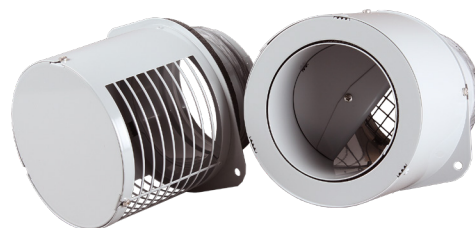




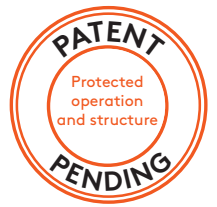
## **CASA WG 12/16**

Adjustable outdoor air diffuser



**Swegon** 

# CASA WG12/16 – wall mounted outdoor air diffuser



Outdoor air diffuser for the intake of fresh air and the discharge of exhaust air is especially well-suited for apartment blocks and provides many advantages when planning and realising a ventilation system. Building costs decrease as no vertical ducts are required, releasing more building space for residential use. The outdoor air diffuser also works at low outdoor air temperatures.

WG12 units are Eurofin's product certified and ensure functionality under the demanding conditions in Finland.

Thanks to the discharge through the wall, the home's exhaust duct can be designed shorter and with a more free placement. This lowers building costs for the whole duct system and also improves energy efficiency. As no vertical ducts are required, more building space is released for residential use.

The outdoor air diffuser CASA WG12/16 has been developed to work together with CASA Smart ventilation unit. They can also be adapted to different conditions and they also function at low outdoor air temperatures.

## Swegon CASA WG12/16 comprises wall mounted diffusers for fresh air and exhaust air

WGI 12 is a separate fresh air unit for 125 mm ventilation ducts. WGO 12 is an exhaust air unit for 125 mm ventilation ducts. Both units are always included in a WG12 delivery. An exhaust velocity of 5 m/s in two stages is achieved even for small air flows, thanks to the reducer section that is supplied as standard with the exhaust unit.

- 32 l/s = 5 m/s (position 1, the extra piece is removed).
- 24 l/s = 5 m/s (position 2, the duct's opening is reduced with the extra piece)

WGI 16 is a separate fresh air unit for 160 mm ventilation ducts. WGO 16 is an exhaust air unit for 160 mm ventilation ducts.

An exhaust velocity of 5 m/s in three stages is achieved even for small air flows, thanks to the reducer section that is supplied as standard with the exhaust unit.

- 71 l/s = 5 m/s (position 1, the extra pieces are removed).
- 53 l/s = 5 m/s (position 2, the duct's opening is reduced with the extra piece 2)
- 40 l/s = 5 m/s (position 3, the duct's opening is reduced with extra pieces 1&2)

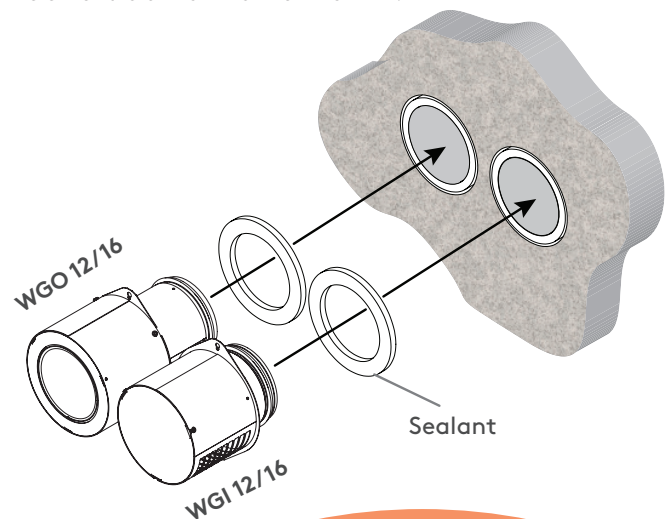
## Important details to consider for element design

### WG12

The mounting flange on the outdoor air diffuser is 175 mm. The recommended hole size for the whole element is a maximum of 161 mm (e.g. 125 mm + 13 mm + 13 mm for ventilation pipe and insulation, combined thickness 151 mm).

