



## EXTERNAL INDUSTRIAL GRILLES 100 mm PITCH

GL  
SERIES

### OVERVIEW

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The GL series is represented by a range of grilles for injection and extraction with fixed blades angled at 49°. Used for the injection of air from the external environment and for the extraction of unwanted air to the outside. It is recommended that for the external use of these grilles, a mesh should be used to prevent birds from passing through the units.

#### CHARACTERGLISTICS

**Frame:** in extruded aluminium, 50 mm wide, with rounded edges, built in four parts with the joints hidden under the frame during machine assembly.

**Blades:** In extruded aluminium with 100mm high blade, attached to the internal frame on four points of assembly.

**Damper:** optional accessory built entirely in aluminium with multiple blades with counter movement.

**Counterframe :** Made from galvanised steel sheet for mounting to walls of light structures.

**Finishing :** The grilles are made in anodised natural aluminium. RAL colours from table, on request.

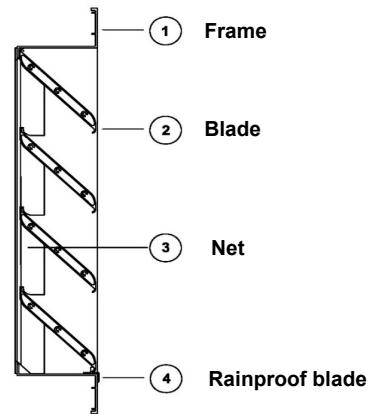
#### SUPPLYABLE SIZES

Minimum: 300 x 240

Maximum: 2.000 x 2.040

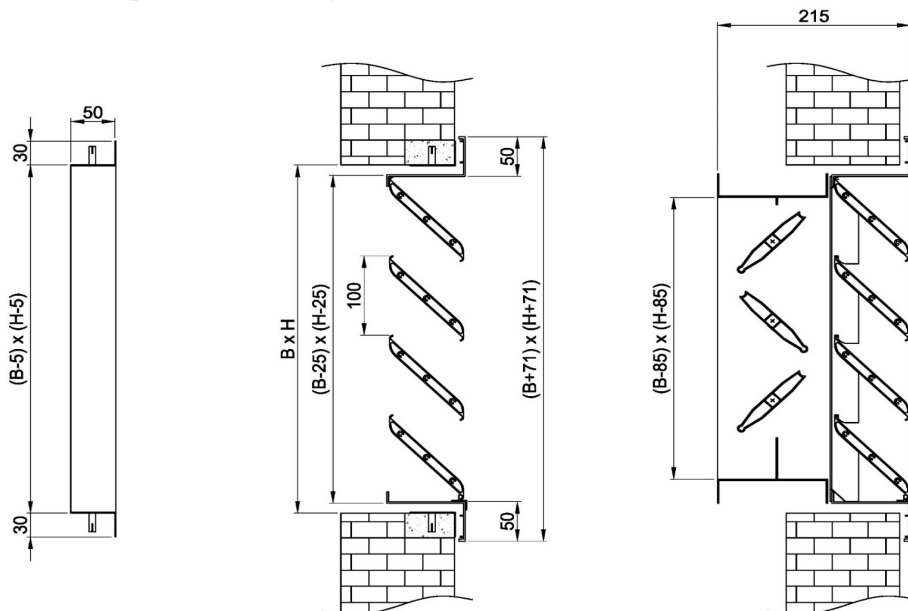
It is possible to supply grilles with one of the two sides (B or H) larger than the maximum sizes (up to 3000 mm) but no bigger than 4 m<sup>2</sup>

Please check availability and supplyability when requesting over measures.



#### UNSUITABLE ENVIRONMENTS

The aluminum products are not suitable for installation in environments with an atmosphere containing corrosive substances for this material and in particular containing chlorine, such as





## EXTERNAL INDUSTRIAL GRILLES

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GRILLE COMPOSITIONS

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### CONSTRUCTION OF COMPOSED GRILLES :

The GL series are made from multiple panels depending both on the height and base where one of the two exceeds 2 metres in length and the section axed 4 mq (i.e. the measure are outside the standard measurements).

