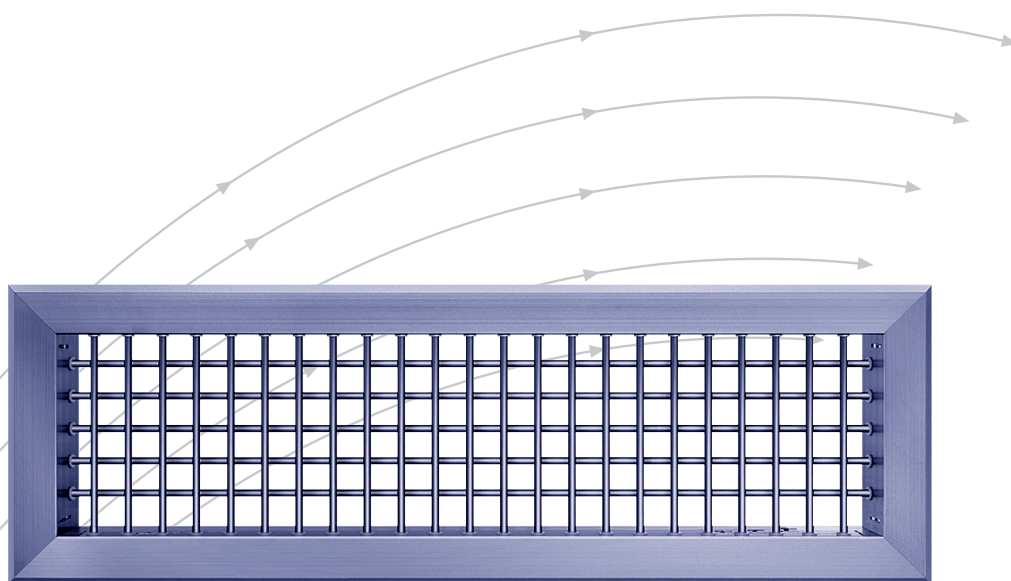


# Light metal diffusion grilles

- Type DGL
- anodised colourless finish



**TROX<sup>®</sup> TECHNIK**



The art of handling air

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# Contents · Application · Realisation · Safety instructions · Dimensions

## Contents

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## Application

The light metal diffusion grilles can be used as supply or exhaust air grilles. The various types we manufacture provide an optimum solution for every application problem. You will find the necessary information on the specific applications of the particular light metal DG types in the documents relating to iron diffusion grilles.

## Realisation

**DGL 1** Individually adjustable **vertical and horizontal** blades, angular frames with screwless mounting and foam gaskets. Blades and angular frame of Extrudal B, anodised colourless finish.

**DGL 3** Realisation as DGL 1 but with individually adjustable **vertical** blades only.

The attractive light metal diffusion grilles ideally complement sophisticated construction elements.

**DGL 5** Grille as DGL 1 with light metal damper mounted on back side consisting of inclined flap casing and flap.

**DGL 6** Grille as DGL 1 with opposed blade damper of Sendzimir-galvanized steel mounted on back side, raw aluminium blades.

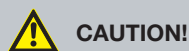
**DGL 7** Grille as DGL 3 with damper mounted on back side, consisting of tiltable flap and patented baffle plate.

**DGL 8** Grille as DGL 3 with opposed blade damper of Sendzimir-galvanized steel mounted on back side. Raw aluminium blades.

**DGL 17** Grille as DGL 1 with damper mounted on back side, consisting of tiltable flap and patented baffle plate.

**MR** Sectional steel masonry frame, Sendzimir-galvanized, for screwless mounting. (see prospectus L-02-1-10e).

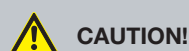
## Safety instructions



**Damage to the product due to improper handling. Check the device for damage and contamination prior to operation!**

Improper handling may lead to considerable material damage of the product.

- Do not use any acid or abrasive cleaning agents.
- Adhesives from sticky tape may lead to colour damage.
- Excessive moisture may lead to colour damage and corrosion.
- Use only cleaning agents, greases and oils that are expressly specified.



**Risk of injury from sharp edges and corners, ridges and thin-walled sheet metal parts!**

- Proceed carefully with all work.
- Wear protective gloves, safety shoes and protective helmet.



