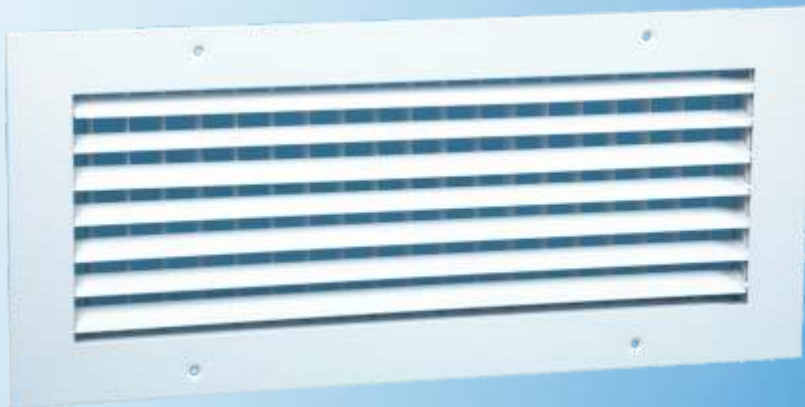


Double deflection supply grilles **SGDD**



Double deflection supply grilles

SGDD

Applications:

Double deflection supply grilles are terminal elements of a manifold-based air conditioning / vent system, which allow inlet and guiding of air jet into the room. They may be installed on walls or in ceiling.

Description:

The double deflection supply grilles are provided with a row of front, mobile, horizontally placed blades, alongside a row of rear adjustable, vertical blades. The inner blades control the lateral diffusion angle of the air flow, while the front blades control both the intensity and the up-down movement of the air flow. Blades are fastened to a peripheral silicone rubber gasket (a material unresponsive to temperature variation and age-resistant) with flush mounting, preventing accidental release. This also prevents inconveniences caused by possible noises occurred over time due to air flow passage and to operational micro-vibrations.

For an improved air flow rate adjustment, the use of OBD dampers is recommended.

Material:

Special profiles, made of extruded aluminum, in RITECH design.

Finish:

Electrostatically painted surface, dried in polymerization oven, providing increased lifetime of the paint layer and its pigment. Standard color: WHITE - RAL code 9016. On request, products may be delivered in any RAL color.

Fastening:

Pre-punched Ø 5 mm holes on long sides, for recessed-head anchor screw, painted in grille's color. The number and position of holes may be adjusted on request.

Packaging:

Individual packaging, in polyethylene foil and delivered in cardboard boxes. Corners are protected with cardboard guards.

Technical specifications text-box, for price quotation requests:

Double deflection supply grille, made of extruded aluminium, painted with electrostatic coating;

The grille shall be provided with adjustable blades both on the length and across the width of the grille. The blades are fastened to a silicone rubber gasket to prevent vibration-induced noises;

Color: RAL #####;

Sizes: mm X mm;

Accessories: damper; insulated/non-insulated plenum box;

Type: RITECH SGDD #####.



