

## Low velocity terminal for small air flows

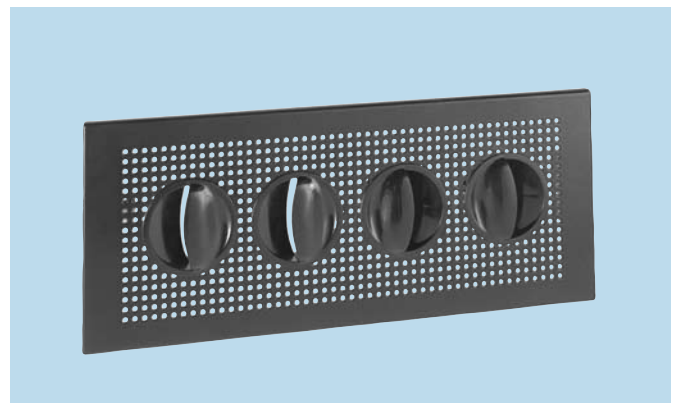


### General

DRG is a rectangular low velocity terminal designed for small air flows, the air being supplied to the room at low velocity. The spread pattern is easily adjustable with the rotatable discs. It is suitable for rooms where many small units can be spread out for the best possible distribution of supply air, for example in assembly halls, theatres, cinemas, lecture halls etc. The unit is mounted under seats in the riser of the steps. The unit shown in the figure is painted in the optional standard colour, RAL 9010.

### Quick facts

- Adjustable spread pattern and affected area
- Simple installation
- Cleanable
- Available in a large number of special versions for optimum adaptation to the room
- Available in alternative colours
- Included in the MagiCAD and CadVent databases



## Technical description

### Design

DRG is a rectangular low terminal consisting of two parts, the front plate and the mounting frame. The rectangular mounting frame is equipped with grooves in the short sides which fit the springs on the front plate. The perforated front plate has aerodynamically shaped discs. The front plate is pressed into the mounting frame and is held in place by the spring clips.

### Materials and surface treatment

The mounting frame and the front plate are manufactured in galvanized sheet steel. The front plate is painted in the colour selected when the order is placed. The standard version is painted in jet black, RAL 9005. The unit is also available in other standard colours: Dusty grey 7037, white aluminium RAL 9006, grey aluminium RAL 9007, pure white RAL 9010 and signal white RAL 9003 (NCS 0500).

### Special versions

In addition to the standard version, these terminals are available in special dimensions, with or without discs, in different shapes etc. Please contact your nearest sales office for further information.

### Planning

The spread pattern can be adjusted by turning the discs in the front panel.

### Installation

The hole is cut as illustrated in the diagram. The mounting frame is placed in the hole and screwed to the framework through the short sides. The front plate is then pressed into place in the mounting frame. See Figure 2.

### Commissioning

We recommend that the space underneath/behind the terminal should function as a pressure chamber. The supply air duct to each pressure chamber is then equipped with a measuring and commissioning damper. See Figure 3.

### Maintenance

The terminal can be cleaned when necessary using luke warm water with detergent added. See Figure 3.

### Environment

The Declaration of construction materials is available at [www.swegon.com](http://www.swegon.com).

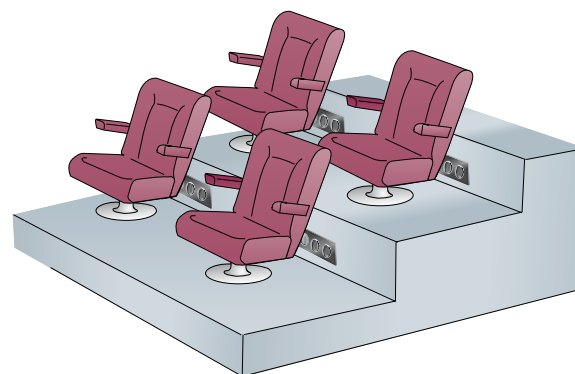


Figure 1. Principle DRG.

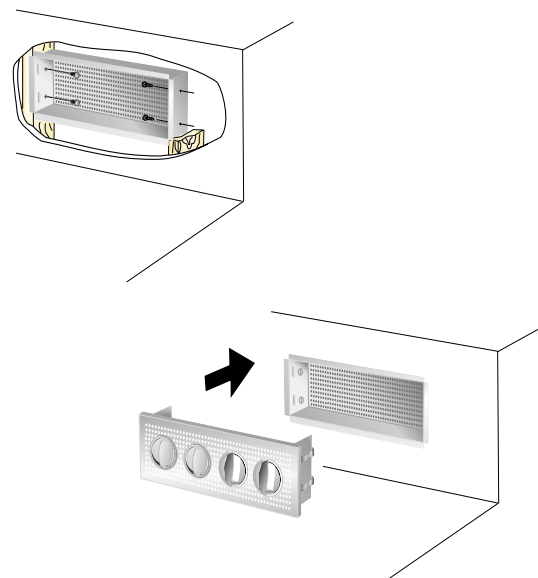


Figure 2. Installation.

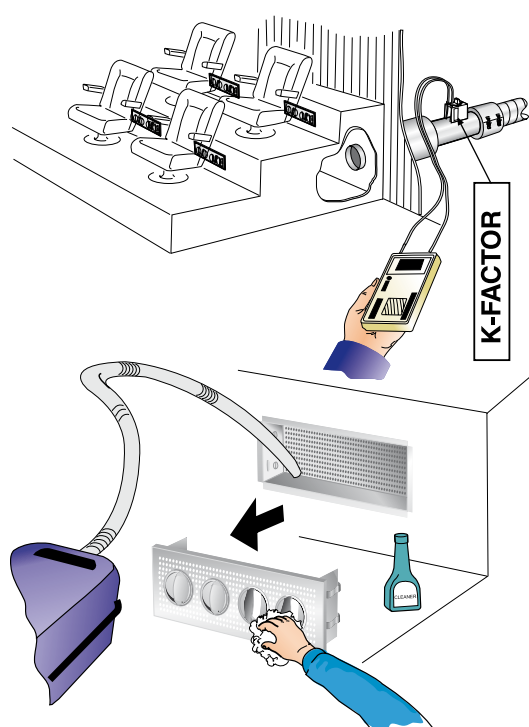


Figure 3. Commissioning. Maintenance.

