

# ST

## VENTILATION GRILLES WITH MOVABLE VANES



SMAY

### Characteristics:

A rectangular air supply or exhaust ventilation grille made of steel, with movable vanes.

### Intended use

The ST ventilation grilles are designed for low- and medium-pressure ventilation systems. A wide range of grille design options makes it possible to direct the supply air flow in an optimal way or to use the grilles as exhaust elements.

### Design

The grille is equipped with a 28 mm frame (ST-L) in the galvanised or painted steel versions and a 30 mm frame (ST) in the stainless steel version. The frame and vanes are made of steel painted in a RAL9010 colour. Other RAL colour painting and galvanized or stainless steel versions are available upon request. In the painted version, the vanes have limited movement due to the paint layer.

Additional supports are used when:

- $C > 625$  mm for the STW(-L), STWS(-L) and STSW(-L) grilles
- $D > 625$  mm for the STS(-L), STWS(-L) and STSW(-L) grilles

### ST grille versions

#### STW/STW-L



a single row of movable, horizontal vanes

#### STS/STS-L



a single row of movable, vertical vanes

#### STWS/STWS-L



two rows of movable vanes, the external row is horizontal

#### STSW/STSW-L



two rows of movable vanes, the external row is vertical

### Net surface area

Approximate net surface area of the ST and ST-L grilles:

$$A = 82\% \times [(C-20) \times (D-20)]$$



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"

### Dimensions

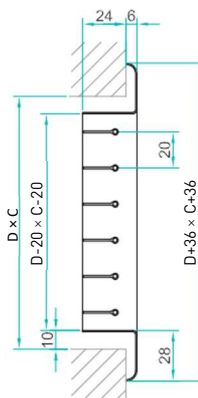


Figure 1. STW-L grille dimensions

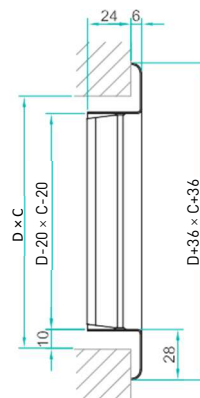


Figure 2. STS-L grille dimensions

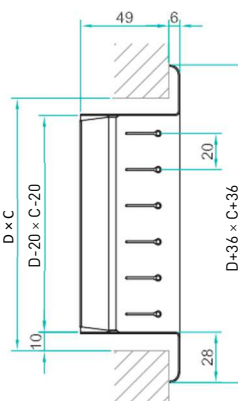


Figure 3. STWS-L grille dimensions

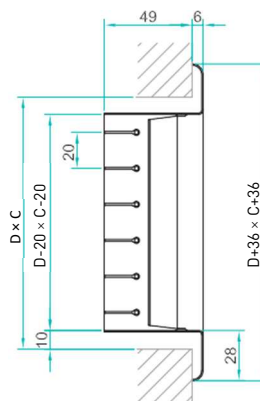


Figure 4. STSW-L grille dimensions

Standard dimensions of the ST and ST-L grilles:

- width **C = 75–1225 mm**
- height **D = 75–625 mm**

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

### 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)

SN

SL

SL

RAL

# ST – Ventilation grilles with movable vanes

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

<TYPE> – <C>x<D> – <M> – <P><RAL> / <ADD>

Where:

<b>TYPE</b>	STW, STS, STWS, STSW, STW-L, STS-L, STWS-L, STSW-L
<b>C</b>	mounting hole width in mm
<b>D</b>	mounting hole height in mm
<b>M</b>	installation method*
	<b>none</b> – with screws
	Z – with an invisible latch
	R – with an invisible latch and lock screws
<b>P</b>	finish*
	<b>SL</b> – painted steel (version -L only)
	SO – galvanised steel (version -L only)
	– stainless steel, quality 1.4301
	SN (304 according to AISI, 0H18N9 according to PN) (does not include version -L)
<b>ADD</b>	specify additional accessories here, as below**

Accessories:

<b>GA</b>	opposed blade damper made of aluminium
<b>GP</b>	opposed blade damper made of galvanised steel
<b>GSN</b>	parallel blade damper made of stainless steel
<b>GC</b>	reclining damper made of galvanised steel
<b>GCN</b>	reclining damper made of stainless steel
<b>GM</b>	arched damper made of galvanised steel and aluminium
<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 40%, made of galvanised steel
<b>L02</b>	screen deflector with a clearance 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)

Plenum box as per the configuration below:

<SR> <I> – <H> – <K><D><R><P>

Where:

<b>I</b>	insulation*
	<b>none</b> – no insulation
	t – insulated
<b>H</b>	plenum box height in mm*
<b>K</b>	connection pipe position*:
	<b>b</b> – side
	g – top
<b>D</b>	connection pipe diameter in mm*
<b>R</b>	damper in a connection pipe*
	<b>none</b> – no damper
	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</b> – galvanised steel
	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)

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

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

Order example:

**STW-L-1025x225-Z-ST9010/GA.SRt-270-b160**



Blocks for REVIT software,

- selection programme,
- certificates,
- available at [www.smay.pl](http://www.smay.pl).