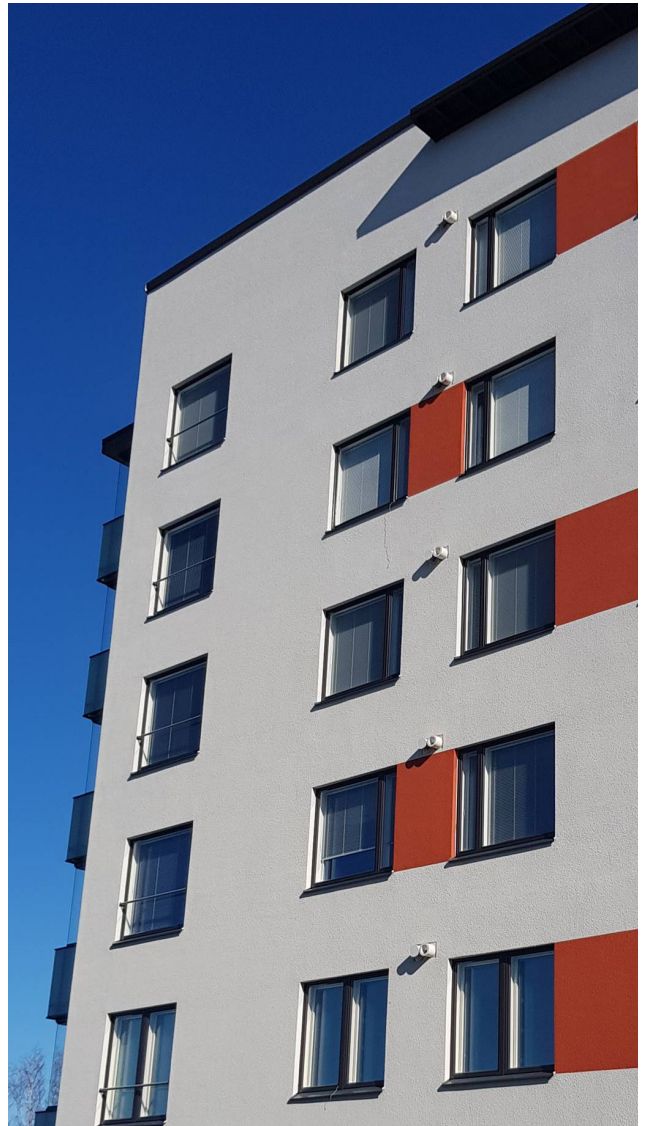
### WG16

The mounting flange on the outdoor air diffuser is 230 mm. The recommended hole size for the whole element is a maximum of 210 mm.



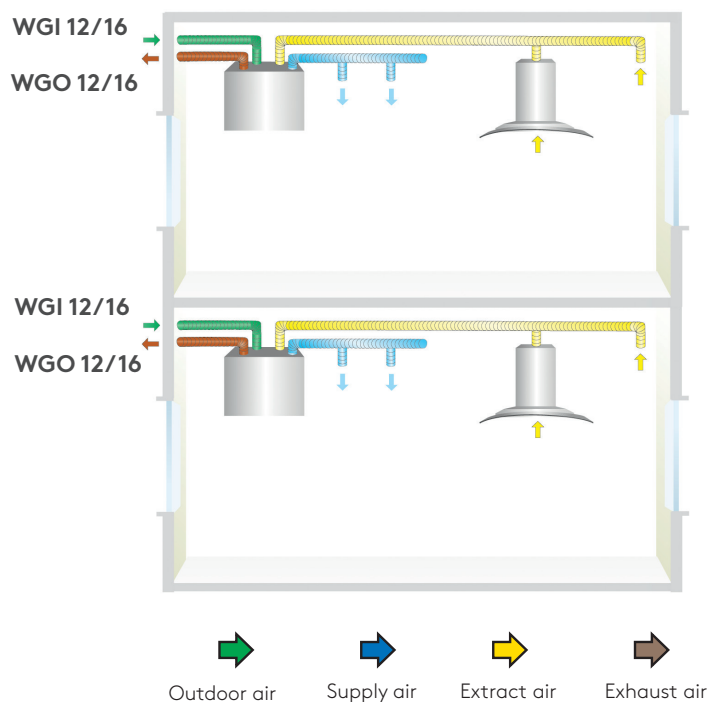
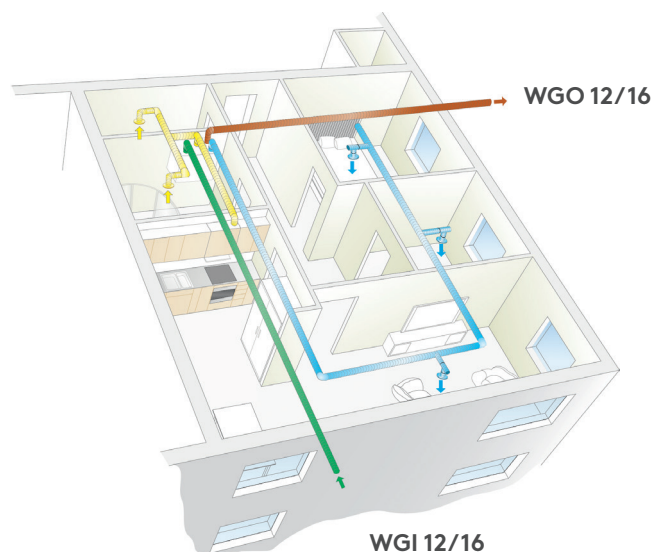
- 1 Maximize good outdoor air without odours from the discharge air
- 2 Does not freeze > pressure conditions are always held at a good level
- 3 Least expensive construction method for ventilation in apartment buildings
- 4 No vertical ducts are required > more space to sell!
- 5 No fire barriers are needed as the whole ventilation is in a residence
- 6 Minimum pressure loss at a discharge velocity of 5 m/s