Performance table

Product code	A	B	Con- nection area	Free area	Tube V = 2 [m/s]			Tube V = 3 [m/s]			Tube V = 4 [m/s]		
	[mm]	[mm]	[m ²]	[m ²]	Q [m ³ /h]	ΔP [Pa]	Grille V [m/s]	Q [m ³ /h]	ΔP [Pa]	Grille V [m/s]	Q [m ³ /h]	ΔP [Pa]	Grille V [m/s]
SGDD 010020	100	200	0,020	0,012	144	2,38	3,22	216	3,7	4,82	288	6,16	6,43
SGDD 010030	100	300	0,030	0,019	216	2,38	3,22	324	3,7	4,82	432	6,16	6,43
SGDD 010040	100	400	0,040	0,025	288	2,38	3,22	432	3,7	4,82	576	6,16	6,43
SGDD 010050	100	500	0,050	0,031	360	2,38	3,22	540	3,7	4,82	720	6,16	6,43
SGDD 010060	100	600	0,060	0,037	432	2,38	3,22	648	3,7	4,82	864	6,16	6,43
SGDD 010070	100	700	0,070	0,044	504	2,38	3,22	756	3,7	4,82	1.008	6,16	6,43
SGDD 010080	100	800	0,080	0,050	576	2,38	3,22	864	3,7	4,82	1.152	6,16	6,43
SGDD 010090	100	900	0,090	0,056	648	2,38	3,22	972	3,7	4,82	1.296	6,16	6,43
SGDD 010100	100	1.000	0,100	0,062	720	2,38	3,22	1.080	3,7	4,82	1.440	6,16	6,43
SGDD 010110	100	1.100	0,110	0,068	792	2,38	3,22	1.188	3,7	4,82	1.584	6,16	6,43
SGDD 010120	100	1.200	0,120	0,075	864	2,38	3,22	1.296	3,7	4,82	1.728	6,16	6,43
SGDD 010130	100	1.300	0,130	0,081	936	2,38	3,22	1.404	3,7	4,82	1.872	6,16	6,43
SGDD 010140	100	1.400	0,140	0,087	1.008	2,38	3,22	1.512	3,7	4,82	2.016	6,16	6,43
SGDD 010150	100	1.500	0,150	0,093	1.080	2,38	3,22	1.620	3,7	4,82	2.160	6,16	6,43
SGDD 015020	150	200	0,030	0,019	216	2,38	3,22	324	3,7	4,82	432	6,16	6,43
SGDD 015030	150	300	0,045	0,028	324	2,38	3,22	486	3,7	4,82	648	6,16	6,43
SGDD 015040	150	400	0,060	0,037	432	2,38	3,22	648	3,7	4,82	864	6,16	6,43
SGDD 015050	150	500	0,075	0,047	540	2,38	3,22	810	3,7	4,82	1.080	6,16	6,43
SGDD 015060	150	600	0,090	0,056	648	2,38	3,22	972	3,7	4,82	1.296	6,16	6,43
SGDD 015070	150	700	0,105	0,065	756	2,38	3,22	1.134	3,7	4,82	1.512	6,16	6,43
SGDD 015080	150	800	0,120	0,075	864	2,38	3,22	1.296	3,7	4,82	1.728	6,16	6,43
SGDD 015090	150	900	0,135	0,084	972	2,38	3,22	1.458	3,7	4,82	1.944	6,16	6,43
SGDD 015100	150	1.000	0,150	0,093	1.080	2,38	3,22	1.620	3,7	4,82	2.160	6,16	6,43
