

# STR

## VENTILATION GRILLES WITH ADJUSTABLE BLADES



### Intended use:

STR type ventilation grilles are designed to use in low and medium-pressure ventilation systems, equipped with circular ducts.

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STR type ventilation grilles are designed to use in low and medium-pressure ventilation systems, equipped with circular ducts. A wide range of design options of grilles allows for the optimal directing of the supply air or using them as the air exhaust component.

### Material

The frame of a grille is made of steel. In standard version of a device, blades are adjustable and made of aluminum or galvanized steel. Standard finishing includes powder-coating to RAL 9010.

Coating to other RAL color is possible on request.

### Frame and blades construction

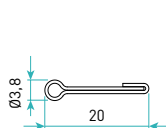


Figure 1. Blades dimension.

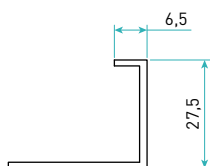


Figure 2. Vertical profile.

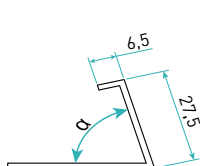


Figure 3. Horizontal profile.

### Selection of the grille height D for the duct diameter ø

Table 1. Selection of the height D of the grille depending on the diameter of the ventilation duct.

ød [mm]	D max [mm]
160	75
200	125
250	125
315	225
400	225
500	325
630	325
800	425

### Dimensions

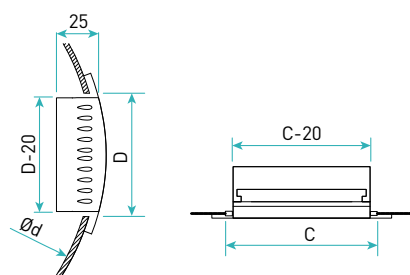


Figure 4. STRW dimensions.

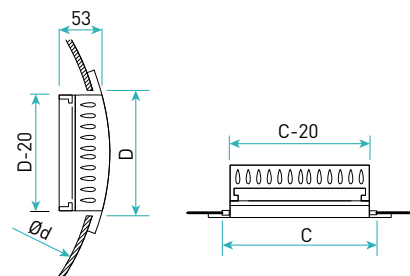


Figure 5. STRWS dimensions.

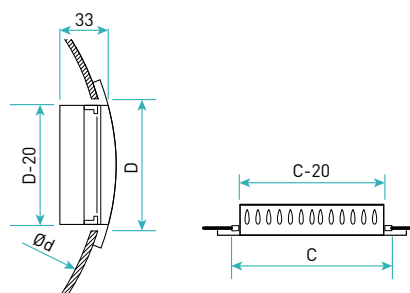


Figure 6. STRS dimensions.

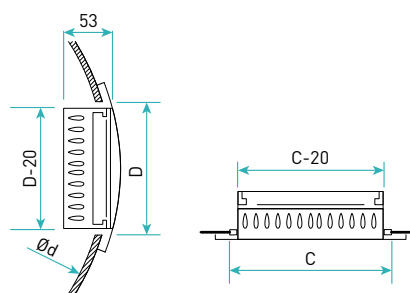


Figure 7. STRSW dimensions.

SL

SN

RAL

Table 2. Standard dimensions, effective areas and weight of STR grilles.

C [mm]	D [mm]	STRW	STRS	STRWS STRSW	STRW	STRS	STRWS STRSW
		A <sub>eff</sub> [m <sup>2</sup> ]	A <sub>eff</sub> [m <sup>2</sup> ]	A <sub>eff</sub> [m <sup>2</sup> ]	Weight [kg]	Weight [kg]	Weight [kg]
75	75	0,0029	0,0029	0,0022	0,2	0,2	0,3
125	75	0,0053	0,0055	0,0042	0,2	0,3	0,4
225	75	0,0101	0,0103	0,0078	0,4	0,4	0,6
325	75	0,0149	0,0152	0,0115	0,5	0,5	0,8
425	75	0,0197	0,02	0,0152	0,6	0,6	1,1
525	75	0,0245	0,0249	0,0188	0,7	0,8	1,3
625	75	0,0293	0,0298	0,0225	0,8	0,9	1,5
825	75	0,0385	0,0395	0,0294	1	1,1	1,9
1025	75	0,0481	0,0492	0,0367	2	1,4	2,6
1225	75	0,0577	0,589	0,044	2,4	1,8	3,1
125	125	0,01	0,01	0,0078	0,3	0,3	0,6
225	125	0,019	0,0188	0,0147	0,5	0,5	0,9
325	125	0,028	0,0277	0,0215	0,7	0,7	1,2
425	125	0,037	0,0365	0,0284	0,8	0,9	1,5
525	125	0,046	0,0454	0,0353	1	1	1,8
625	125	0,055	0,0543	0,0421	1,1	1,2	2,1
825	125	0,0722	0,072	0,0551	1,4	1,5	2,9
1025	125	0,0902	0,0897	0,0688	2,5	2	3,3
1225	125	0,1082	0,1074	0,0825	3	2,3	3,9
225	225	0,0358	0,0358	0,0275	0,8	0,7	1,4
325	225	0,0528	0,0527	0,0404	1	1	1,9
425	225	0,0698	0,0695	0,0533	1,3	1,3	2,4
525	225	0,0868	0,0864	0,0661	1,6	1,5	3,1
625	225	0,1038	0,1033	0,079	1,9	1,9	3,6
825	225	0,1364	0,137	0,1033	2,4	2,4	4,6
1025	225	0,1704	0,1707	0,129	3,6	3	4,7
1225	225	0,2044	0,2044	0,1547	4,2	3,5	5,6
325	325	0,0777	0,0777	0,0593	1,4	1,4	2,7
425	325	0,1027	0,1025	0,0781	1,9	1,8	3,5
525	325	0,1277	0,1274	0,097	2,3	2,2	4,2
625	325	0,1527	0,1523	0,1158	2,6	2,5	4,9
825	325	0,2006	0,202	0,1515	3,3	3,2	6,1
1025	325	0,2506	0,2517	0,1892	4,6	4	6,4
1225	325	0,3006	0,3014	0,2269	5,5	4,7	7,2
425	425	0,1355	0,1355	0,103	2,4	2,2	4,4
525	425	0,1685	0,1684	0,1278	2,8	2,7	5,3
625	425	0,2015	0,2013	0,1527	3,3	3,1	6,2
825	425	0,2648	0,267	0,1997	4,2	4	7,5
1025	425	0,3308	0,3327	0,2494	5,7	4,9	8,2
1225	425	0,3968	0,3984	0,2991	6,7	5,9	8,9