**Danger from incorrect use. Misuse of the product may lead to dangerous situations.**

The product must not be used:

- in areas subject to explosion hazards;
- in the open air without sufficient protection against weather effects;
- in atmospheres that may have a damaging and/or corrosive effect on the product due to scheduled or unscheduled chemical reactions.

## Dimensions / Rapid selection

Preference dimensions

Nominal length B x nominal height H mm

| B    | K               | O        | T    | H    | J               | N        |
|------|-----------------|----------|------|------|-----------------|----------|
| [mm] | $B + 15^{+2}_0$ | $B + 50$ | [mm] | [mm] | $H + 10^{+2}_0$ | $H + 50$ |
| 200  | 215             | 250      | 75   | 50   | 60              | 100      |
| 250  | 265             | 300      | 80   | 100  | 110             | 150      |
| 300  | 315             | 350      | 85   | 150  | 160             | 200      |
| 400  | 415             | 450      | 95   | 200  | 210             | 250      |
| 500  | 515             | 550      | 100  | 250  | 260             | 300      |
| 600  | 615             | 650      | 110  | 300  | 310             | 350      |
| 750  | 765             | 800      | 130  |      |                 |          |
| 900  | 915             | 950      | 150  |      |                 |          |

# Dimensions · Installation · Dimensioning

| Nom. length B<br>[mm] | Nominal height |      |        |        |      |        |        |      |        |        |      |        |        |      |        |      |     |      |
|-----------------------|----------------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|--------|------|--------|------|-----|------|
|                       | ZL             | H    | AL     | ZL     | H    | AL     | ZL     | H    | AL     | ZL     | H    | AL     | ZL     | H    | AL     |      |     |      |
|                       | [m³/h]         | [mm] | [m³/h] | [m³/h] | [mm] | [m³/h] | [m³/h] | [mm] | [m³/h] | [m³/h] | [mm] | [m³/h] | [m³/h] | [mm] | [m³/h] |      |     |      |
| 200                   | 83             | 50   | 97     | 167    | 100  | 195    |        |      |        |        |      |        |        |      |        |      |     |      |
| 250                   |                |      |        | 209    | 100  | 243    |        |      |        |        |      |        |        |      |        |      |     |      |
| 300                   | 125            | 50   | 146    | 250    | 100  | 292    | 375    | 150  | 438    |        |      |        |        |      |        |      |     |      |
| 400                   | 167            | 50   | 195    | 334    | 100  | 390    | 500    | 150  | 585    | 667    | 200  | 780    |        |      |        |      |     |      |
| 500                   | 208            | 50   | 243    | 417    | 100  | 487    | 625    | 150  | 730    | 834    | 200  | 974    |        |      |        |      |     |      |
| 600                   | 250            | 50   | 292    | 500    | 100  | 584    | 750    | 150  | 876    | 1000   | 200  | 1168   | 1250   | 250  | 1460   | 1500 | 300 | 1752 |
| 750                   | 313            | 50   | 365    | 625    | 100  | 730    | 938    | 150  | 1095   | 1250   | 200  | 1460   | 1563   | 250  | 1825   |      |     |      |
| 900                   |                |      |        | 750    | 100  | 876    | 1125   | 150  | 1314   | 1500   | 200  | 1752   | 1875   | 250  | 2190   | 2250 | 300 | 2628 |

## Base: Directly flowing resp. flowing off

ZL = supply air,  $v_{\text{eff}} = 3.0 \text{ m/s}$ ,  $\Delta p_s = 3.5 \text{ Pa}$

AL = exhaust air,  $v_{\text{eff}} = 3.5 \text{ m/s}$ ,  $\Delta p_s = 8 \text{ Pa}$

$L_w$  for nominal dimension 600 x 100 mm:

$L_{wZL} = 21 \text{ dB(A)}$ ,  $L_{wAL} = 25 \text{ dB(A)}$

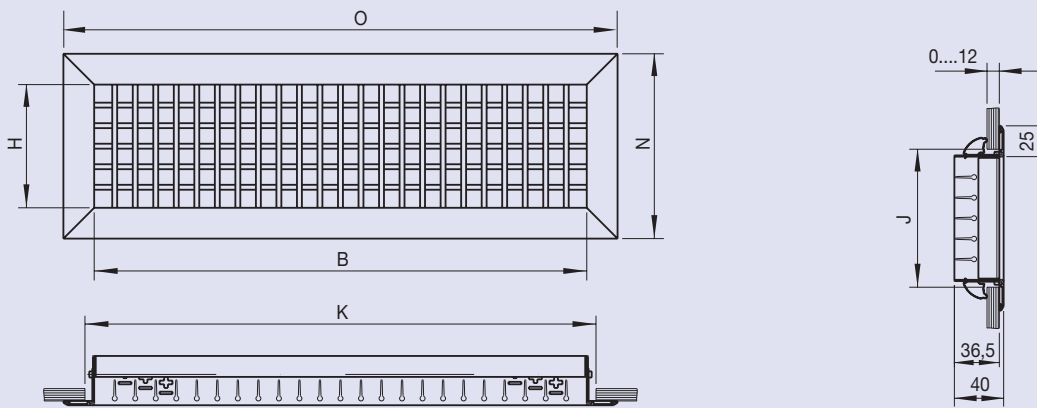
## Legend

$v_{\text{eff}}$  = velocity of effective air

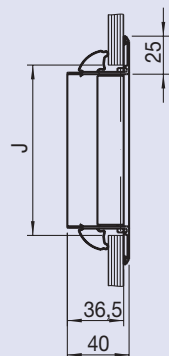
$\Delta p_s$  = static pressure drop

$L_w$  = sound power level

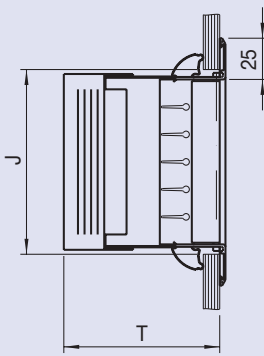
## Type DGL 1



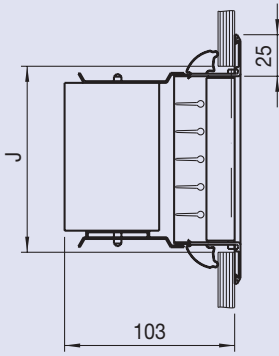
## Type DGL 3



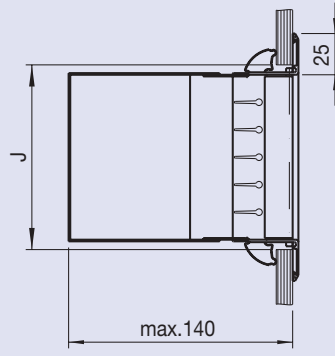
## Type DGL 5



## Type DGL 6 + DGL 8



## Type DGL 7 + DGL 17



## Installation

Instructions for screwless mounting (designation SL) look prospectus L-02-1-31e.

## Special models:

Anodised in colour according to colour chart (the exact shade of the colour cannot be guaranteed).

Special sizes in anodised colour or colourless finish.

Grilles with border (5 mm) in anodised colour or colourless finish. Linear air terminal devices 50, 100, 150 and 200 mm high, any desired length, anodised colour or colourless finish.

Prices of special models on request.