SGDD 015110	150	1.100	0,165	0,103	1.188	2,38	3,22	1.782	3,7	4,82	2.376	6,16	6,43
SGDD 015120	150	1.200	0,180	0,112	1.296	2,38	3,22	1.944	3,7	4,82	2.592	6,16	6,43
SGDD 015130	150	1.300	0,195	0,121	1.404	2,38	3,22	2.106	3,7	4,82	2.808	6,16	6,43
SGDD 015140	150	1.400	0,210	0,131	1.512	2,38	3,22	2.268	3,7	4,82	3.024	6,16	6,43
SGDD 015150	150	1.500	0,225	0,140	1.620	2,38	3,22	2.430	3,7	4,82	3.240	6,16	6,43
SGDD 020020	200	200	0,040	0,025	288	2,38	3,22	432	3,7	4,82	576	6,16	6,43
SGDD 020030	200	300	0,060	0,037	432	2,38	3,22	648	3,7	4,82	864	6,16	6,43
SGDD 020040	200	400	0,080	0,050	576	2,38	3,22	864	3,7	4,82	1.152	6,16	6,43
SGDD 020050	200	500	0,100	0,062	720	2,38	3,22	1.080	3,7	4,82	1.440	6,16	6,43
SGDD 020060	200	600	0,120	0,075	864	2,38	3,22	1.296	3,7	4,82	1.728	6,16	6,43
SGDD 020070	200	700	0,140	0,087	1.008	2,38	3,22	1.512	3,7	4,82	2.016	6,16	6,43
SGDD 020080	200	800	0,160	0,100	1.152	2,38	3,22	1.728	3,7	4,82	2.304	6,16	6,43
SGDD 020090	200	900	0,180	0,112	1.296	2,38	3,22	1.944	3,7	4,82	2.592	6,16	6,43
SGDD 020100	200	1.000	0,200	0,124	1.440	2,38	3,22	2.160	3,7	4,82	2.880	6,16	6,43
SGDD 020110	200	1.100	0,220	0,137	1.584	2,38	3,22	2.376	3,7	4,82	3.168	6,16	6,43
SGDD 020120	200	1.200	0,240	0,149	1.728	2,38	3,22	2.592	3,7	4,82	3.456	6,16	6,43
SGDD 020130	200	1.300	0,260	0,162	1.872	2,38	3,22	2.808	3,7	4,82	3.744	6,16	6,43
SGDD 020140	200	1.400	0,280	0,174	2.016	2,38	3,22	3.024	3,7	4,82	4.032	6,16	6,43
SGDD 020150	200	1.500	0,300	0,187	2.160	2,38	3,22	3.240	3,7	4,82	4.320	6,16	6,43
SGDD 025020	250	200	0,050	0,031	360	2,38	3,22	540	3,7	4,82	720	6,16	6,43
SGDD 025030	250	300	0,075	0,047	540	2,38	3,22	810	3,7	4,82	1.080	6,16	6,43
SGDD 025040	250	400	0,100	0,062	720	2,38	3,22	1.080	3,7	4,82	1.440	6,16	6,43
SGDD 025050	250	500	0,125	0,078	900	2,38	3,22	1.350	3,7	4,82	1.800	6,16	6,43
SGDD 025060	250	600	0,150	0,093	1.080	2,38	3,22	1.620	3,7	4,82	2.160	6,16	6,43
SGDD 025070	250	700	0,175	0,109	1.260	2,38	3,22	1.890	3,7	4,82	2.520	6,16	6,43

