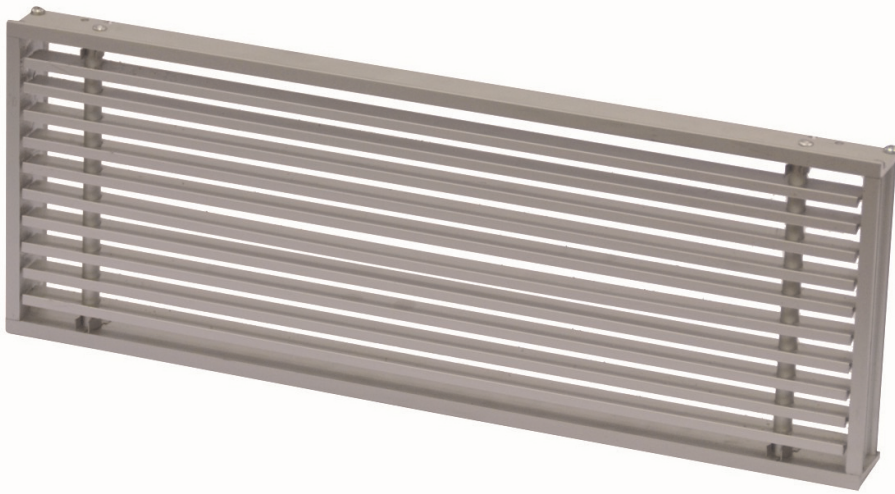


- Wall grilles
- Aluminium
- Anodized natural finish
- Fixed blades 15°
- 7 mm



## Aluminium linear wall grilles type ALG-XS-15

Anodized aluminium grilles with fixed blades, a frame of 7mm and a blade pitch of 12.5 mm.  
Deflection of the blades 15°.

### Brand

- Cairox

### Application

- Used for air supply and air exhaust in ventilation and air conditioning systems

### Material

- Aluminium
- Available from size 400x75mm till 1200x300mm LxH

### Colour

- Anodized natural finish
- Other colours available upon request

### Composition

- Deflection: fixed 15°
- Single row of horizontal blades

### Mounting

- Invisible mounting with screw hole provided on the inside of the frame
- The horizontal fixed blades can be removed from the frame for easy access to the fixing holes

### Other available products

- **ALG-XS-0** with 0° deflection and small frame of 7mm
- **ALG-0** with 0° deflection and frame of 25mm
- **ALG-15** with 15° deflection and frame of 25mm

### Text for tender

- The air supply wall grilles have fixed blades with extra small frame provided with screwholes for easy mounting.
- **Cairox** Type **ALG-XS**