## Dimensioning

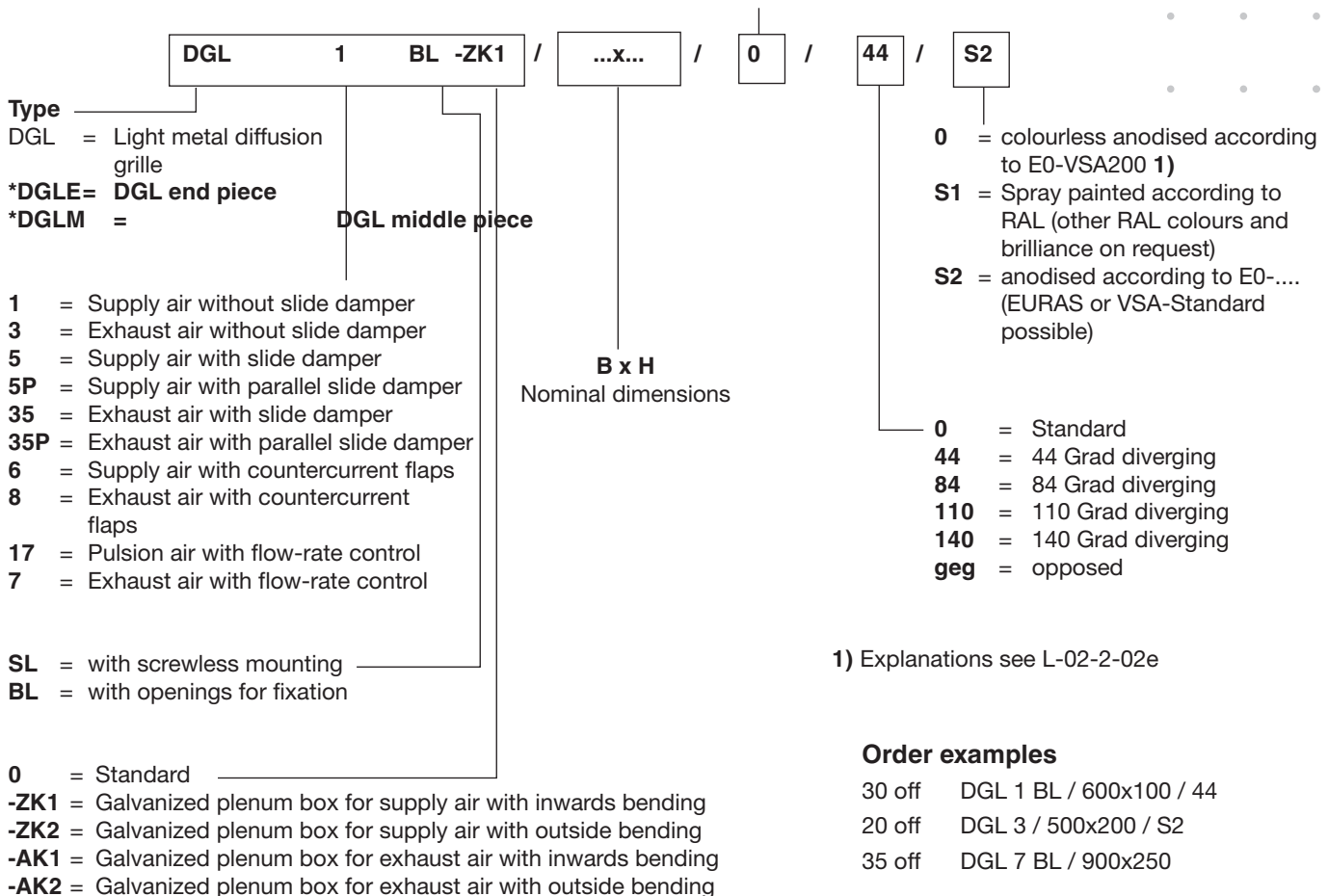
Free area = 77 % of the nominal area B x H.

Outlet velocity, flow rate, pressure drop and sound power level values are found in 'Dimensioning of diffusion grilles'.

# Order details

## Order codes

No details for standard products



\*for belt design

## Text for tendering purposes

### Type DGL 1

Diffusion grille (supply air/exhaust air) with individually adjustable **vertical** (in front) and **horizontal** (behind) blades, designed for favorable flow. Angular frames with screwless mounting and foam gaskets.

### Material

Blades and angular frame of Extrudal B, anodised colourless finish.

### Type DGL 3

Realisation as DGL 1 but with individually adjustable **vertical** blades only.

### Type DGL 5

Grille as DGL 1 with light metal damper mounted on back side consisting of inclined flap casing and flap.

### Type DGL 6

Grille as DGL 1 with opposed blade damper of Sendzimir-galvanized steel mounted on back side, raw aluminium blades.

### Type DGL 7

Grille as DGL 3 with damper mounted on back side, consisting of tiltable flap and patented baffle plate.

### Type DGL 8

Grille as DGL 3 with opposed blade damper of Sendzimir-galvanized steel mounted on back side. Raw aluminium blades.

### Type DGL 17

Grille as DGL 1 with damper mounted on back side, consisting of tiltable flap and patented baffle plate.

### MR

Sectional steel masonry frame, Sendzimir-galvanized, for screwless mounting (see prospectus L-02-1-10e).