SGDD - Double deflection supply grilles

Performance table

Product code	A	B	Con- nection area	Free area	Tube V = 2 [m/s]			Tube V = 3 [m/s]			Tube V = 4 [m/s]		
	[mm]	[mm]	[m ²]	[m ²]	Q [m ³ /h]	ΔP [Pa]	Grille V [m/s]	Q [m ³ /h]	ΔP [Pa]	Grille V [m/s]	Q [m ³ /h]	ΔP [Pa]	Grille V [m/s]
SGDD 025080	250	800	0,200	0,124	1.440	2,38	3,22	2.160	3,7	4,82	2.880	6,16	6,43
SGDD 025090	250	900	0,225	0,140	1.620	2,38	3,22	2.430	3,7	4,82	3.240	6,16	6,43
SGDD 025100	250	1.000	0,250	0,156	1.800	2,38	3,22	2.700	3,7	4,82	3.600	6,16	6,43
SGDD 025110	250	1.100	0,275	0,171	1.980	2,38	3,22	2.970	3,7	4,82	3.960	6,16	6,43
SGDD 025120	250	1.200	0,300	0,187	2.160	2,38	3,22	3.240	3,7	4,82	4.320	6,16	6,43
SGDD 025130	250	1.300	0,325	0,202	2.340	2,38	3,22	3.510	3,7	4,82	4.680	6,16	6,43
SGDD 025140	250	1.400	0,350	0,218	2.520	2,38	3,22	3.780	3,7	4,82	5.040	6,16	6,43
SGDD 025150	250	1.500	0,375	0,233	2.700	2,38	3,22	4.050	3,7	4,82	5.400	6,16	6,43
SGDD 030030	300	300	0,090	0,056	648	2,38	3,22	972	3,7	4,82	1.296	6,16	6,43
SGDD 030040	300	400	0,120	0,075	864	2,38	3,22	1.296	3,7	4,82	1.728	6,16	6,43
SGDD 030050	300	500	0,150	0,093	1.080	2,38	3,22	1.620	3,7	4,82	2.160	6,16	6,43
SGDD 030060	300	600	0,180	0,112	1.296	2,38	3,22	1.944	3,7	4,82	2.592	6,16	6,43
SGDD 030070	300	700	0,210	0,131	1.512	2,38	3,22	2.268	3,7	4,82	3.024	6,16	6,43
SGDD 030080	300	800	0,240	0,149	1.728	2,38	3,22	2.592	3,7	4,82	3.456	6,16	6,43
SGDD 030090	300	900	0,270	0,168	1.944	2,38	3,22	2.916	3,7	4,82	3.888	6,16	6,43
SGDD 030100	300	1.000	0,300	0,187	2.160	2,38	3,22	3.240	3,7	4,82	4.320	6,16	6,43
SGDD 030110	300	1.100	0,330	0,205	2.376	2,38	3,22	3.564	3,7	4,82	4.752	6,16	6,43
SGDD 030120	300	1.200	0,360	0,224	2.592	2,38	3,22	3.888	3,7	4,82	5.184	6,16	6,43
SGDD 030130	300	1.300	0,390	0,243	2.808	2,38	3,22	4.212	3,7	4,82	5.616	6,16	6,43
SGDD 030140	300	1.400	0,420	0,261	3.024	2,38	3,22	4.536	3,7	4,82	6.048	6,16	6,43
SGDD 030150	300	1.500	0,450	0,280	3.240	2,38	3,22	4.860	3,7	4,82	6.480	6,16	6,43
SGDD 040040	400	400	0,160	0,100	1.152	2,38	3,22	1.728	3,7	4,82	2.304	6,16	6,43
SGDD 040050	400	500	0,200	0,124	1.440	2,38	3,22	2.160	3,7	4,82	2.880	6,16	6,43
SGDD 040060	400	600	0,240	0,149	1.728	2,38	3,22	2.592	3,7	4,82	3.456	6,16	6,43
SGDD 040070	400	700	0,280	0,174	2.016	2,38	3,22	3.024	3,7	4,82	4.032	6,16	6,43
SGDD 040080	400	800	0,320	0,199	2.304	2,38	3,22	3.456	3,7	4,82	4.608	6,16	6,43
SGDD 040090	400	900	0,360	0,224	2.592	2,38	3,22	3.888	3,7	4,82	5.184	6,16	6,43
SGDD 040100	400	1.000	0,400	0,249	2.880	2,38	3,22	4.320	3,7	4,82	5.760	6,16	6,43
SGDD 040110	400	1.100	0,440	0,274	3.168	2,38	3,22	4.752	3,7	4,82	6.336	6,16	6,43
SGDD 040120	400	1.200	0,480	0,299	3.456	2,38	3,22	5.184	3,7	4,82	6.912	6,16	6,43
SGDD 040130	400	1.300	0,520	0,323	3.744	2,38	3,22	5.616	3,7	4,82	7.488	6,16	6,43
SGDD 040140	400	1.400	0,560	0,348	4.032	2,38	3,22	6.048	3,7	4,82	8.064	6,16	6,43
SGDD 040150	400	1.500	0,600	0,373	4.320	2,38	3,22	6.480	3,7	4,82	8.640	6,16	6,43
SGDD 050050	500	500	0,250	0,156	1.800	2,38	3,22	2.700	3,7	4,82	3.600	6,16	6,43
SGDD 054054	540	540	0,292	0,181	2.100	2,38	3,22	3.149	3,7	4,82	4.199	6,16	6,43