Sizing

- Sound level dB(A) applies to rooms of 10 m² equivalent absorption area, which gives 4 dB room attenuation.
- The affected areas  $a_{0,20}$  and  $b_{0,20}$  are measured at  $\Delta t -3^\circ$  and refer to the maximum velocity independence of the distance from the floor.
- $\Delta t$  is the difference between the room temperature at 1.2 m above the floor and the supply air temperature.
- Recommended maximum under temperature 6 °C.
- For calculating the width of the spread pattern, air velocities in the zone of occupation or sound levels in rooms with other dimensions, please refer to our calculation programmes ProAir web and ProAc, which are both available for download at [www.swegon.com](http://www.swegon.com).

Sound data - DRG

Sound power level  $L_w$  (dB)

Table K<sub>OK</sub>

Size	Mid-frequency (octave band) Hz							
DRGa	63	125	250	500	1000	2000	4000	8000
300x100	2	4	3	3	-1	-6	-17	-27
Tol. ±	2	2	2	2	2	2	2	2

Sound attenuation  $\Delta L$  (dB)

Table  $\Delta L$

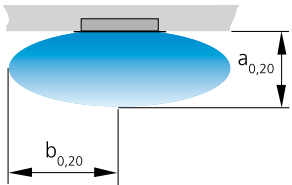
Size	Mid-frequency (octave band) Hz							
DRGa	63	125	250	500	1000	2000	4000	8000
300x100	15	9	4	2	0	0	0	0
Tol. ±	2	2	2	2	2	2	2	2

Engineering graphs

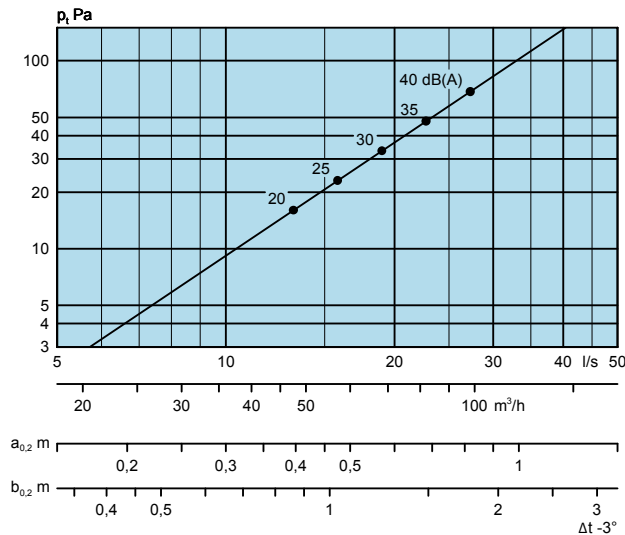
Air flow - Pressure drop - Sound level -

Affected area

- The graphs illustrate data for a DRG terminal installed in the open space below the seats, that functions as a pressure chamber.
- The affected areas  $a_{0,20}$  and  $b_{0,20}$  are measured at  $\Delta t -3^\circ$
- The graphs are not to be used for commissioning.
- The dB(C) value is normally 6-9 dB higher than the dB(A) value. For more accurate calculations, see the calculation template in the chapter on Acoustics in the Technical Information section of this catalogue.



DRGa 300-100



## Dimensions and weights

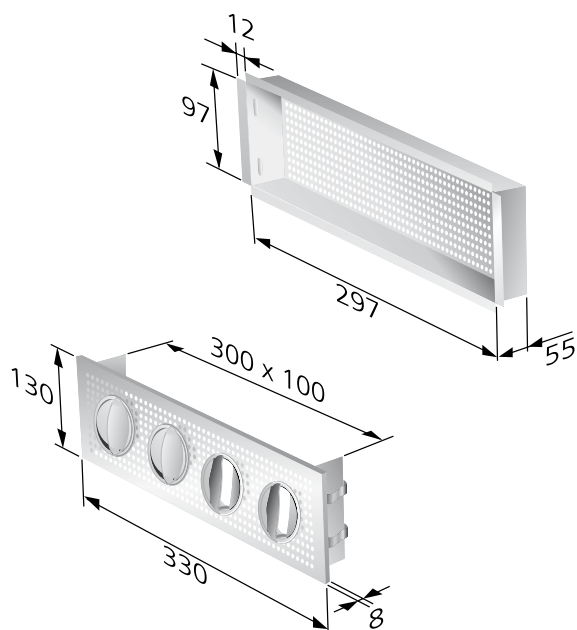


Figure 4. DRG with mounting frame. Hole making size = 300 x 100 mm. Weight: 1.1 kg

## Order key

### Product

Rectangular low velocity terminal  
for small air flows

DRGa -aaa -bbb

Size: 300 x 100

## Specification example

### SD XX

Swegon's rectangular low velocity terminal for small air flows of type DRGa, with the following functions:

- Adjustable spread pattern and affected area
- Includes mounting frame
- Non-fouling
- Cleanable
- Painted in standard matt black, RAL 9005

Size: DRGa 300 x 100 xx items