Air through perfection

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.
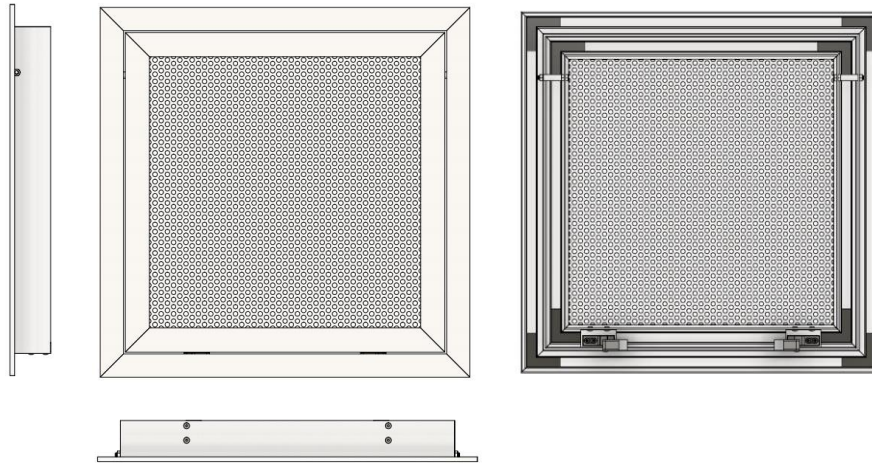
Materials

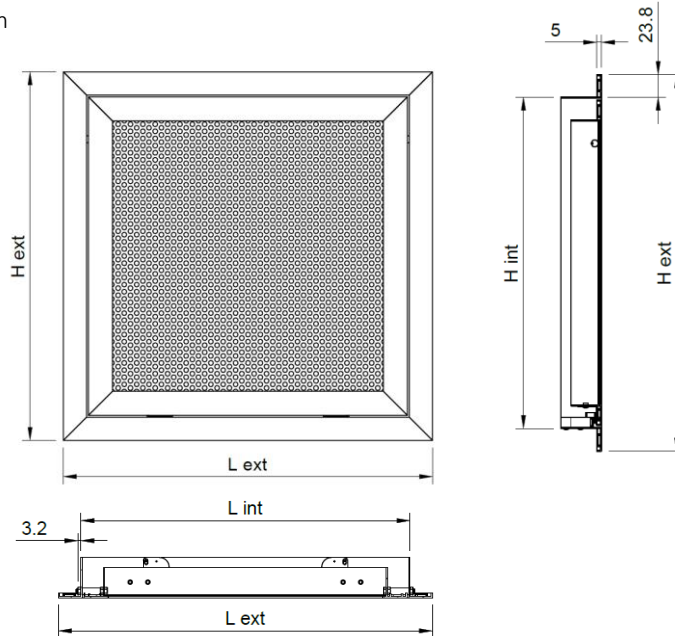The grille is made of extruded aluminum profiles (frame) with the perforated central part in galvanized steel sheet.

Standard grille is electrostatic field painted in glossy white RAL9016.

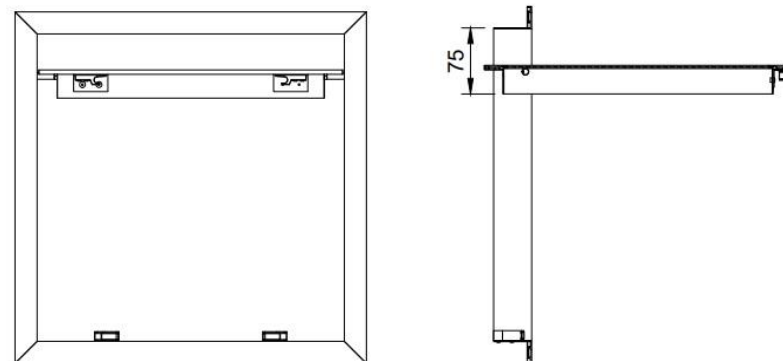Other RAL colours are available on request.