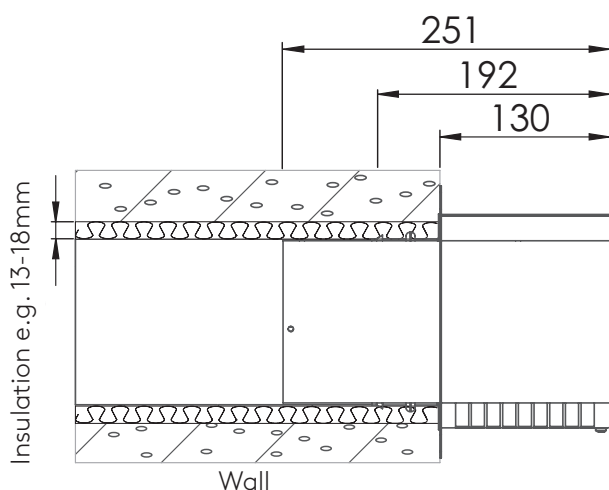
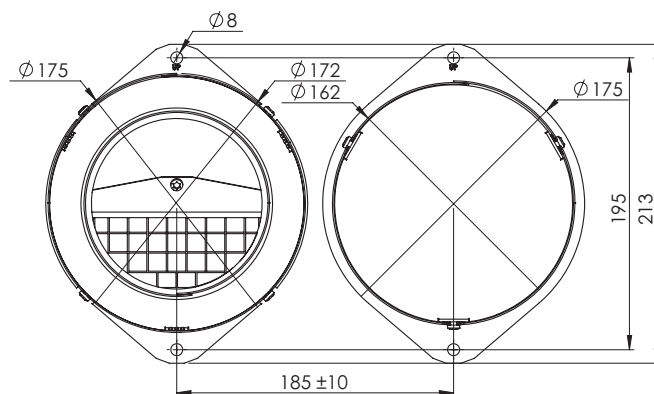
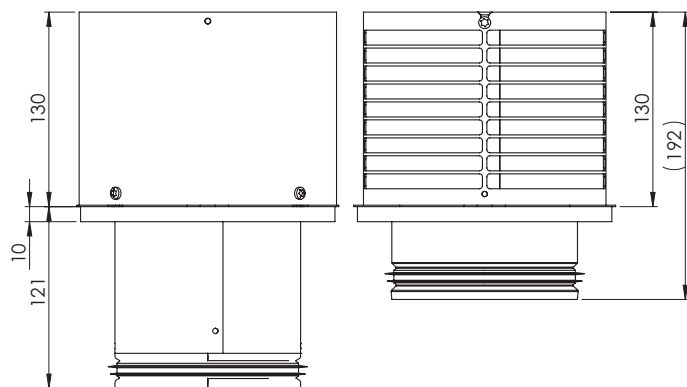