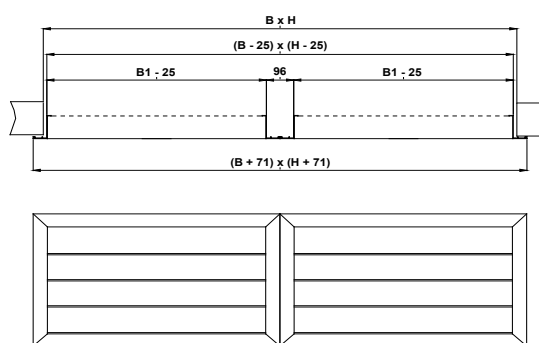
The nominal dimensions BxH of the standard composed grille are shown in the below table with the relative number of sections (2 or 3).

The standard composed grille is that where it is composed from single grilles with standard sizes. The assembly of the composed grilles is the responsibility of the supplier.

#### BASE DIMENSIONS

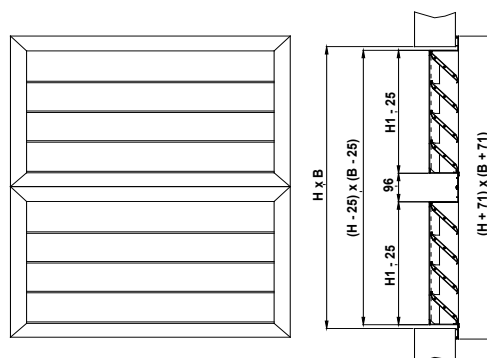
| B    | n <sub>B</sub> | B1   |
|------|----------------|------|
| 2070 | 2              | 1000 |
| 2270 | 2              | 1100 |
| 2470 | 2              | 1200 |
| 2670 | 2              | 1300 |
| 2870 | 2              | 1400 |
| 3070 | 2              | 1500 |
| 3270 | 2              | 1600 |
| 3470 | 2              | 1700 |
| 3670 | 2              | 1800 |
| 3870 | 2              | 1900 |
| 4070 | 2              | 2000 |
| 4041 | 3              | 1300 |
| 4341 | 3              | 1400 |
| 4641 | 3              | 1500 |
| 4941 | 3              | 1600 |
| 5241 | 3              | 1700 |
| 5541 | 3              | 1800 |
| 5841 | 3              | 1900 |
| 6141 | 3              | 2000 |

#### GRILLE COMPOSITION IN 2 HORIZONTAL



The horizontal grille composition is done considering the nominal dimensions for B in the above table, to which corresponds the number of subdivisions of the base (n<sub>B</sub>), the nominal dimension B1 of the single grille.

#### GRILLE COMPOSITION IN 2 VERTICAL PARTS



The vertical composition of the grille is done taking into account the nominal dimensions of H in the above table, that is in relation to the number of different subdivisions of the base (n<sub>H</sub>), the nominal dimension H1 of the single grille. Differently to the base dimension B, that for H does not allow for dimensions different to those indicated due to construction restrictions dictated by the

#### HEIGHT DIMENSIONS

| H    | n <sub>H</sub> | H1   |
|------|----------------|------|
| 2150 | 2              | 1040 |
| 2350 | 2              | 1140 |
| 2550 | 2              | 1240 |
| 2750 | 2              | 1340 |
| 2950 | 2              | 1440 |
| 3150 | 2              | 1540 |
| 3350 | 2              | 1640 |
| 3550 | 2              | 1740 |
| 3750 | 2              | 1840 |
| 3950 | 2              | 1940 |
| 4150 | 2              | 2040 |
| 4161 | 3              | 1340 |
| 4461 | 3              | 1440 |
| 4761 | 3              | 1540 |
| 5061 | 3              | 1640 |
| 5361 | 3              | 1740 |
| 5661 | 3              | 1840 |
| 5961 | 3              | 1940 |
| 6261 | 3              | 2040 |

#### LEGEND

|                |                                      |
|----------------|--------------------------------------|
| B x H          | Composed grille - nominal dimensions |
| B-25 x H-25    | Composed grille - P. A. dimensions   |
| B+71 x H+71    | Composed grille - E. C. dimensions   |
| n <sub>B</sub> | n° of fields in the base B division  |
| n <sub>H</sub> | n° fields in the height H division   |
| B1 x H1        | Single grille - nominal dimensions   |
| B1-25 x H1-25  | Single grille - P. A. dimensions     |
| B1+71 x H1+71  | Single grille - E. C. dimensions     |



