

# KRS

## VENTILATION GRILLES WITH A SCREEN



SMAY



### Characteristics:

A rectangular air supply or exhaust ventilation grille made of aluminium or steel, with a screen.

### Intended use

The KRS grilles are used in low- and medium-pressure ventilation installations as part of an air supply or exhaust system. They offer a large surface area of free passage and low air flow resistance.

### Design

#### Aluminium grilles (AA and AL)

The KRS grilles with aluminium frames are equipped with screens made of aluminium. The anodised version (AA) has a frame that is made of anodised aluminium, and the screen is made of aluminium. The aluminium frame can also be painted in other RAL colours (AL) upon request.

#### Steel grilles with a plastic screen (SP)

The KRS grilles with steel frames are equipped with screens made of white plastic (SP). The steel frames are painted white as standard.

### Net surface area

Approximate net surface area of the KRS grilles:

$A = 92\% \times [(C-32) \times (D-32)]$  – for the aluminium screen (AA and AL)

$A = 82\% \times [(C-40) \times (D-40)]$  – for the plastic screen (SP).



The technical data of the grilles, including pressure loss, noise level and stream ranges, is available at [smay.eu](http://smay.eu), in the document titled "Flow Characteristics for Grilles and Diffusers"

### Installation

The grilles can be installed:

- with screws through the holes in the frame (recommended for ceiling installation)
- with latches invisible from outside (an assembling frame or a plenum box required).

### Dimensions

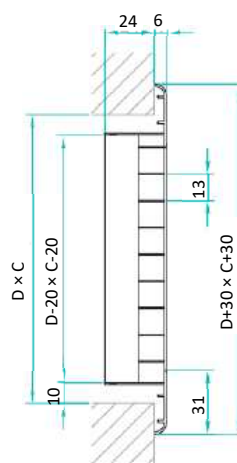


Figure 1. Dimensions of an aluminium KRS grille

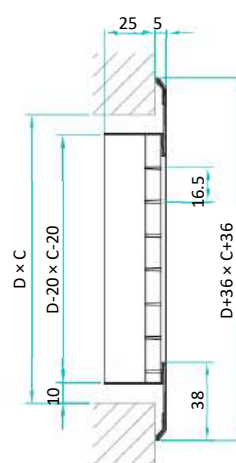


Figure 2. Dimensions of a steel KRS grille

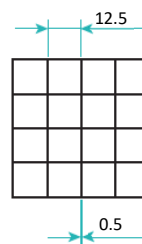


Figure 3. Dimensions of an aluminium screen (clearance

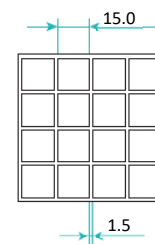
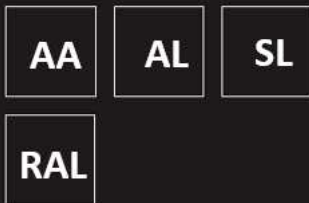
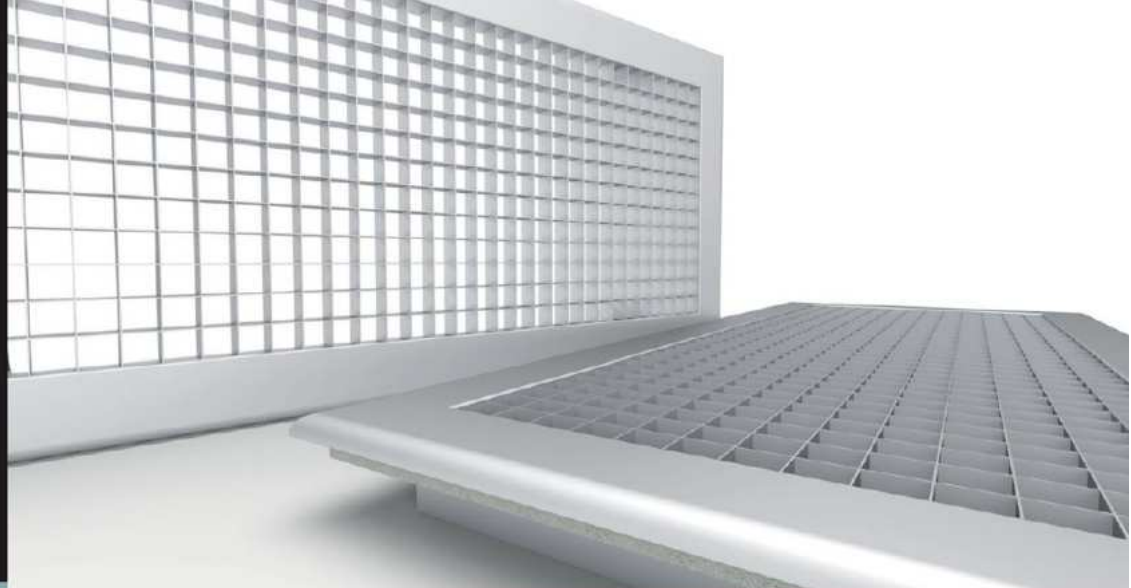