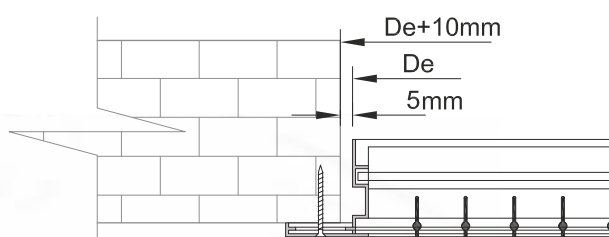
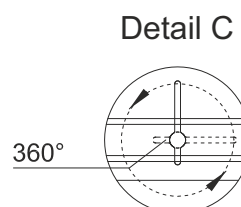
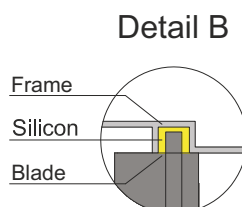
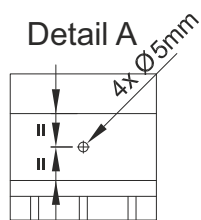
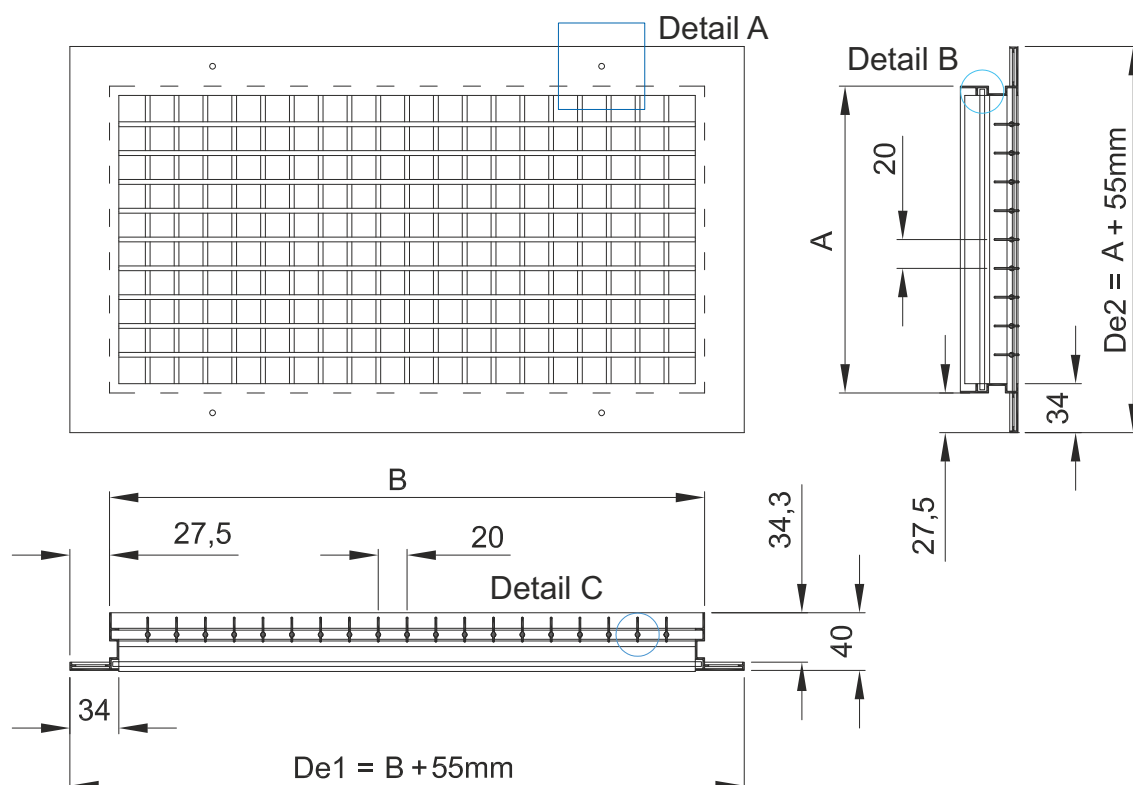
Legend:

Symbol	Description	M.U.
SGDD	Double deflection supply grille	
A	Grille connection gauge - Width	[mm]
B	Grille connection gauge - Length	[mm]
Connection area	Grille surface for connection gauges (A x B)	[m ²]
Free area	Surface available for air circulation (connection area-blade area)	[m ²]
Q	Air flow	[m ³ /h]
ΔP	Pressure loss through grille	[Pa]
Grille V	Air velocity through grille, calculated based on Flow and Free Area	[m/s]
Tube V	Air velocity in the connection section	[m/s]



Design your environment

Sizes



Engineering tolerance $\pm 2mm$

Example: Code SGDD020040 represents:

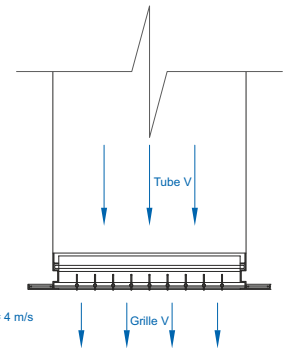
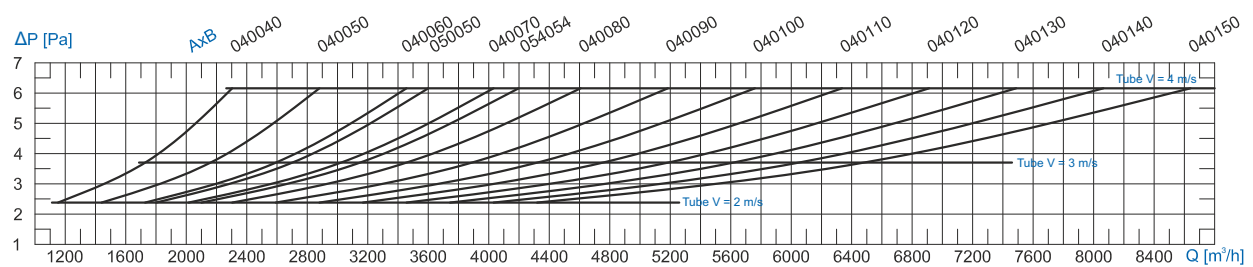
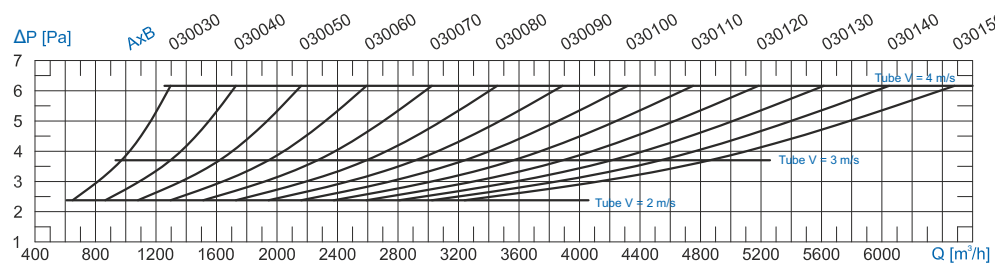
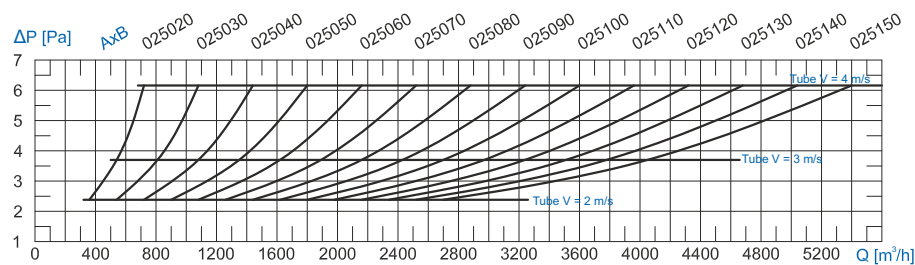
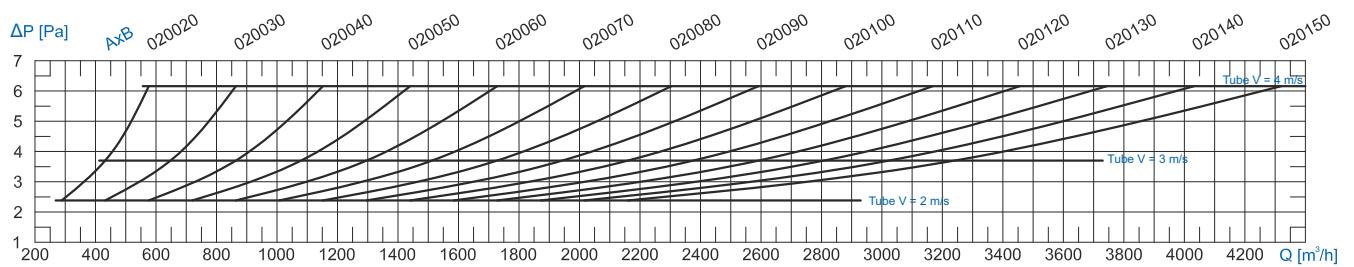
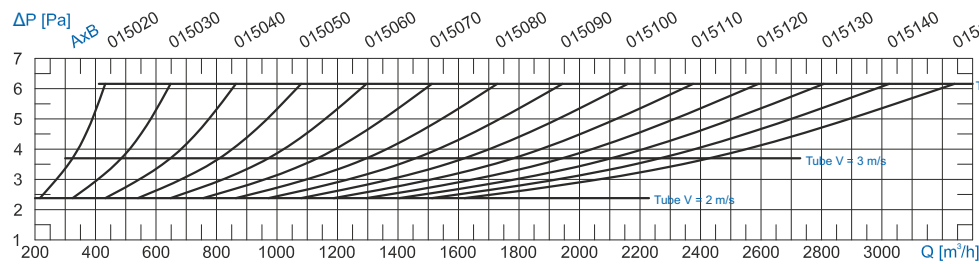
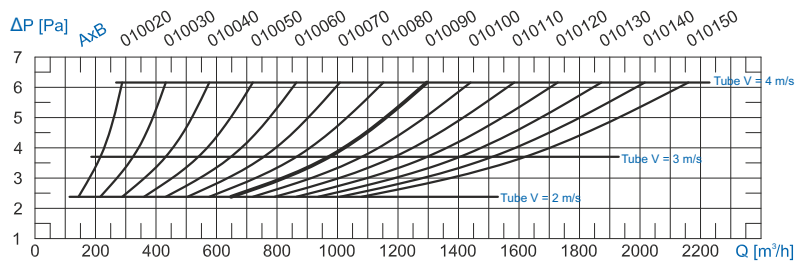
Double deflection supply grille, made of aluminum, $A = 200$ mm and $B = 400$ mm