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EFFECTIVE AREA

$A_k [m^2]$

|        |      |       |       |       |       |       |       |       |       |       |       |       |
|--------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| HEIGHT | 3040 | 0,544 | 0,701 | 0,859 | 1,016 | 1,174 | 1,332 | 1,489 | 1,647 | 1,804 | 1,962 |       |
|        | 2940 | 0,525 | 0,677 | 0,829 | 0,981 | 1,134 | 1,286 | 1,438 | 1,590 | 1,742 | 1,894 | 2,046 |
|        | 2840 | 0,506 | 0,653 | 0,800 | 0,946 | 1,093 | 1,240 | 1,386 | 1,533 | 1,680 | 1,827 | 1,973 |
|        | 2740 | 0,487 | 0,629 | 0,770 | 0,911 | 1,053 | 1,194 | 1,335 | 1,476 | 1,618 | 1,759 | 1,900 |
|        | 2640 | 0,469 | 0,605 | 0,740 | 0,876 | 1,012 | 1,148 | 1,284 | 1,420 | 1,555 | 1,691 | 1,827 |
|        | 2540 | 0,450 | 0,580 | 0,711 | 0,841 | 0,972 | 1,102 | 1,232 | 1,363 | 1,493 | 1,624 | 1,754 |
|        | 2440 | 0,431 | 0,556 | 0,681 | 0,806 | 0,931 | 1,056 | 1,181 | 1,306 | 1,431 | 1,556 | 1,681 |
|        | 2340 | 0,412 | 0,532 | 0,652 | 0,771 | 0,891 | 1,010 | 1,130 | 1,249 | 1,369 | 1,488 | 1,608 |
|        | 2240 | 0,394 | 0,508 | 0,622 | 0,736 | 0,850 | 0,964 | 1,078 | 1,192 | 1,307 | 1,421 | 1,535 |
|        | 2140 | 0,375 | 0,484 | 0,592 | 0,701 | 0,810 | 0,918 | 1,027 | 1,136 | 1,244 | 1,353 | 1,462 |
|        | 2040 | 0,356 | 0,459 | 0,563 | 0,666 | 0,769 | 0,872 | 0,976 | 1,079 | 1,182 | 1,285 | 1,389 |
|        | 1940 | 0,337 | 0,435 | 0,533 | 0,631 | 0,729 | 0,827 | 0,924 | 1,022 | 1,120 | 1,218 | 1,316 |
|        | 1840 | 0,319 | 0,411 | 0,503 | 0,596 | 0,688 | 0,781 | 0,873 | 0,965 | 1,058 | 1,150 | 1,242 |
|        | 1740 | 0,300 | 0,387 | 0,474 | 0,561 | 0,648 | 0,735 | 0,822 | 0,909 | 0,996 | 1,082 | 1,169 |
|        | 1640 | 0,281 | 0,363 | 0,444 | 0,526 | 0,607 | 0,689 | 0,770 | 0,852 | 0,933 | 1,015 | 1,096 |
|        | 1540 | 0,262 | 0,339 | 0,415 | 0,491 | 0,567 | 0,643 | 0,719 | 0,795 | 0,871 | 0,947 | 1,023 |
|        | 1440 | 0,244 | 0,314 | 0,385 | 0,456 | 0,526 | 0,597 | 0,668 | 0,738 | 0,809 | 0,879 | 0,950 |
|        | 1340 | 0,225 | 0,290 | 0,355 | 0,421 | 0,486 | 0,551 | 0,616 | 0,681 | 0,747 | 0,812 | 0,877 |
|        | 1240 | 0,206 | 0,266 | 0,326 | 0,386 | 0,445 | 0,505 | 0,565 | 0,625 | 0,684 | 0,744 | 0,804 |
|        | 1140 | 0,187 | 0,242 | 0,296 | 0,350 | 0,405 | 0,459 | 0,514 | 0,568 | 0,622 | 0,677 | 0,731 |
|        | 1040 | 0,169 | 0,218 | 0,267 | 0,315 | 0,364 | 0,413 | 0,462 | 0,511 | 0,560 | 0,609 | 0,658 |
|        | 940  | 0,150 | 0,193 | 0,237 | 0,280 | 0,324 | 0,367 | 0,411 | 0,454 | 0,498 | 0,541 | 0,585 |
|        | 840  | 0,131 | 0,169 | 0,207 | 0,245 | 0,283 | 0,321 | 0,359 | 0,397 | 0,436 | 0,474 | 0,512 |
|        | 740  | 0,112 | 0,145 | 0,178 | 0,210 | 0,243 | 0,276 | 0,308 | 0,341 | 0,373 | 0,406 | 0,439 |
|        | 640  | 0,094 | 0,121 | 0,148 | 0,175 | 0,202 | 0,230 | 0,257 | 0,284 | 0,311 | 0,338 | 0,365 |
|        | 540  | 0,075 | 0,097 | 0,118 | 0,140 | 0,162 | 0,184 | 0,205 | 0,227 | 0,249 | 0,271 | 0,292 |
|        | 440  | 0,056 | 0,073 | 0,089 | 0,105 | 0,121 | 0,138 | 0,154 | 0,170 | 0,187 | 0,203 | 0,219 |
|        | 340  | 0,037 | 0,048 | 0,059 | 0,070 | 0,081 | 0,092 | 0,103 | 0,114 | 0,124 | 0,135 | 0,146 |
|        | 240  | 0,019 | 0,024 | 0,030 | 0,035 | 0,040 | 0,046 | 0,051 | 0,057 | 0,062 | 0,068 | 0,073 |
|        | 400  | 500   | 600   | 700   | 800   | 900   | 1000  | 1100  | 1200  | 1300  | 1400  |       |
|        | BASE |       |       |       |       |       |       |       |       |       |       |       |

