

# GTKV

Perforated extract air grille of robust construction for wall or ceiling



## QUICK FACTS

- Robust construction for environments with safety requirements
- Made of at least 75% recycled steel with 66% lower CO<sub>2</sub> footprint compared with traditional steel

| AIRFLOW - SOUND PRESSURE ROOM (Lp10A) *) |             |           |                   |           |                   |           |                   |
|------------------------------------------|-------------|-----------|-------------------|-----------|-------------------|-----------|-------------------|
| Size                                     | Perforation | 25 dB (A) |                   | 30 dB (A) |                   | 35 dB (A) |                   |
|                                          |             | l/s       | m <sup>3</sup> /h | l/s       | m <sup>3</sup> /h | l/s       | m <sup>3</sup> /h |
| 200-200-125                              | 2 mm        | 19        | 67                | 22        | 79                | 26        | 94                |
|                                          | 6 mm        | 36        | 130               | 43        | 154               | 51        | 184               |
| 250-250-125                              | 2 mm        | 19        | 67                | 22        | 79                | 26        | 94                |
|                                          | 6 mm        | 36        | 130               | 43        | 154               | 51        | 184               |
| 250-250-160                              | 2 mm        | 28        | 101               | 32        | 114               | 36        | 128               |
|                                          | 6 mm        | 62        | 223               | 73        | 263               | 86        | 310               |

\*) Lp10A = Sound pressure incl. A-filter with 4 dB room attenuation and 10 m<sup>2</sup> room absorption area.

|                 |                                                                                                                 |
|-----------------|-----------------------------------------------------------------------------------------------------------------|
| <b>Function</b> | Extract air                                                                                                     |
| <b>Variants</b> | 2 mm circular perforations<br>6 mm square perforations                                                          |
| <b>Colour</b>   | Standard colour: RAL 9003, signal white<br>5 alternative standard colours<br>Other colours available on request |

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# Technical description

## Design

GTKV is a square extract air grille made of 2 mm sheet steel for installation in walls or ceilings.

The robust design makes it suitable for installation in demanding environments with high safety requirements. The design of the grille protects against tampering and restricts access where required for safety purposes.

The extract air grille is available in two designs:

- GTKV 6, with 6 mm square perforations.
- GTKV 2, with 2 mm circular perforations.

## Materials and surface treatment

- Made of recycled galvanised sheet steel.
- Standard colour:
  - RAL 9003, signal white, gloss 40
- Alternative standard colours:
  - RAL 9006, white aluminium, gloss 80
  - RAL 9007, grey aluminium, gloss 80
  - RAL 9010, pure white, gloss 40
  - RAL 9005, jet black, gloss 35
  - RAL 7037, dusty grey, gloss 30

## Adaptation

Other colours are available on request.

## Project planning

Calculation and simulation of the product can easily be done via the product selection programmes Single Product Calculator and Room Unit Design, available at [www.swegon.com](http://www.swegon.com).

## Installation, commissioning and maintenance

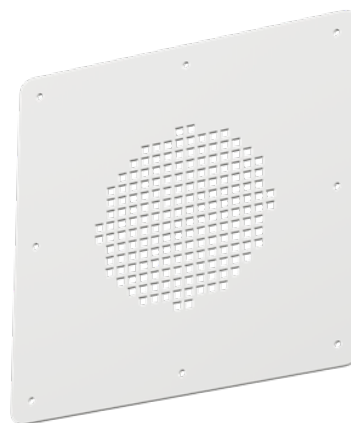
GTKV is designed for simple and secure installation via screw fixing to a wall or ceiling.

The airflow is adjusted via a damper in the duct system.

The extract air grille can be vacuumed using a brush attachment and, if required, cleaned with lukewarm water and detergent

## Certificates and standards

Certificates and standards are available at [www.swegon.com](http://www.swegon.com).



*GTKV 6, 6 mm square perforations.*



*GTKV 2, 2 mm circular perforations.*

# Technical data

## Dimensions and weight

| Size        | Dimensions |     | Weight (kg) |      |
|-------------|------------|-----|-------------|------|
|             | A          | Ød  | 2 mm        | 6 mm |
| 200-200-125 | 200        | 125 | 0.6         | 0.5  |
| 250-250-125 | 250        | 125 | 0.9         | 0.8  |
| 250-250-160 | 250        | 160 | 0.9         | 0.8  |