## 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)

Horizontal connection
(side/lateral exit)

Vertical connection
(opposite exit)
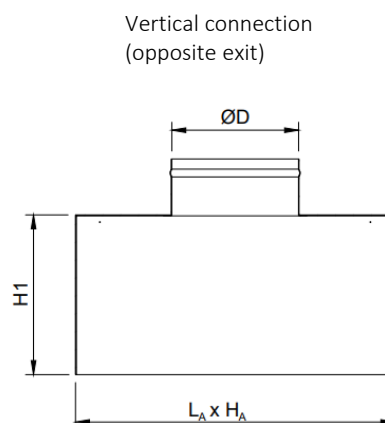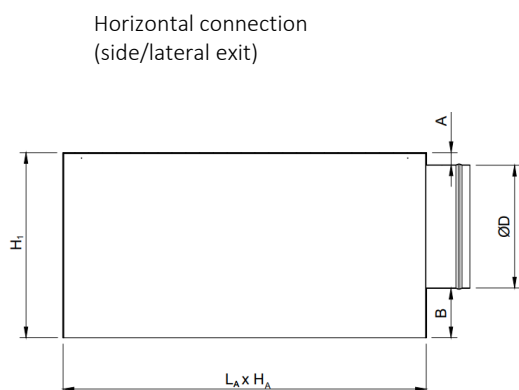
$L_A \times H_A$ = Lint x Hint grille + 5 mm
A, B, H1 - depending on demand and ØD

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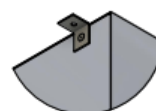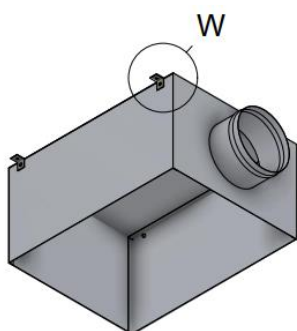
W - Suspension lug

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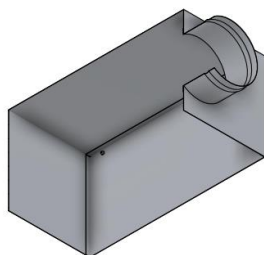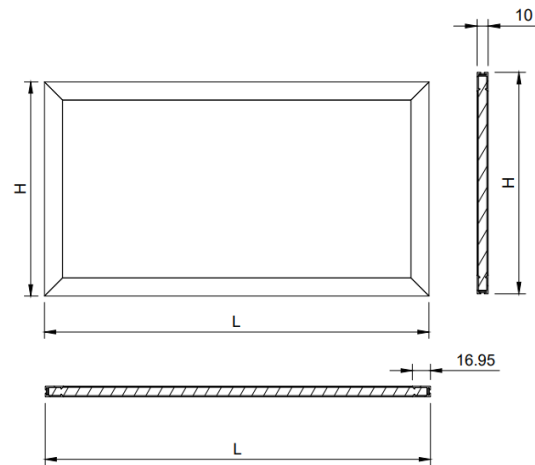

AN - Uninsulated adapter
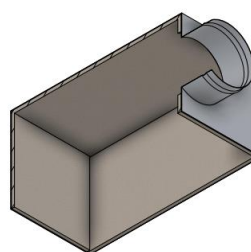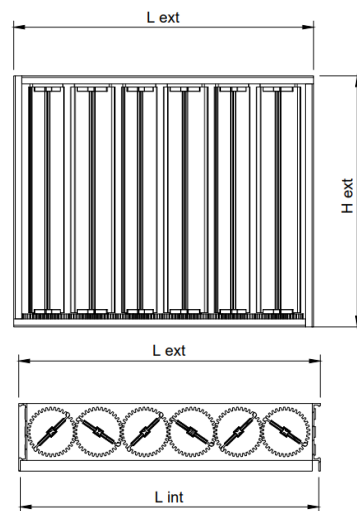
AIZ - Insulated adapter