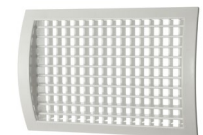
STRW



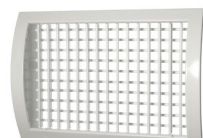
STRS



STRWS



STRSW



Where

**C** - width of the installation opening [mm]

**D** - height of the installation opening [mm]

**A<sub>eff</sub>** - effective area [m<sup>2</sup>]

**Weight** - weight of the grille [kg]

Table 3. The dependence of the angle „α” of the horizontal profile of the frame on the diameter of the ventilation duct and the height of the installation opening D.

angle α	80°	75°	70°	65°	60°	55°	50°	45°
ø160	D = 75							
ø200			75 ≤ D ≤ 79	≤0 ≤ D ≤ 97	98 ≤ D ≤ 113	114 ≤ D ≤ 125		
ø250			75 ≤ D ≤ 94	95 ≤ D ≤ 115	116 ≤ D ≤ 125			
ø315		75 ≤ D ≤ 85	86 ≤ D ≤ 112	113 ≤ D ≤ 139	140 ≤ D ≤ 165	166 ≤ D ≤ 190	191 ≤ D ≤ 213	214 ≤ D ≤ 225
ø400		75 ≤ D ≤ 102	103 ≤ D ≤ 136	137 ≤ D ≤ 170	171 ≤ D ≤ 203	204 ≤ D ≤ 225		
ø500	75 ≤ D ≤ 78	79 ≤ D ≤ 122	123 ≤ D ≤ 165	166 ≤ D ≤ 207	208 ≤ D ≤ 247	248 ≤ D ≤ 286	287 ≤ D ≤ 323	324 ≤ D ≤ 325
ø630	75 ≤ D ≤ 93	94 ≤ D ≤ 148	149 ≤ D ≤ 202	203 ≤ D ≤ 255	256 ≤ D ≤ 306	307 ≤ D ≤ 325		
ø800	75 ≤ D ≤ 112	113 ≤ D ≤ 182	183 ≤ D ≤ 250	251 ≤ D ≤ 317	318 ≤ D ≤ 382	383 ≤ D ≤ 425		

## STR - Ventilation grilles with adjustable blades

When ordering, please provide information in accordance with the following pattern:

<TYPE> - <C>x<D> -<S> - P<RAL> / <ADD>

Where:

<b>TYPE</b>	STRW, STRWS, STRS lub STRSW
<b>C</b>	width of the installation opening in [mm]
<b>D</b>	height of the installation opening in [mm]
<b>S</b>	diameter of the ventilation duct in [mm]
<b>P</b>	finish*
	<b>SL - coated steel</b>
	SN - stainless steel 1.4301 (304 acc. AISI, 0H18N9 acc. PN)
<b>RAL</b>	colour as per RAL*
<b>ADD</b>	here you should determine the additional accessories as below**

### Accessories:

<b>GA</b>	opposed blade damper made of aluminum
<b>GP</b>	opposed blade damper made of galvanized steel
<b>GSN</b>	parallel blade damper made of stainless steel
<b>GC</b>	tangent-balance damper
<b>GM</b>	arc damper
<b>GT</b>	slot damper
<b>L01</b>	sieve deflector with 38% effective area of the cross-section
<b>L02</b>	sieve deflector with 58% effective area of the cross-section

\* optional values - default values will be used if optional values are not specified

\*\* more information about accessories in "accessories for grilles and diffusers."

Order example: **STRW-525x225-315-SL9010/GS**