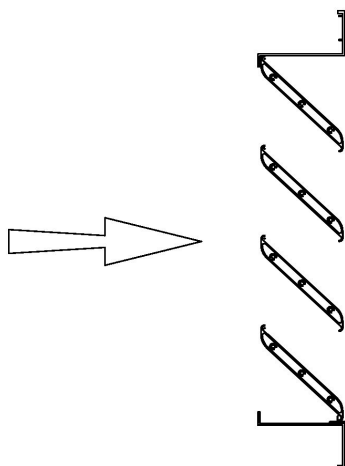
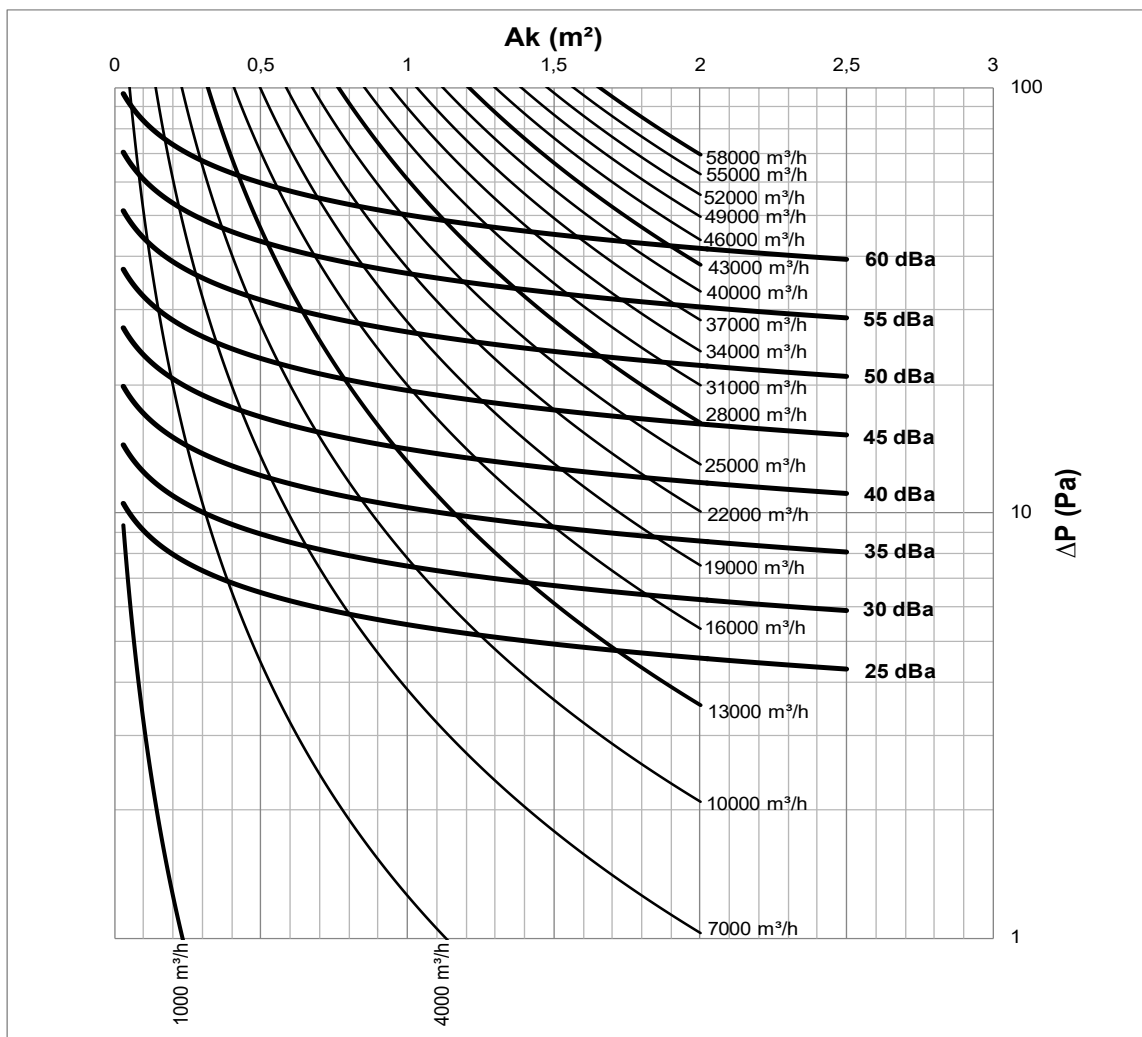
|        |      |       |       |       |       |       |       |       |       |       |       |       |
|--------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| HEIGHT | 2740 | 2,042 |       |       |       |       |       |       |       |       |       |       |
|        | 2640 | 1,963 |       |       |       |       |       |       |       |       |       |       |
|        | 2540 | 1,885 | 2,015 |       |       |       |       |       |       |       |       |       |
|        | 2440 | 1,806 | 1,931 | 2,056 |       |       |       |       |       |       |       |       |
|        | 2340 | 1,727 | 1,847 | 1,967 |       |       |       |       |       |       |       |       |
|        | 2240 | 1,649 | 1,763 | 1,877 | 1,991 |       |       |       |       |       |       |       |
|        | 2140 | 1,570 | 1,679 | 1,788 | 1,896 | 2,005 |       |       |       |       |       |       |
|        | 2040 | 1,492 | 1,595 | 1,698 | 1,802 | 1,905 | 2,008 |       |       |       |       |       |
|        | 1940 | 1,413 | 1,511 | 1,609 | 1,707 | 1,805 | 1,902 | 2,000 |       |       |       |       |
|        | 1840 | 1,335 | 1,427 | 1,520 | 1,612 | 1,704 | 1,797 | 1,889 | 1,982 |       |       |       |
|        | 1740 | 1,256 | 1,343 | 1,430 | 1,517 | 1,604 | 1,691 | 1,778 | 1,865 | 1,952 |       |       |
|        | 1640 | 1,178 | 1,259 | 1,341 | 1,422 | 1,504 | 1,585 | 1,667 | 1,748 | 1,830 | 1,911 |       |
|        | 1540 | 1,099 | 1,175 | 1,251 | 1,328 | 1,404 | 1,480 | 1,556 | 1,632 | 1,708 | 1,784 | 1,860 |