# For individual mounting or side by side



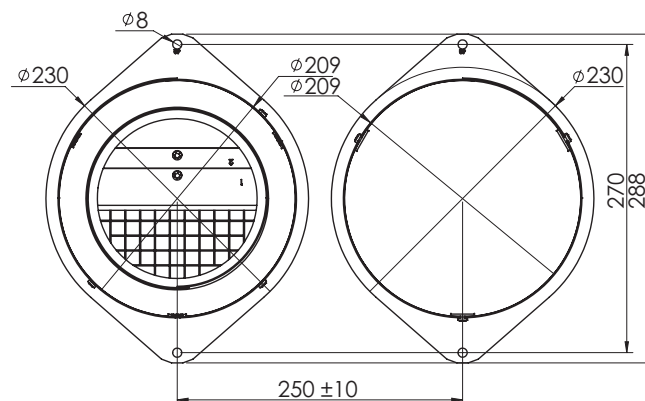
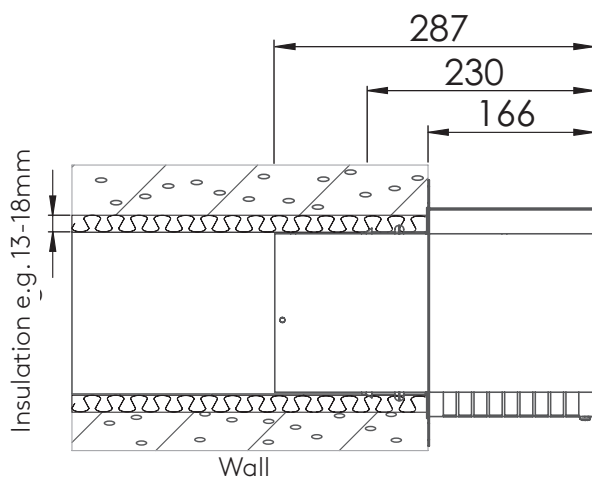
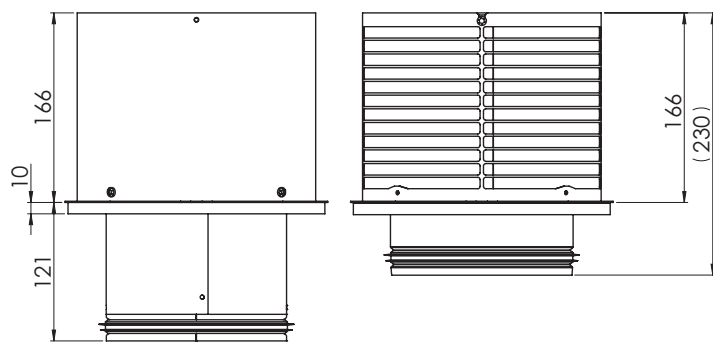
## Dimensions WG12



## Weight

WGI 12:	0,8 kg
WGO 12:	2,0 kg

## Dimensions WG16



## Weight

WGI 16:	1,3 kg
WGO 16:	3,0 kg

## Colours

### A variety of colour options are available

As standard, the WG12 outdoor air diffuser is available in five different RAL colours. In addition, you can also order the units finished in any RAL colour.

Standard colours:

- White RAL9010
- Grey, dark RAL7024
- Grey RAL7045
- Grey, light RAL7040
- Black RAL9011

