

# Smoke extraction grille SGR-SMO



## Description

SGR-SMO grilles are used for exhaust air in smoke extraction ducts, fire resistance class: E<sub>600</sub> 120 (h<sub>o</sub>) S1500 single, designed for single-compartment smoke extraction systems and combined (dual-function) systems. Front frame is made of pressed steel profiles, adhering to the profile of a circular air duct. Blades made of rolled steel plate profile. Horizontal or vertical fixture of blades, inclination angle of the blades of the grille is 90°. If one of the dimensions of the mounting hole A or B exceeds 550 mm, the grille is equipped with a bracing bracket made of galvanized steel sheet.

### Assembly:

The grille is mounted directly on the circular duct (without sealing materials) using visible screws in all extruded holes in the front frame.

Dimension of mounting hole A or B [mm]

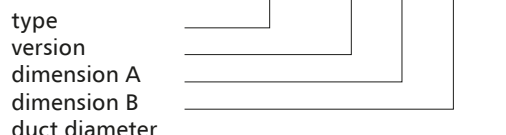
A or B < 550	Without bracing brackets
550 < A or B < 750	One bracket
A or B > 750	Two brackets

### Available materials — product marking example:

SGR-SMO-0H - galvanized steel, horizontal fixture of blade  
SGR-SMO-0V - galvanized steel, vertical fixture of blade

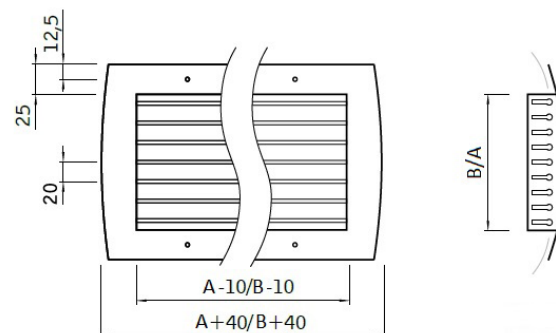
### Product code example

Product code: SGR-SMO - aa - bbb - ccc - ddd

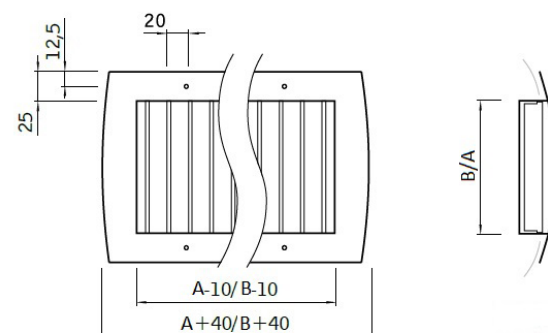


## Dimensions

Grille with fixed vertical blades - SGR-SMO-0H.



Grille with fixed horizontal blades - SGR-SMO-0V.



Dimension AxB [mm]	Duct diameter [mm]	Area [m <sup>2</sup> ]	Weigh [kg]
125x75	Ø100; Ø125;	0.0066	0.5
	Ø140; Ø150;		
	Ø160; Ø180; Ø200		
325x75	Ø280; Ø300	0.0186	0.9
525x75	Ø355	0.0306	1.3
125x125	Ø224; Ø250;	0.0121	0.9
225x125	Ø315	0.0231	1.1
325x125	Ø400	0.0341	1.3
425x125	Ø450	0.0451	1.5
525x125	Ø500	0.0561	1.7
325x225	Ø560; Ø600;	0.0651	1.9
	Ø630		
	Ø710		
525x225	Ø710	0.1071	3.1
825x225	Ø900; Ø1000	0.1701	4.8