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 [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 [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
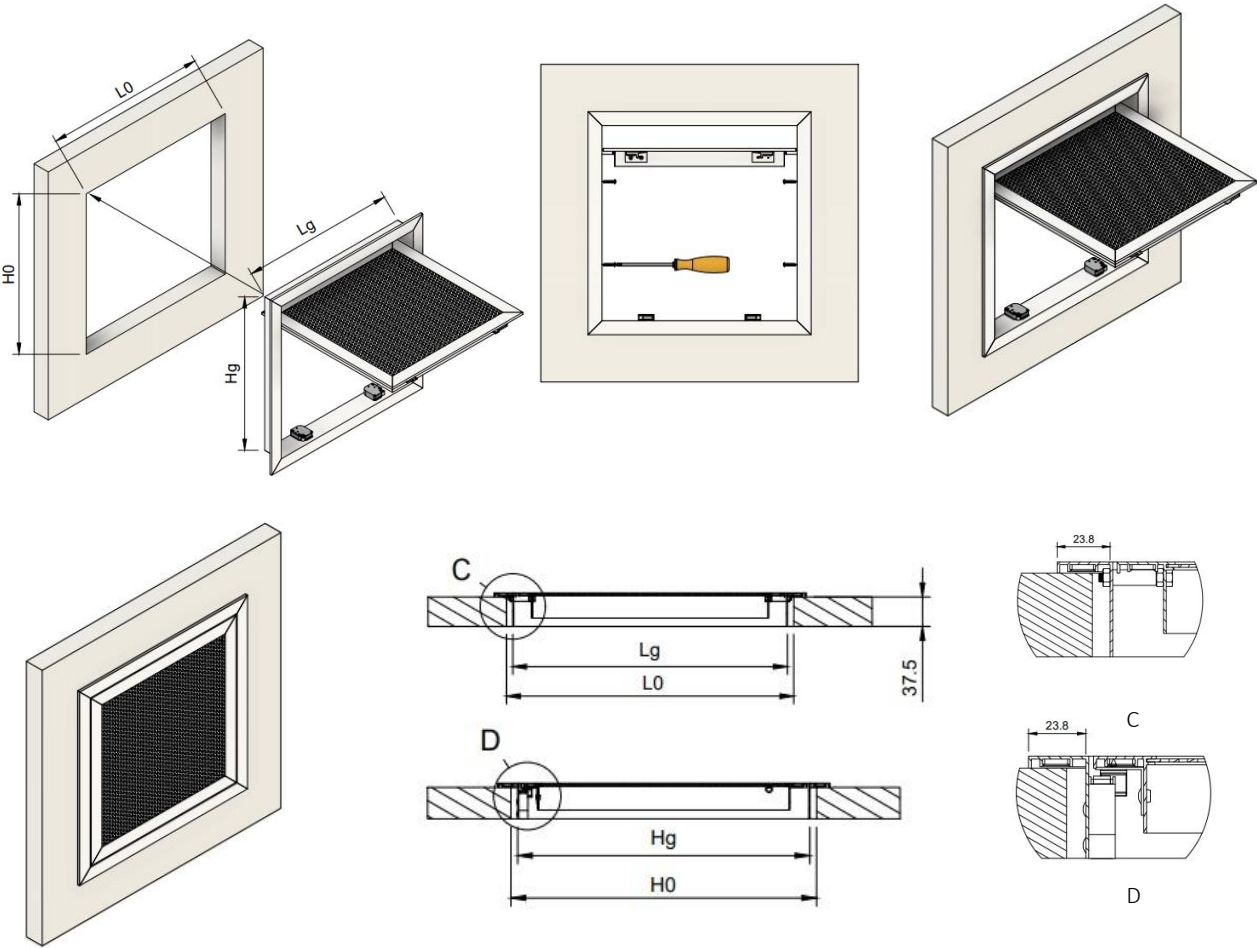NR [dB (A)] - Noise level without room attenuation
X [m] - The length of the air jet at a speed of 0.2 m/s
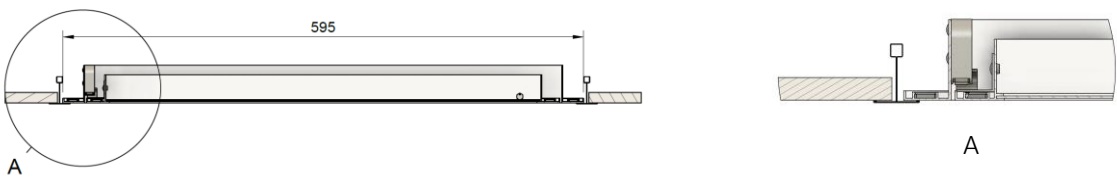ΔPt [Pa] - Pressure loss

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				