

## VENTILATION GRILLES WITH MOVABLE VANES FOR ROUND DUCTS



### Characteristics:

A rectangular air supply or exhaust ventilation grille made of steel, with movable vanes, installed in round ducts, in a cost-efficient version.

SO

SL

RAL

version: 08/04/25

### Intended use

The STR-E ventilation grilles are designed for use in low- and medium-pressure ventilation systems, in round ventilation ducts. The grille design makes it possible to direct the supply air flow in an optimal way or to use the grilles as exhaust elements.

### Design

In the standard version, the grille frame and movable vanes are made of galvanised steel. The grilles can be painted in any RAL colour upon request. In the painted version, the vanes have limited movement due to the paint layer.

### STR-E grille versions



Figure 1. STRS-E a single row of movable, vertical vanes



Figure 2. STRSW-E two rows of movable vanes, the external row is vertical

### Dimensions

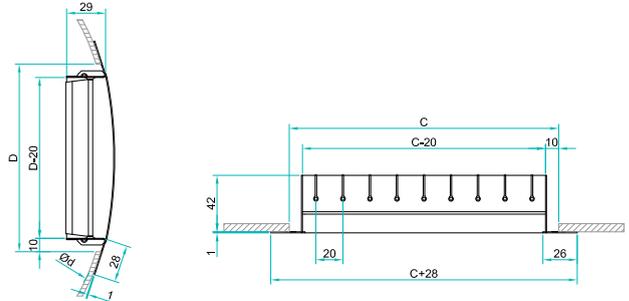


Figure 3. STRS-E grille dimensions

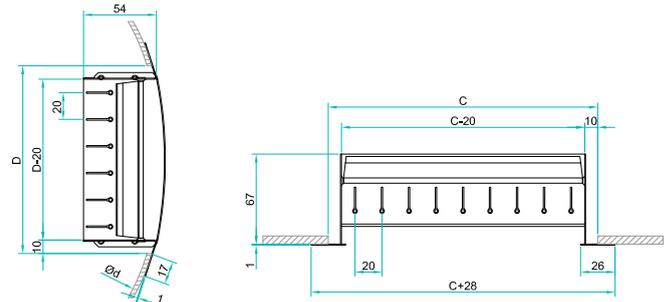


Figure 4. STRSW-E grille dimensions

Table 1. Possible combinations of STR-E grille dimensions.

Width, C [mm]	Height, D [mm]
225, 325, 425, 525, 625, 825, 1025, 1225	75, 125, 225
200, 300, 400, 500, 600, 800, 1000, 1200	100, 200

Table 2. Grille height D depending on the ventilation duct diameter Ød.

Grille height, D [mm]	Ventilation duct diameter, Ød [mm]
75	160 - 400
100	160 - 400
125	315 - 800
200	315 - 800
225	500 - 1000

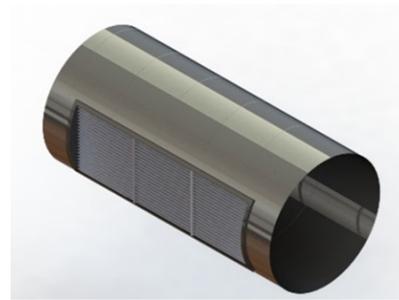


Figure 5. Installation of the grille with screws.

## Installation

The grilles can be installed in ventilation ducts with screws, through holes in the grille frame.



For using the grille in the ceiling, installation with screws is recommended.

## Net surface area

Table 3. Free area of the STRS-E grilles, A [m<sup>2</sup>].

Height, D [mm]	Width, C [mm]										
	225	325	425	525	625	725	825	925	1025	1125	1225
75	0,010	0,014	0,019	0,023	0,028	0,032	0,037	0,042	0,046	0,051	0,055
100	0,014	0,021	0,027	0,034	0,040	0,047	0,054	0,060	0,067	0,074	0,080
125	0,018	0,027	0,036	0,044	0,053	0,062	0,070	0,079	0,088	0,096	0,105
200	0,031	0,046	0,061	0,076	0,091	0,105	0,120	0,135	0,150	0,165	0,179
225	0,036	0,053	0,069	0,086	0,103	0,120	0,137	0,154	0,171	0,187	0,204

Table 4. Free area of the STRSW-E grilles, A [m<sup>2</sup>].