**Order example**

■ALG-XS-15, 800, 200

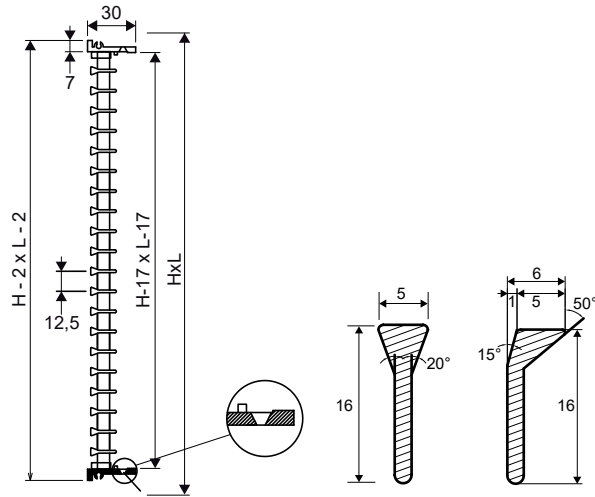
Explanation

**ALG-XS** = Grille type

**15°** = type of blade

**800** = Length

**200** = Height



|        |       | Quick selection |                   |        |                               |        |         |   |                    |                    |                    |                     |   |                                |                     |          |                     |          |
|--------|-------|-----------------|-------------------|--------|-------------------------------|--------|---------|---|--------------------|--------------------|--------------------|---------------------|---|--------------------------------|---------------------|----------|---------------------|----------|
| ALG-XS | LxH   | 200x100         | 400x75<br>300x100 | 500x75 | 400x100<br>300x150<br>200x200 | 600x75 | 500x100 | 800x75<br>600x100<br>400x150<br>300x200 | 1000x75<br>500x150 | 800x100<br>400x200 | 1200x75<br>600x150 | 500x200<br>1000x100 | 1200x100<br>800x150<br>600x200<br>400x300 | 1000x150<br>800x200<br>500x300 | 1200x150<br>600x300 | 1000x200 | 1200x200<br>800x300 | 1200x300 |
| Qv     | Ak    | 0.0021          | 0.0083            | 0.0129 | 0.0145                        | 0.0176 | 0.0206  | 0.0268                                  | 0.0361             | 0.0392             | 0.0453             | 0.0515              | 0.0638                                    | 0.0823                         | 0.1008              | 0.1132   | 0.1379              | 0.2119   |
| 50     | Vk    | 6.6             | 1.7               | 1.1    |                               |        |         |   |                    |                    |                    |                     |   |                                |                     |          |                     |          |
|        | X0,25 | 5.7             | 3.3               | 2.9    |                               |        |         |   |                    |                    |                    |                     |   |                                |                     |          |                     |          |
|        | Ps    | 32              | 2                 | 1      |                               |        |         |   |                    |                    |                    |                     |   |                                |                     |          |                     |          |
|        | Lw(A) | 30              | <20               | <20    |                               |        |         |   |                    |                    |                    |                     |   |                                |                     |          |                     |          |
| 100    | Vk    | 3.3             | 2.2               | 1.9    | 1.6                           | 1.3    | 1       |   |                    |                    |                    |                     |   |                                |                     |          |                     |          |
|        | X0,25 | 6.1             | 5.1               | 4.8    | 4.5                           | 4.2    | 3.8     |   |                    |                    |                    |                     |   |                                |                     |          |                     |          |
|        | Ps    | 8               | 4                 | 3      | 2                             | 1      | 1       |   |                    |                    |                    |                     |   |                                |                     |          |                     |          |
|        | Lw(A) | 24              | <20               | <20    | <20                           | <20    | <20     | <20                                     |                    |                    |                    |                     |   |                                |                     |          |                     |          |
| 150    | Vk    | 5               | 3.2               | 2.9    | 2.4                           | 2      | 1.6     | 1.2                                     | 1.1                |                    |                    |                     |   |                                |                     |          |                     |          |
|        | X0,25 | 8.8             | 7.3               | 6.9    | 6.4                           | 6      | 5.4     | 4.8                                     | 4.6                |                    |                    |                     |   |                                |                     |          |                     |          |
|        | Ps    | 19              | 8                 | 6      | 4                             | 3      | 2       | 1                                       | 1                  |                    |                    |                     |   |                                |                     |          |                     |          |
|        | Lw(A) | 32              | 26                | 25     | 22                            | <20    | <20     | <20                                     | <20                |                    |                    |                     |   |                                |                     |          |                     |          |
| 200    | Vk    | 6.7             | 4.3               | 3.8    | 3.2                           | 2.7    | 2.1     | 1.5                                     | 1.4                | 1.2                | 1.1                |                     |   |                                |                     |          |                     |          |
|        | X0,25 | 11.5            | 9.5               | 9      | 8.3                           | 7.8    | 7       | 6.2                                     | 6                  | 5.6                | 5.4                |                     |   |                                |                     |          |                     |          |
|        | Ps    | 33              | 14                | 11     | 8                             | 6      | 3       | 2                                       | 2                  | 1                  | 1                  |                     |   |                                |                     |          |                     |          |
|        | Lw(A) | 38              | 32                | 30     | 27                            | 25     | 22      | <20                                     | <20                | <20                | <20                |                     |   |                                |                     |          |                     |          |
| 300    | Vk    |                 | 6.5               | 5.7    | 4.7                           | 4      | 3.1     | 2.3                                     | 2.1                | 1.8                | 1.6                | 1.3                 | 1   |                                |                     |          |                     |          |
|        | X0,25 |                 | 13.9              | 13.2   | 12.2                          | 11.4   | 10.2    | 9                                       | 8.7                | 8.1                | 7.7                | 7.1                 | 6.4                                       |                                |                     |          |                     |          |
|        | Ps    |                 | 30                | 24     | 17                            | 12     | 7       | 4                                       | 4                  | 3                  | 2                  | 1                   | 1   |                                |                     |          |                     |          |
|        | Lw(A) |                 | 40                | 38     | 35                            | 33     | 30      | 25                                      | 24                 | 22                 | 21                 | <20                 | <20                                       |                                |                     |          |                     |          |
| 400    | Vk    |                 |                   | 7.7    | 6.3                           | 5.4    | 4.1     | 3.1                                     | 2.8                | 2.5                | 2.2                | 1.7                 | 1.4                                       | 1.1                            |                     |          |                     |          |
|        | X0,25 |                 |                   | 17.4   | 16                            | 15     | 13.3    | 11.7                                    | 11.3               | 10.6               | 10.1               | 9.2                 | 8.3                                       | 7.6                            |                     |          |                     |          |