Accessories: OBD damper: OBD020040

Plenum box: MAG 020040

NOTE: Products may be ordered in customized sizes and configurations (colors, number and position of holes, fastening method, blade display, execution of hybrid product, special plenum box etc.)

Pressure loss charts

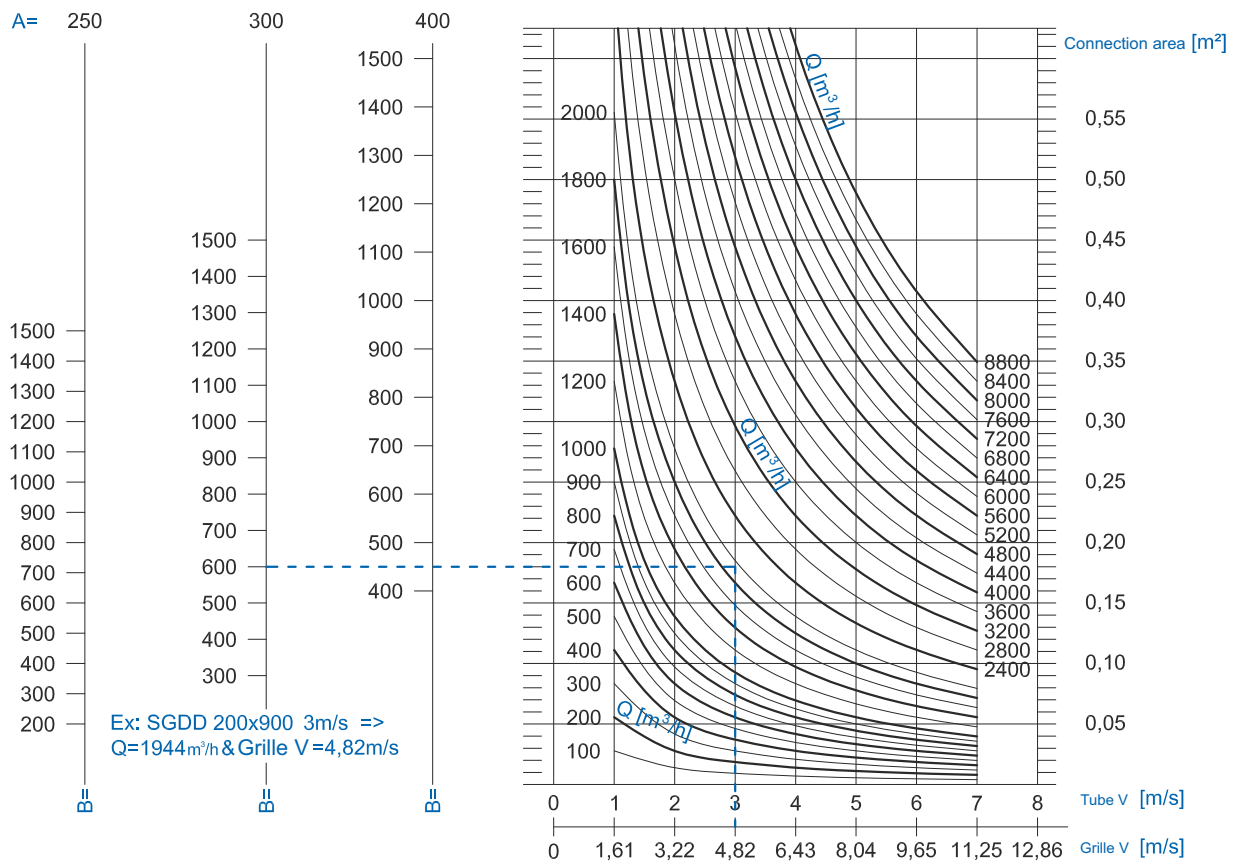
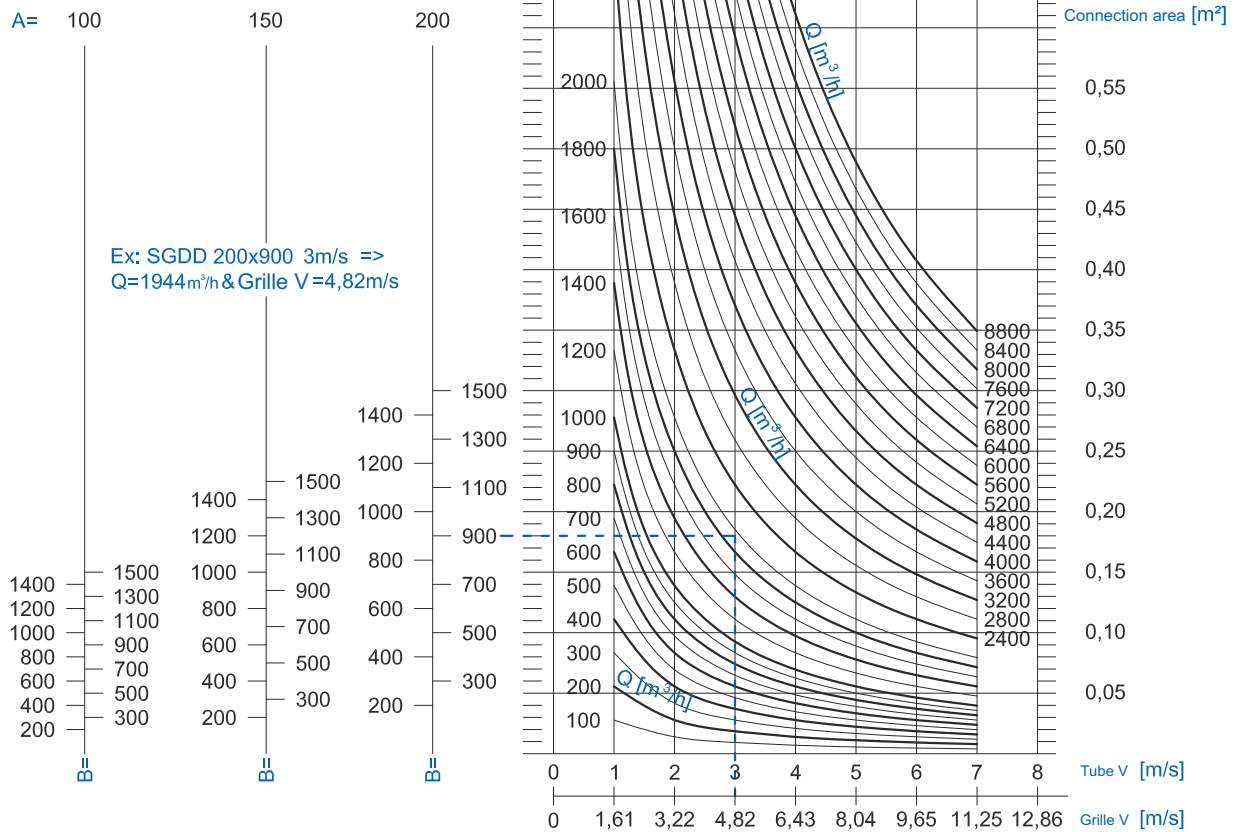


Ex: SGDD 300x600 Tube V=3m/s =>
Q=1944m³/h & ΔP=3,70Pa



Design your environment

Selection chart





Design your environment