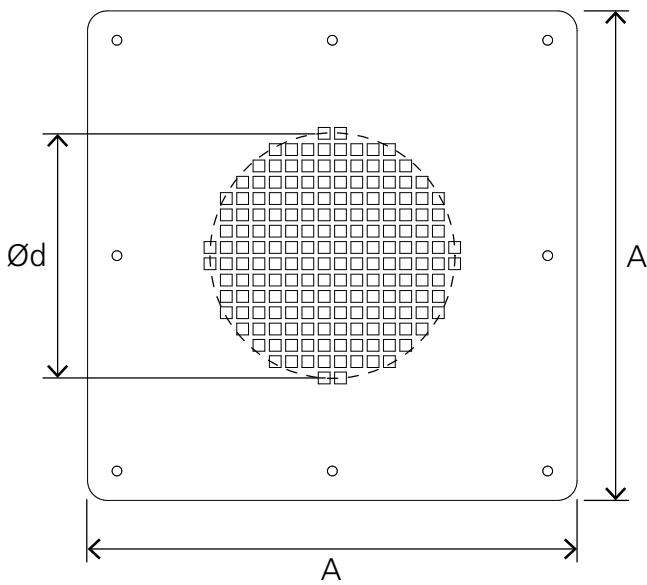


Figure 1. Dimensions, GTKV (mm).

## Performance

- Sound pressure level dB(A) applies to rooms with 10 m<sup>2</sup> equivalent sound absorption area.
- Sound attenuation ( $\Delta L$ ) is reported in octave bands.
- Orifice attenuation is included in the values.
- For further calculations, please refer to our calculation programmes available at [www.swegon.com](http://www.swegon.com).

$L_w$  = Sound power level

$L_{p10A}$  = Sound pressure level dB(A)

$K_{ok}$  = Correction for determining the  $L_w$  value in the octave band

$L_w = L_{p10A} + K_{ok}$  gives the frequency divided octave band

## Sound data

### 2 mm circular perforations

Sound power level  $L_w$  (dB)

Table  $K_{ok}$

| Size        | Mid-frequency (octave band) Hz |     |     |     |      |      |      |      |
|-------------|--------------------------------|-----|-----|-----|------|------|------|------|
|             | 63                             | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 200-200-125 | -8                             | -13 | -12 | -8  | -5   | -3   | 0    | -11  |
| 250-250-125 | -8                             | -13 | -12 | -8  | -5   | -3   | 0    | -11  |
| 250-250-160 | -11                            | -14 | -12 | -7  | -1   | 0    | -6   | -20  |
| Tol. $\pm$  | 6                              | 3   | 2   | 2   | 2    | 2    | 2    | 3    |

Sound attenuation  $\Delta L$  (dB)

Table  $\Delta L$

| Size        | Mid-frequency (octave band) Hz |     |     |     |      |      |      |      |
|-------------|--------------------------------|-----|-----|-----|------|------|------|------|
|             | 63                             | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 200-200-125 | 16                             | 12  | 7   | 2   | 0    | 0    | 0    | 0    |
| 250-250-125 | 16                             | 12  | 7   | 2   | 0    | 0    | 0    | 0    |
| 250-250-160 | 14                             | 10  | 5   | 1   | 0    | 0    | 0    | 0    |
| Tol. $\pm$  | 6                              | 3   | 2   | 2   | 2    | 2    | 2    | 3    |

### 6 mm square perforations

Sound power level  $L_w$  (dB)

Table  $K_{ok}$

| Size        | Mid-frequency (octave band) Hz |     |     |     |      |      |      |      |
|-------------|--------------------------------|-----|-----|-----|------|------|------|------|
|             | 63                             | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 200-200-125 | -11                            | -2  | -4  | -4  | -1   | -1   | -6   | -19  |
| 250-250-125 | -11                            | -2  | -4  | -4  | -1   | -1   | -6   | -19  |
| 250-250-160 | -9                             | -3  | -6  | -4  | -1   | -1   | -6   | -17  |
| Tol. $\pm$  | 6                              | 3   | 2   | 2   | 2    | 2    | 2    | 3    |

Sound attenuation  $\Delta L$  (dB)

Table  $\Delta L$

| Size        | Mid-frequency (octave band) Hz |     |     |     |      |      |      |      |
|-------------|--------------------------------|-----|-----|-----|------|------|------|------|
|             | 63                             | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 200-200-125 | 16                             | 12  | 7   | 2   | 0    | 0    | 0    | 0    |
| 250-250-125 | 16                             | 12  | 7   | 2   | 0    | 0    | 0    | 0    |
| 250-250-160 | 14                             | 10  | 5   | 1   | 0    | 0    | 0    | 0    |
| Tol. $\pm$  | 6                              | 3   | 2   | 2   | 2    | 2    | 2    | 3    |