Height, D [mm]	Width, C [mm]										
	225	325	425	525	625	725	825	925	1025	1125	1225
75	0,010	0,014	0,019	0,023	0,028	0,032	0,037	0,042	0,046	0,051	0,055
100	0,014	0,021	0,027	0,034	0,040	0,047	0,054	0,060	0,067	0,073	0,080
125	0,018	0,027	0,035	0,044	0,052	0,061	0,070	0,078	0,087	0,096	0,105
200	0,031	0,046	0,061	0,076	0,090	0,105	0,120	0,135	0,150	0,164	0,179
225	0,035	0,052	0,069	0,086	0,103	0,120	0,137	0,154	0,170	0,187	0,204

Approximate net surface area of the STR grilles:  $A = 83\% \times [(C-20) \times (D-20)]$

## Technical data

### Throw length

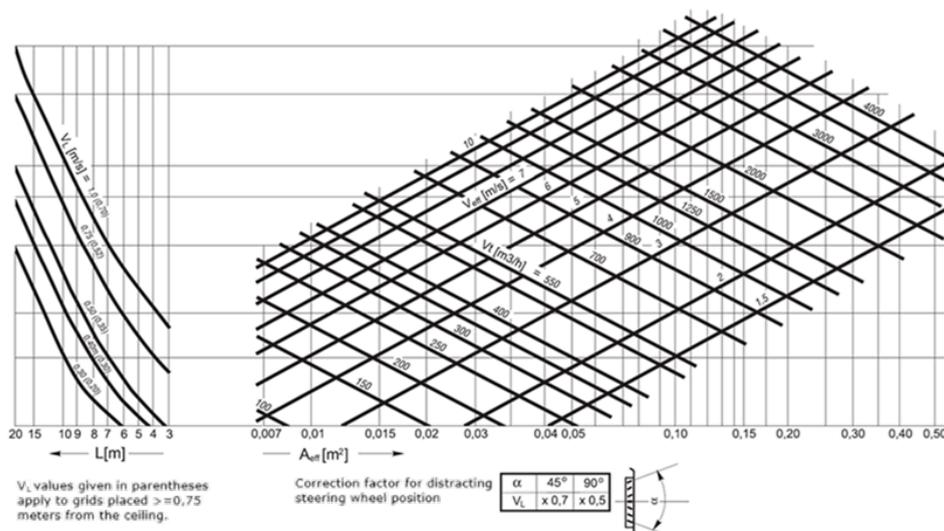


Chart 1. Stream range.

## Pressure drop

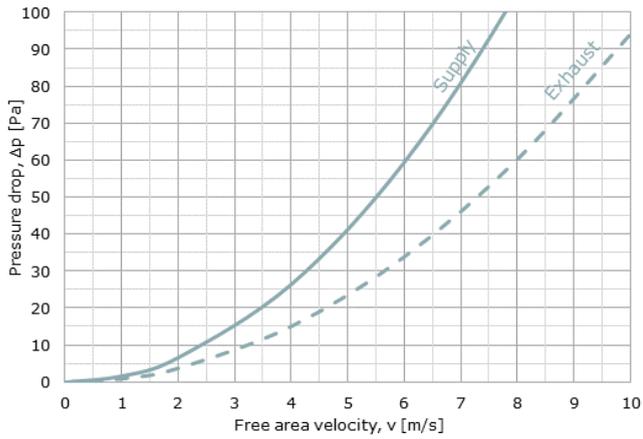


Chart 2. Pressure drop of the STR-E grilles.

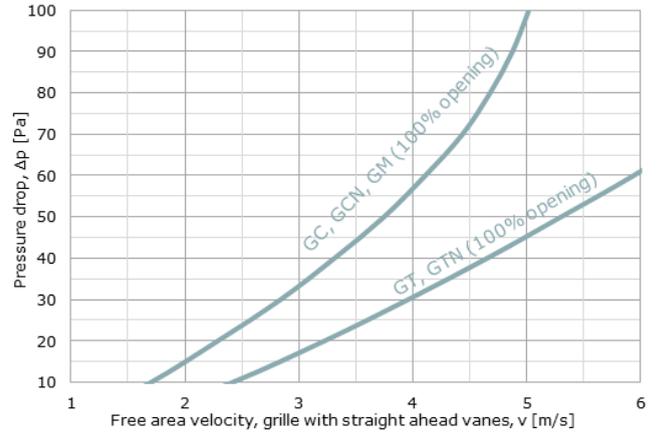


Chart 3. Pressure drop of grilles for round duct with dampers.