Figure 4. Dimensions of a plastic screen (clearance of 82%)

Standard dimensions of the KRS grilles:

- width **C = 75–1225 mm** (AA and AL), **C = 75–610 mm** (SP)
- height **D = 125–625 mm** (AA and AL), **D = 125–610 mm** (SP)

We can make custom-sized grilles or a set of multiple grilles upon request.



# KRS – Ventilation grilles with a screen

When ordering, please provide information according to the following pattern:

**KRS – <C> x <D> – <M> – <P> <RAL> <K> / <ADD>**

Where:

<b>C</b>	mounting hole width in mm
<b>D</b>	mounting hole height in mm
<b>M</b>	installation method*
	<b>none – with screws</b>
	Z – with an invisible latch
<b>P</b>	finish*
	AA – frame made of anodised aluminium, screen made of aluminium
	AL – frame and screen made of painted aluminium
	<b>SP – frame made of painted steel, screen made of white plastic</b>
<b>RAL</b>	frame colour as per RAL (for AL or SP finishing)*
<b>K</b>	screen colour (for AL finishing)
	<b>none – screen with the same colour as frame – for a RAL9010 colour</b>
	R – screen with the same colour as frame – for colours other than RAL9010
<b>ADD</b>	specify additional accessories here, as below:

Accessories\*\*

<b>GA</b>	backward damper made of aluminium
<b>GP</b>	backward damper made of galvanised steel
<b>GSN</b>	concurrent damper made of stainless steel
<b>GT</b>	slot damper made of galvanised steel
<b>GTN</b>	slot damper made of stainless steel
<b>RM</b>	assembling frame made of galvanised or stainless steel
<b>RM-F</b>	assembling frame made of galvanised or stainless steel, with a filter
<b>L01</b>	screen deflector with a clearance equal to 40%, made of galvanised steel
<b>L02</b>	screen deflector with a clearance equal to 58%, made of galvanised steel
<b>NDS&lt;S&gt;</b>	NDS connection pipe for round ducts (in the <S> field provide requested diameter of the connection pipe in mm)

\* optional values – if not specified, default values will be used

\*\*for more information on accessories, see the accessories sheet

Plenum box as per the configuration below:

**<SR> <I> – <H> – <K><D><R><P>**

Where:

<b>I</b>	insulation*
	<b>none – no insulation</b>
	t – insulated
<b>H</b>	plenum box height in mm*
<b>K</b>	connection pipe position*:
	<b>b – side</b>
	<b>g – top</b>
<b>D</b>	connection pipe diameter in mm*
<b>R</b>	damper in a connection pipe*
	<b>none – no damper</b>
	P – damper adjusted from outside the box
	Pc – damper adjusted from inside the box with a tie rod
	Pd – damper adjusted from inside the box with a lever
<b>P</b>	design*
	<b>SO – galvanised steel</b>
	SN – stainless steel, quality 1.4301 [304 according to AISI, 0H18N9 according to PN]
	SM – stainless steel, quality 1.4404 [316L according to AISI, 0H17N14M2 according to PN]

Order example:

**KRS-425x425-Z-AL9010/SR-380-b250P**



Blocks for REVIT software, a selection programme and certificates are available at [www.smay.pl](http://www.smay.pl).