|        | Ps    |                 |                   | 42     | 29                            | 21     | 13      | 7                                       | 6                  | 5                  | 4                  | 2                   | 1   | 1                              |                     |          |                     |          |
|        | Lw(A) |                 |                   | 44     | 41                            | 39     | 35      | 31                                      | 30                 | 28                 | 26                 | 23                  | <20                                       | <20                            |                     |          |                     |          |
| 600    | Vk    |                 |                   |        |                               |        | 6.2     | 4.6                                     | 4.3                | 3.7                | 3.2                | 2.6                 | 2   | 1.7                            | 1.5                 | 1.2      |                     |          |
|        | X0,25 |                 |                   |        |                               |        | 19.7    | 17.3                                    | 16.7               | 15.6               | 14.8               | 13.5                | 12.1                                      | 11.1                           | 10.5                | 9.7      |                     |          |
|        | Ps    |                 |                   |        |                               |        | 28      | 16                                      | 13                 | 10                 | 8                  | 5                   | 3   | 2                              | 2                   | 1        |                     |          |
|        | Lw(A) |                 |                   |        |                               |        | 43      | 39                                      | 38                 | 36                 | 34                 | 31                  | 27  | 25                             | 23                  | 20       |                     |          |
| 800    | Vk    |                 |                   |        |                               |        |         | 6.2                                     | 5.7                | 4.9                | 4.3                | 3.5                 | 2.7                                       | 2.2                            | 2                   | 1.6      | 1                   |          |
|        | X0,25 |                 |                   |        |                               |        |         | 22.8                                    | 22                 | 20.6               | 19.5               | 17.8                | 15.9                                      | 14.5                           | 13.8                | 12.7     | 10.5                |          |
|        | Ps    |                 |                   |        |                               |        |         | 28                                      | 24                 | 18                 | 14                 | 9                   | 6   | 4                              | 3                   | 2        | 1                   |          |
|        | Lw(A) |                 |                   |        |                               |        |         | 44                                      | 43                 | 41                 | 39                 | 37                  | 33  | 30                             | 29                  | 26       | <20                 |          |
| 1000   | Vk    |                 |                   |        |                               |        |         | 7.7                                     | 7.1                | 6.1                | 5.4                | 4.4                 | 3.4                                       | 2.8                            | 2.5                 | 2        | 1.3                 |          |
|        | X0,25 |                 |                   |        |                               |        |         | 28.4                                    | 27.3               | 25.6               | 24.2               | 22                  | 19.7                                      | 18                             | 17.1                | 15.7     | 13                  |          |
|        | Ps    |                 |                   |        |                               |        |         | 43                                      | 36                 | 27                 | 21                 | 14                  | 9   | 6                              | 5                   | 3        | 1                   |          |
|        | Lw(A) |                 |                   |        |                               |        |         | 49                                      | 48                 | 46                 | 44                 | 41                  | 37  | 35                             | 33                  | 30       | 24                  |          |
| 1200   | Vk    |                 |                   |        |                               |        |         |   |                    | 7.4                | 6.5                | 5.2                 | 4.1                                       | 3.3                            | 2.9                 | 2.4      | 1.6                 |          |
|        | X0,25 |                 |                   |        |                               |        |         |   |                    | 30.6               | 28.9               | 26.3                | 23.5                                      | 21.5                           | 20.4                | 18.7     | 15.5                |          |
|        | Ps    |                 |                   |        |                               |        |         |   |                    | 39                 | 30                 | 20                  | 12  | 8                              | 7                   | 5        | 2                   |          |
|        | Lw(A) |                 |                   |        |                               |        |         |   |                    | 49                 | 47                 | 44                  | 41  | 38                             | 36                  | 34       | 28                  |          |
| 1600   | Vk    |                 |                   |        |                               |        |         |   |                    |                    |                    | 7                   | 5.4                                       | 4.4                            | 3.9                 | 3.2      | 2.1                 |          |
|        | X0,25 |                 |                   |        |                               |        |         |   |                    |                    |                    | 34.9                | 31.1                                      | 28.4                           | 27                  | 24.7     | 20.5                |          |
|        | Ps    |                 |                   |        |                               |        |         |   |                    |                    |                    | 35                  | 21  | 14                             | 12                  | 8        | 3                   |          |
|        | Lw(A) |                 |                   |        |                               |        |         |   |                    |                    |                    | 50                  | 46  | 44                             | 42                  | 39       | 33                  |          |
| 2000   | Vk    |                 |                   |        |                               |        |         |   |                    |                    |                    |                     | 6.8                                       | 5.5                            | 4.9                 | 4        | 2.6                 |          |
|        | X0,25 |                 |                   |        |                               |        |         |   |                    |                    |                    |                     | 38.7                                      | 35.4                           | 33.6                | 30.8     | 25.4                |          |
|        | Ps    |                 |                   |        |                               |        |         |   |                    |                    |                    |                     | 33  | 22                             | 18                  | 12       | 5                   |          |
|        | Lw(A) |                 |                   |        |                               |        |         |   |                    |                    |                    |                     | 51  | 48                             | 46                  | 44       | 38                  |          |