### White

RAL 9010



### Grey

RAL 7024

RAL 7045

RAL 7040



### Black

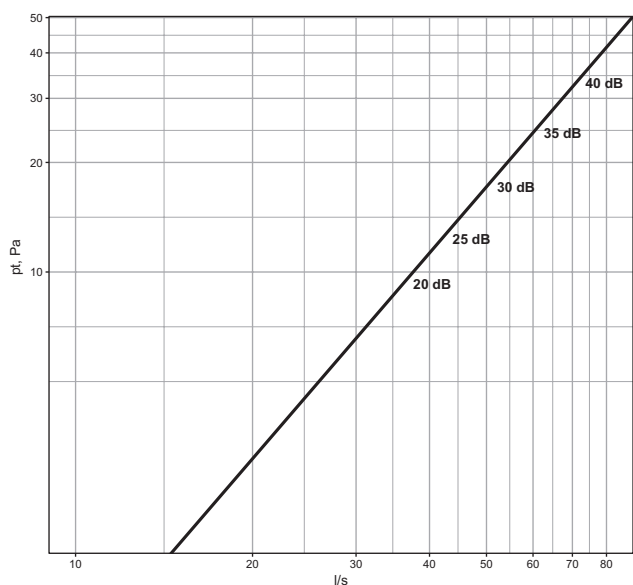
RAL 9011



# Technical data

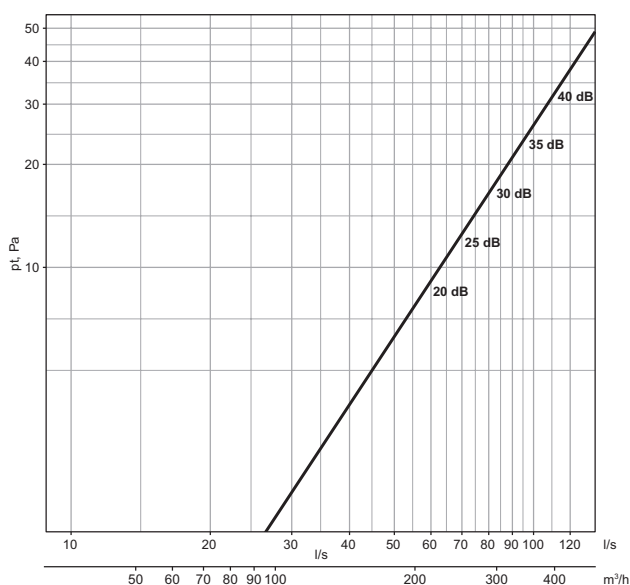
## WG 12

### Pressure drop and sound data (WGI 12)

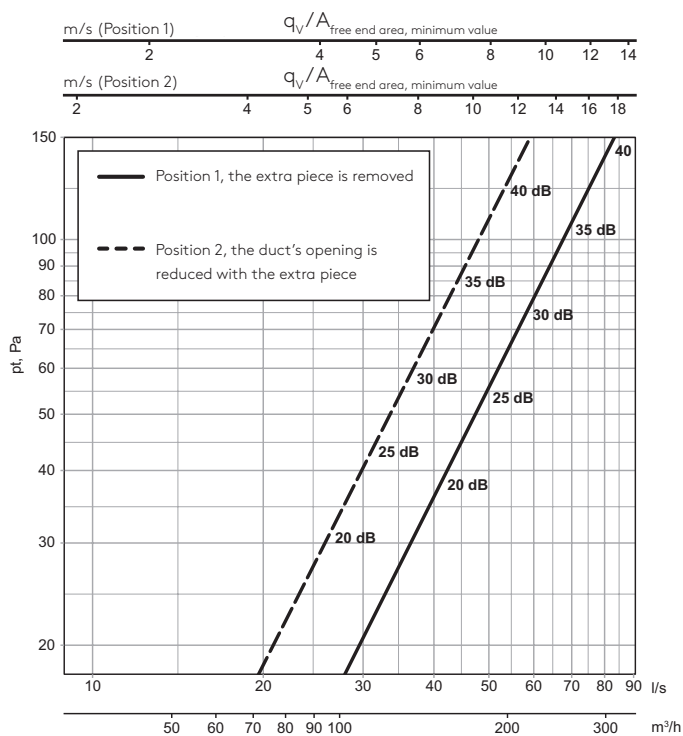


## WG 16

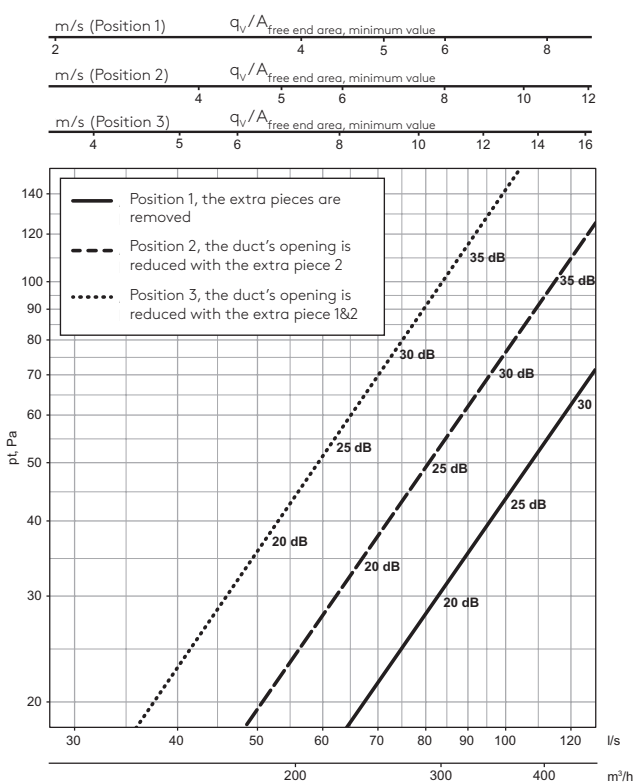
### Pressure drop and sound data (WGI 16)



### Pressure drop, exhaust velocity and sound data (WGO 12)



### Pressure drop, exhaust velocity and sound data (WGO 16)



# Product codes and accessories

## WG12



Code	Colour	Product
WG12R9011	RAL9011	Exhaust and fresh air diffuser, black
WG12R7024	RAL7024	Exhaust and fresh air diffuser, dark grey
WG12R7045	RAL7045	Exhaust and fresh air diffuser, grey
WG12R7040	RAL7040	Exhaust and fresh air diffuser, light grey
WG12R9010	RAL9010	Exhaust and fresh air diffuser, white

## WG16



Code	Colour	Product
WGI16R9010	RAL9010	Fresh air diffuser 160 mm, white
WGI16R7024	RAL7024	Fresh air diffuser 160 mm, dark grey
WGO16R9010	RAL9010	Exhaust air diffuser 160 mm, white
WGO16R7024	RAL7024	Exhaust air diffuser 160 mm, dark grey

Feel good **inside**