|        | 1440 | 1,021 | 1,091 | 1,162 | 1,233 | 1,303 | 1,374 | 1,445 | 1,515 | 1,586 | 1,657 | 1,727 |
|        | 1340 | 0,942 | 1,007 | 1,073 | 1,138 | 1,203 | 1,268 | 1,334 | 1,399 | 1,464 | 1,529 | 1,594 |
|        | 1240 | 0,864 | 0,924 | 0,983 | 1,043 | 1,103 | 1,163 | 1,222 | 1,282 | 1,342 | 1,402 | 1,461 |
|        | 1140 | 0,785 | 0,840 | 0,894 | 0,948 | 1,003 | 1,057 | 1,111 | 1,166 | 1,220 | 1,274 | 1,329 |
|        | 1040 | 0,707 | 0,756 | 0,805 | 0,853 | 0,902 | 0,951 | 1,000 | 1,049 | 1,098 | 1,147 | 1,196 |
|        | 940  | 0,628 | 0,672 | 0,715 | 0,759 | 0,802 | 0,846 | 0,889 | 0,932 | 0,976 | 1,019 | 1,063 |
|        | 840  | 0,550 | 0,588 | 0,626 | 0,664 | 0,702 | 0,740 | 0,778 | 0,816 | 0,854 | 0,892 | 0,930 |
|        | 740  | 0,471 | 0,504 | 0,536 | 0,569 | 0,602 | 0,634 | 0,667 | 0,699 | 0,732 | 0,765 | 0,797 |
|        | 640  | 0,393 | 0,420 | 0,447 | 0,474 | 0,501 | 0,528 | 0,556 | 0,583 | 0,610 | 0,637 | 0,664 |
|        | 540  | 0,314 | 0,336 | 0,358 | 0,379 | 0,401 | 0,423 | 0,445 | 0,466 | 0,488 | 0,510 | 0,531 |
|        | 440  | 0,236 | 0,252 | 0,268 | 0,284 | 0,301 | 0,317 | 0,333 | 0,350 | 0,366 | 0,382 | 0,399 |
|        | 340  | 0,157 | 0,168 | 0,179 | 0,190 | 0,201 | 0,211 | 0,222 | 0,233 | 0,244 | 0,255 | 0,266 |
|        | 240  | 0,079 | 0,084 | 0,089 | 0,095 | 0,100 | 0,106 | 0,111 | 0,117 | 0,122 | 0,127 | 0,133 |
|        | 1500 | 1600  | 1700  | 1800  | 1900  | 2000  | 2100  | 2200  | 2300  | 2400  | 2500  |       |
|        | BASE |       |       |       |       |       |       |       |       |       |       |       |