**Symbols and specifications**

- $L \times H$  = Width L and height H in mm
  - $Q$  = Air volume in  $m^3/h$
  - $A_k$  = Effective surface (free area) in  $m^2$
  - $V_k$  = Average effective velocity through the grill in  $m/s$
  - $X_{0.25}$  = Horizontal throw in m at an end velocity  $V_t$  of 0.25  $m/s$
  - $P_s$  = Static pressure loss given in Pa
  - $L_w(A)$  = Acoustic power in  $dB(A)$
- The throw  $X_{0.25}$  is given without deflection of the airstream at an end velocity of 0.25  $m/s$ . The distances are given for a smooth ceiling and installation distance of the center of the grille at 300 mm from the ceiling surface. When mounted at a distance of 400 to 600 mm from the ceiling, a horizontal deflection towards the ceiling of  $15^\circ$  is advised. When mounted at a distance larger than 600 mm from the ceiling, the throw distance  $X_{0.25}$  will be smaller than mentioned due to the missing coanda effect. In these cases and for all other special requirements, please contact our engineering office.
  - The values are given for isothermal supply air. Throw distances for cooling conditions at  $-11K$  can be calculated by dividing the  $X_{0.25}$  values with factor 1.1. For heating purposes at  $Dt$  of  $+11K$  a multiplier of 1.1 should be applied to the given  $X_{0.25}$  value.
  - Advised mounting distance between centers of multiple grilles in the same wall should be greater than  $1/3$  of the throw length  $X_{0.25}$  (without spread)
  - The pressure losses  $P_s$  are given for grilles without damper or with fully opened damper.
  - The acoustic powers  $L_w(A)$  are given for grilles without damper or with fully opened damper without room attenuation. Acoustic powers below 20  $dB(A)$  are mentioned as " $<20$ " in the tables.

**Placement instruction**