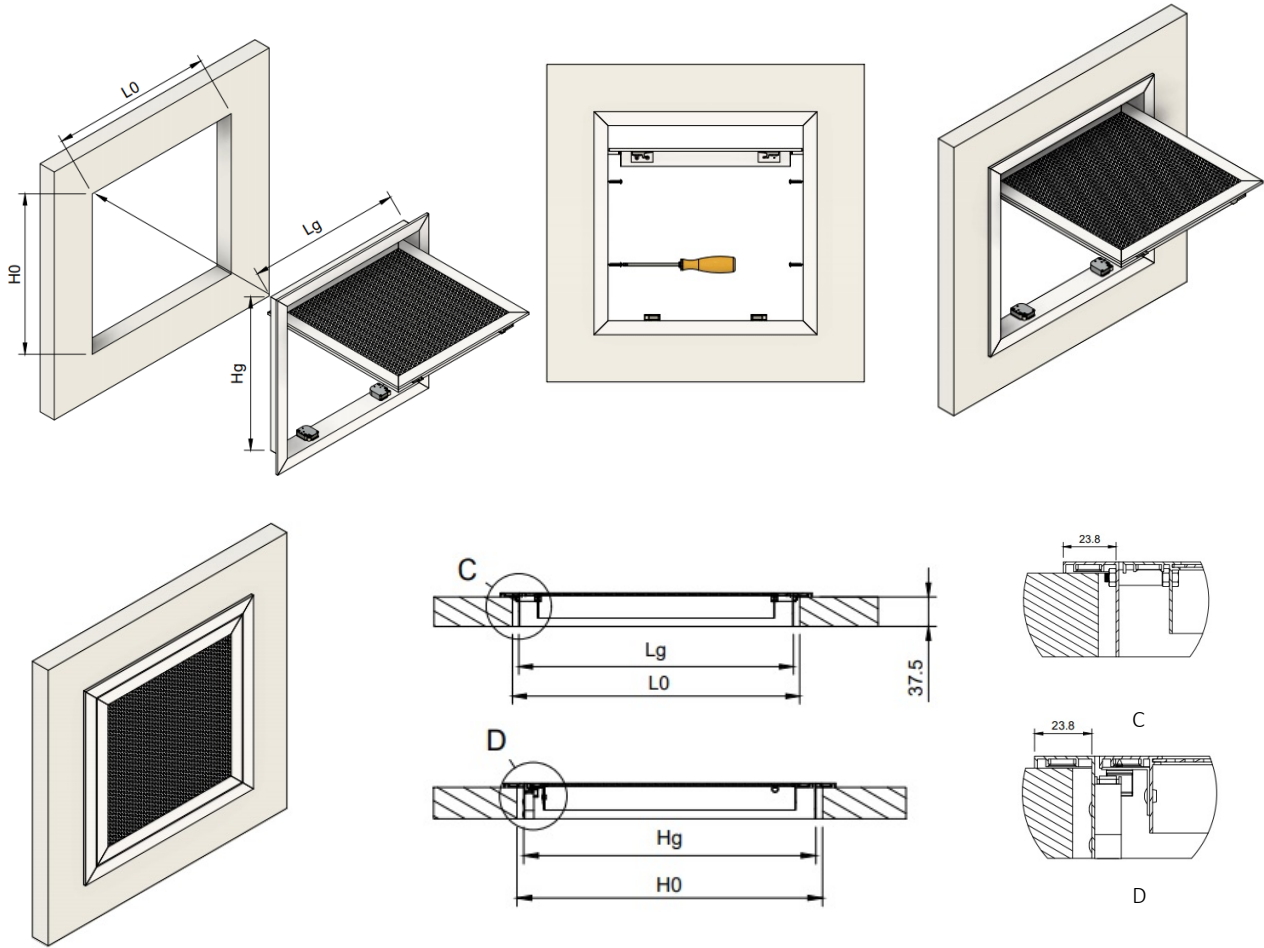
X [m] - The length of the air jet at a speed of 0.2 m/s

ΔPt [Pa] - Pressure loss

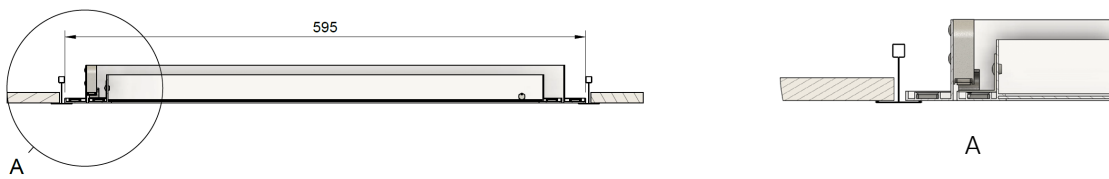
## Installation

The grille can be mounted on the wall or in the false ceiling.

Installation in wall or continuous ceiling



Installation in T-bar suspended ceiling



## Order code

Example on how to place an order

| Type                                | Dimensions | Accessories | Finish |
|-------------------------------------|------------|-------------|--------|
| PF-D                                |            |             |        |
| On request                          |            |             |        |
| F-R - Air filter G4                 |            |             |        |
| OBD - Control damper                |            |             |        |
| AIZ - Insulated adapter             |            |             |        |
| AN - Uninsulated adapter            |            |             |        |
| RAL9016                             |            |             |        |
| RAL.. - Other RAL colors on request |            |             |        |