# Smoke extraction grille

## SGR-SMO

### Technical data

Q [m³/h]	Type	75 x 125	125 x 125	75 x 325	125 x 225	75 x 525	125 x 325	125 x 425	125 x 525	225 x 325	225 x 525	225 x 825	
	A <sub>ef</sub> [m²]	0.0066	0.0121	0.0186	0.0231	0.0306	0.0341	0.0451	0.0561	0.0651	0.1071	0.1701	
	D <sub>p</sub> [Pa]	24.2											
20	L [m]	4.6											
	L <sub>WA</sub> [dB(A)]	<35											
	D <sub>p</sub> [Pa]	98.4	20.4										
40	L [m]	7.9	4.6										
	L <sub>WA</sub> [dB(A)]	<40	<35										
	D <sub>p</sub> [Pa]	223	46.5	15.3									
60	L [m]	9.8	6.8	4.6									
	L <sub>WA</sub> [dB(A)]	<45	<40	30									
	D <sub>p</sub> [Pa]	400	83.4	27.5	15.7								
80	L [m]	11.1	8.3	6.3	5.2								
	L <sub>WA</sub> [dB(A)]	50	40	<35	<35								
	D <sub>p</sub> [Pa]	628	131	43.3	24.8	12	9.1						
100	L [m]	12.2	9.5	7.5	6.5	5.3	4.8						
	L <sub>WA</sub> [dB(A)]	>50	45	35	<35	30	30						
	D <sub>p</sub> [Pa]	1425	299	99	56.7	27.5	20.8	10.1	5.8				
150	L [m]	14.1	11.6	9.8	8.9	7.8	7.3	6.2	5.3				
	L <sub>WA</sub> [dB(A)]	>50	50	40	<40	35	<35	30	<30				
	D <sub>p</sub> [Pa]	2549	537	178	102	49.6	37.5	18.3	10.5	7.1			
200	L [m]	15.5	13.1	11.5	10.6	9.5	9.1	8	7.2	6.6			
	L <sub>WA</sub> [dB(A)]	>50	>50	<50	40	<40	<40	<35	<35	<30			
	D <sub>p</sub> [Pa]	1225		407	234	114	86.2	42.1	24.1	16.5	4.6	1.4	
300	L [m]	15.3		13.8	13	12	11.7	10.7	9.9	9.4	7.7	6.1	
	L <sub>WA</sub> [dB(A)]	>50		>50	<50	<45	40	<40	35	<35	<30	<30	
	D <sub>p</sub> [Pa]	2199		733	421	205	156	76.1	43.6	29.8	8.3	2.6	
400	L [m]	16.8		15.4	14.7	13.8	13.5	12.6	11.9	11.4	9.8	8.3	
	L <sub>WA</sub> [dB(A)]	>50		10.3	8.2	50	<50	40	<40	<40	30	<30	
	D <sub>p</sub> [Pa]	1155			664	324	246	120	69	47.2	13.2	4.1	
500	L [m]	16.7			16	15.2	14.9	14	13.4	12.9	11.4	10.1	
	L <sub>WA</sub> [dB(A)]	>50			>50	>50	50	45	40	<40	<35	<30	
	D <sub>p</sub> [Pa]	1676			965	471	357	175	100	68.7	19.3	5.9	
600	L [m]	17.7			17.1	16.3	16	15.2	14.6	14.2	12.8	11.5	
	L <sub>WA</sub> [dB(A)]	>50			>50	9.3	8.3	<50	<45	40	<35	30	
	D <sub>p</sub> [Pa]	1322				646	490	241	138	94.5	26.6	8.2	
700	L [m]	18				17.2	17	16.2	15.6	15.2	13.9	12.7	
	L <sub>WA</sub> [dB(A)]	>50				>50	>50	>50	45	<45	<40	<35	
	D <sub>p</sub> [Pa]	849					645	317	182	124	35.1	10.8	
800	L [m]	18.1					17.8	17.1	16.5	16.2	14.9	13.7	
	L <sub>WA</sub> [dB(A)]	12.4					11.1	>50	50	<50	<40	<35	
	D <sub>p</sub> [Pa]	1342						1019	501	288	197	55.7	17.2
1000	L [m]	19.4						19.2	18.5	18	17.7	16.5	15.5
	L <sub>WA</sub> [dB(A)]	>50						>50	>50	>50	50	<40	35

## Kratka oddymiająca SMOKE System

**SGR-SMO**

Q [m <sup>3</sup> /h]	Type	75 x 125	125 x 125	75 x 325	125 x 225	75 x 525	125 x 325	125 x 425	125 x 525	225 x 325	225 x 525	225 x 825
1200	Aef[m <sup>2</sup> ]	0.0066	0.0121	0.0186	0.0231	0.0306	0.0341	0.0451	0.0561	0.0651	0.1071	0.1701
	Dp [Pa]						1481	729	419	287	81.2	25.1
	L [m]						20.3	19.7	19.3	18.9	17.9	16.9
	L <sub>WA</sub> [dB(A)]						>50	>50	>50	>50	<45	<40
1400	Dp [Pa]						1000	575	395	112	34.6	
	L [m]						20.7	20.3	20	19	18.1	
	L <sub>WA</sub> [dB(A)]						>50	>50	>50	45	<40	
	Dp [Pa]							758	520	147	45.7	
1600	L [m]							21.2	20.9	20	19.1	
	L <sub>WA</sub> [dB(A)]							>50	>50	<50	<40	
	Dp [Pa]							966	663	188	58.4	
	L [m]							22	21.7	20.8	20	
1800	L <sub>WA</sub> [dB(A)]							>50	12.9	50	<45	
	Dp [Pa]								824	234	72.6	
	L [m]								22.4	21.6	20.8	
	L <sub>WA</sub> [dB(A)]								>50	>50	<45	

Aef[m<sup>2</sup>] – effective grille area;  
Dp [Pa] – pressure loss;  
L [m] – range;  
LWA[dB(A)] – sound pressure level;