# EXTERNAL INDUSTRIAL GRILLES 100 mm PITCH

GL  
SERIES

PERFORMANCE IN EXPULSION

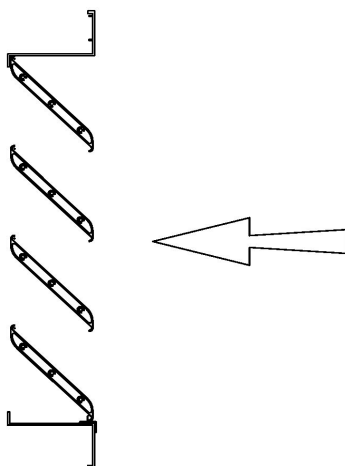
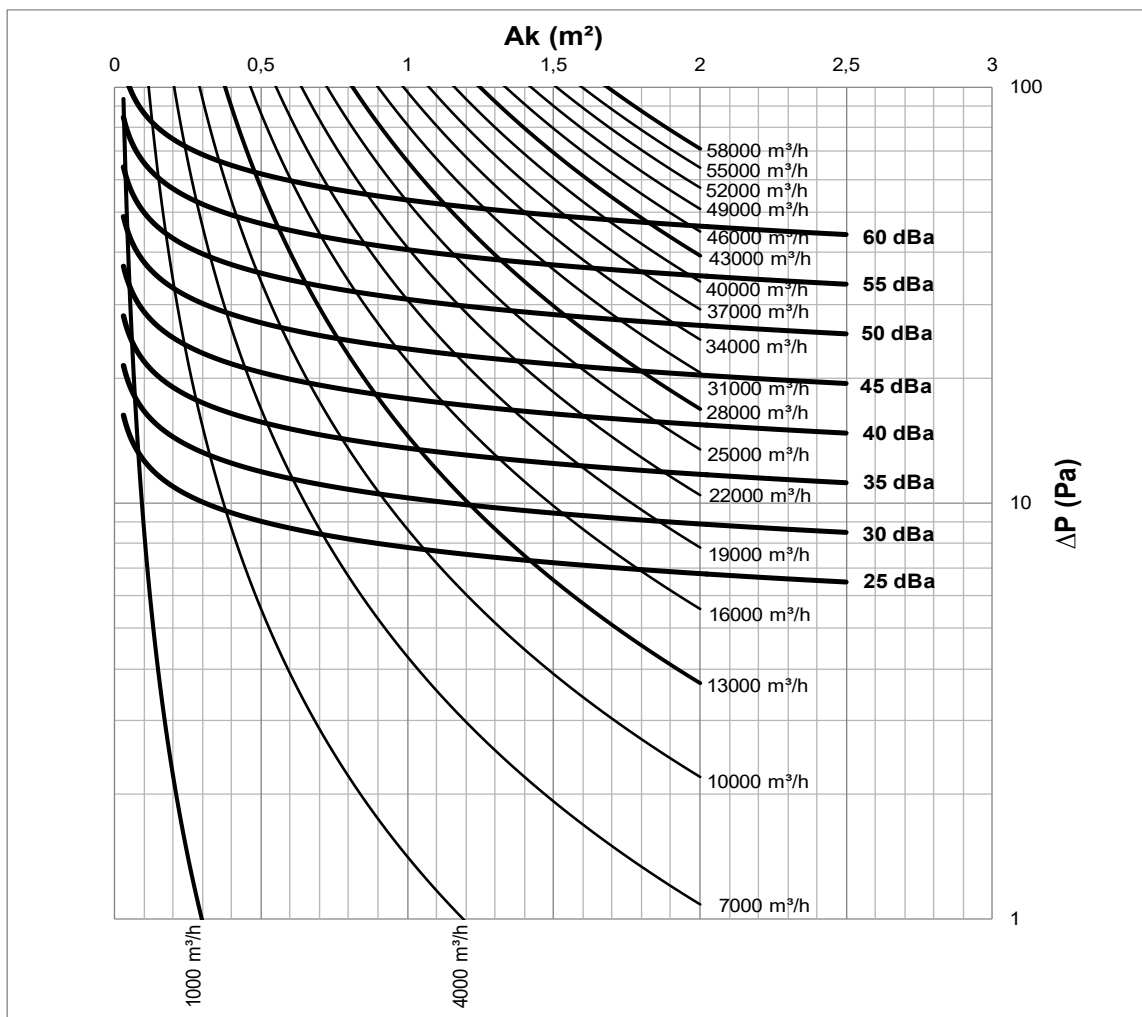




# EXTERNAL INDUSTRIAL GRILLES 100 mm PITCH

GL  
SERIES

PERFORMANCE IN INJECTION

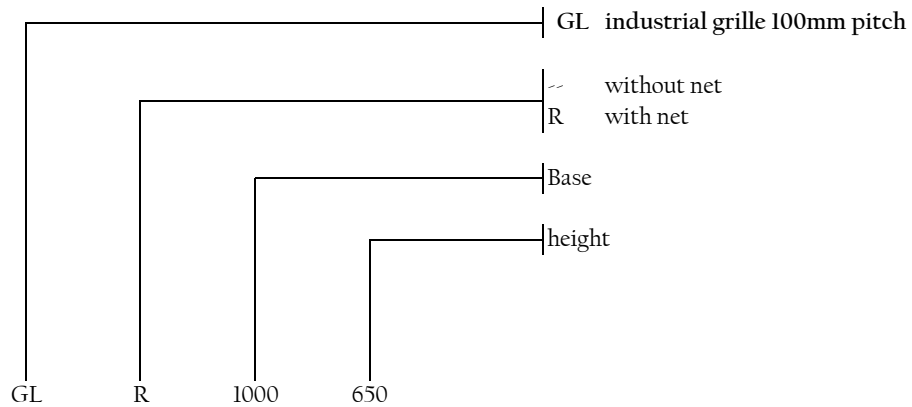




## EXTERNAL INDUSTRIAL GRILLES 100 mm PITCH

GL  
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### HOW TO ORDER



| Standard Bases |
|----------------|
| 600            |
| 800            |
| 1000           |
| 1200           |
| 1400           |
| 1600           |
| 1800           |
| 2000           |

| Standard Heights |
|------------------|
| 640              |
| 840              |
| 1040             |
| 1240             |
| 1440             |
| 1640             |
| 1840             |
| 2040             |