## Acoustic data

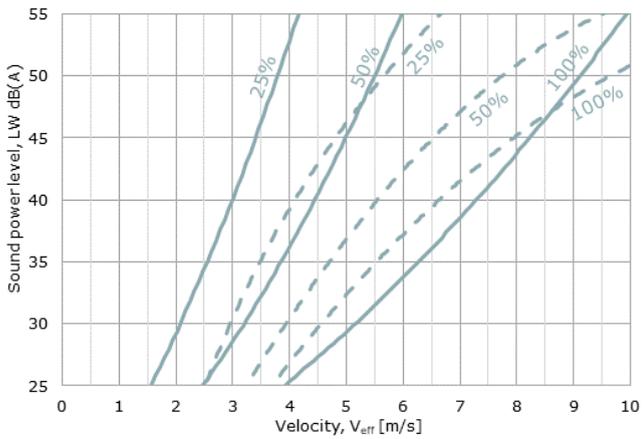


Chart 4. Sound power level (dampers GA, GS, GM).

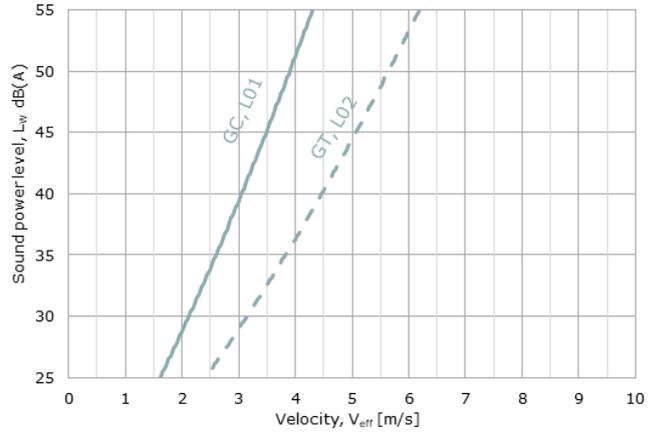


Chart 5. Sound power level.



The technical data including throw length, pressure drop and acoustic data are available in the selection software [Quick Smay Designer](#)



Revit blocks and approval documents available at [www.smay.pl](http://www.smay.pl)

## Accessories



Figure 6. GA opposed blades damper made of aluminium.



Figure 7. GP opposed blade damper made of galvanised steel.



Figure 8. GC reclining damper made of galvanised steel.



Figure 9. GM arched damper made of galvanised steel and aluminium.



Figure 10. GT steel damper.

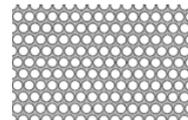


Figure 11. Screen deflector made of galvanised steel (clearance equal to 40%).

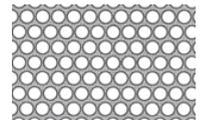


Figure 12. Screen deflector made of galvanised steel (clearance equal to 58%).

# STR-E - Ventilation grilles with movable vanes for round ducts

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

<TYP> - <C>x<D> - <P><RAL> / <ADD>

Where:

**TYP** STRS-E, STRSW-E

**C** mounting hole width in mm

**D** mounting hole height in mm

**P** finish\*

**SO** – galvanised steel

**SL** – painted steel

**RAL** colour as per RAL (for SL finishing)

**ADD** specify additional accessories here, as below\*\*

## Accessories\*\*:

**GA** backward damper made of aluminium

**GP** backward damper made of galvanised steel

**GC** reclining damper made of galvanised steel

**GM** arched damper made of galvanised steel and aluminium

**GT** slot damper made of galvanised steel

**LO1** screen deflector with a clearance equal to 40%, made of galvanised steel

**LO2** screen deflector with a clearance equal to 58%, made of galvanised steel

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

\*\* for more information about accessories, see the accessories data sheet for grilles and diffusers.

Order example: **STRSW-E-525x225-SL9010/GT**