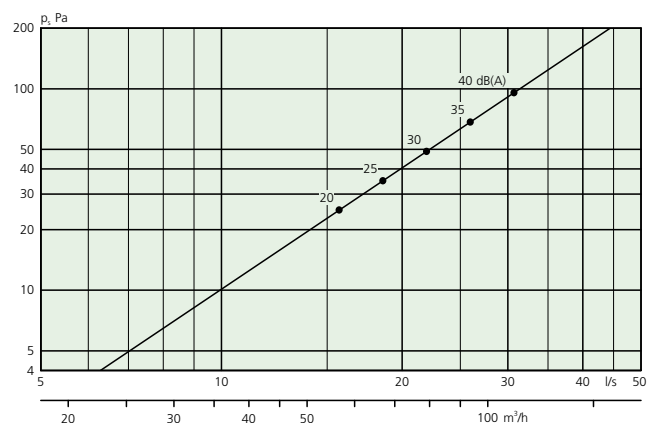
## Sizing diagram

Airflow – Pressure drop – Sound level

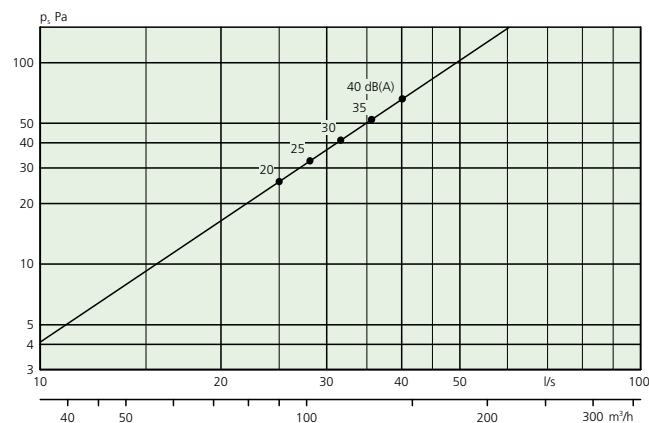
- The diagrams should not be used for commissioning.
- dB(A) applies to normal acoustic absorption, 4 dB room attenuation/10 m<sup>2</sup> equivalent room absorption area.
- The dB(C) value is normally 6-9 dB higher than the dB(A) value.

### 2 mm circular perforations

200-200-125 | 250-250-125

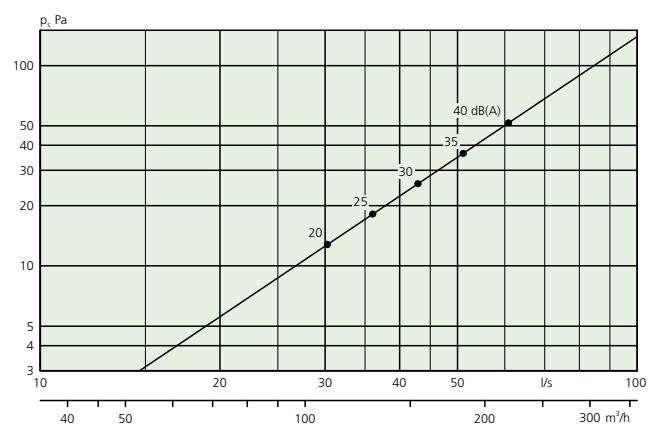


250-250-160

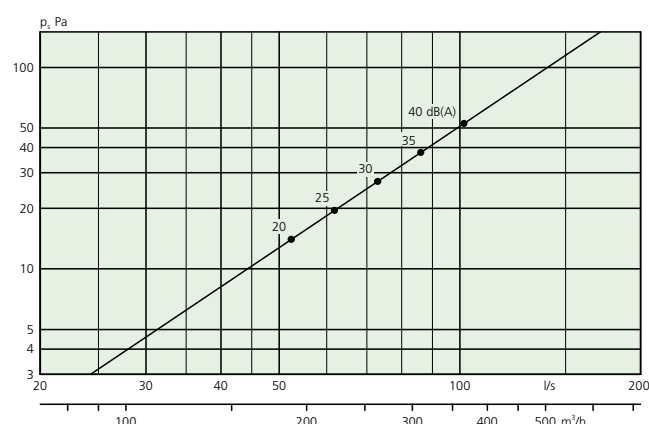


### 6 mm square perforations

200-200-125 | 250-250-125



250-250-160



# Specification

|                                                                            |      |   |   |         |      |
|----------------------------------------------------------------------------|------|---|---|---------|------|
| Perforated extract air grille                                              | GTKV | x | a | bbb-ccc | -ddd |
| Variant:<br>2 = 2 mm circular perforations<br>6 = 6 mm square perforations |      |   |   |         |      |
| Version:                                                                   |      |   |   |         |      |
| Width-height:<br>200-200, 250-250                                          |      |   |   |         |      |
| Inlet, Ø:<br>125, 160                                                      |      |   |   |         |      |

# Specification text

Swegon's square extract air grille GTKV for wall or ceiling placement with the following functions:

- Robust design for environments with safety requirements.
- Made of 2 mm sheet steel.
- Design with circular (2 mm) or square (6 mm) perforations.
- Made of at least 75% recycled steel with a 66% lower CO<sub>2</sub> footprint compared with traditional steel.
- Powder-coated white, RAL 9003.

Size:                      GTKV 6a bbb-ccc-ddd                      xx pcs