



FLOOR DIFFUSERS

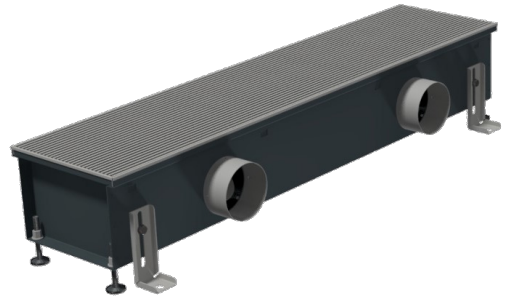
[Portfolio]

SLT floor diffusers

BQA

3 - 8

Low velocity floor diffuser



KOV

9 - 14

Underfloor convector



BIA-ID

15 - 21

Floor induction diffuser



T18A, K18A, R22A

22 - 24

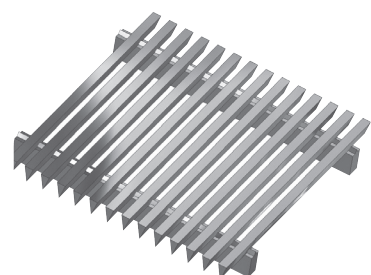
Rolling grate



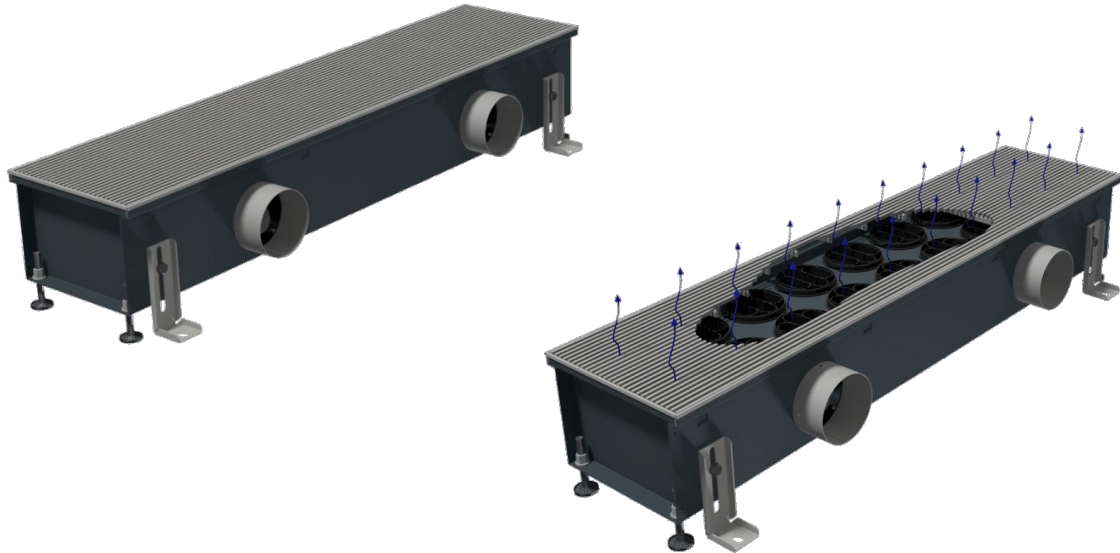
DSM

25 - 28

Design structures made of stainless steel



BQA [Low velocity floor diffuser]



Description:

Low velocity floor diffuser (BQA) for introducing conditioned supply air into the occupied area of comfort rooms with raised or hollow floors according to the mixed/displacement air principle. It is placed on the unfinished floor using adjustable feet to form one level with the raised floor.

Function:

The conditioned primary air is supplied to the floor duct of the diffuser via connecting pieces. An integrated level with inserted, adjustable scoop elements ensures that the air flow is evened out across the entire outlet area.

For cooling, the cold supply air flows vertically into the room as mixed/displacement air close to the facade. By mixing with the room air, an air flow with a low vertical temperature gradient and moderate velocities is formed. In the following the mixed air flows into the room close

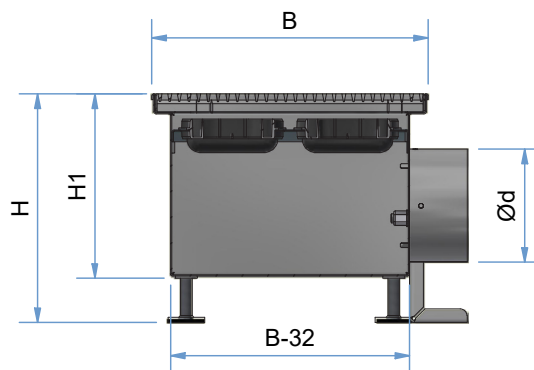
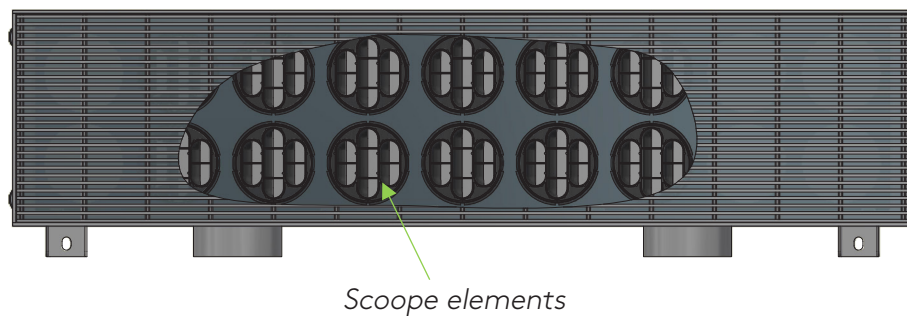
to the floor according to the principle of low velocity air flow and heats up at existing loads/heat sources such as people or electrical devices. As a result, the heated air rises as a displacement flow and transports existing pollutants and used air towards the exhaust air. The characteristics of blown-out air can be adjusted using the scoop elements.

Material:

- housing made of galvanized sheet steel, visible parts coated in black
- scoop elements made of plastic, black
- grating made of aluminium, naturally anodized

Accessories / Options:

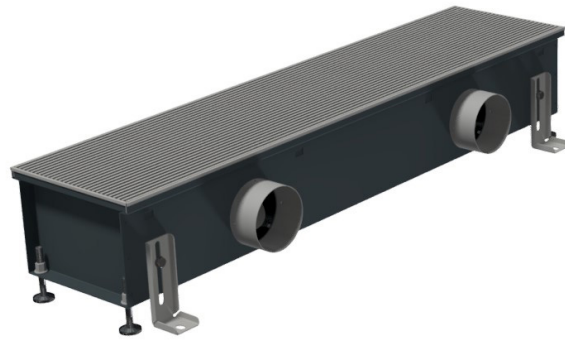
- conveyor line assembly
- conveyor line assembly with intermediate pieces, end pieces, mitered corners
- grating as a linear grating or rolling grating made of aluminium
- stainless steel grille with linear or transverse front profiles
- perforated sheet metal cover in different designs
- in a special finish, coated in the RAL color of your choice
- alternative materials



length L [mm]	width B [mm]	height H [mm]	H ₁ [mm]	air connection d [mm]
600 - 2000	150 - 390	150 - 390	140 - 310	78 - 250

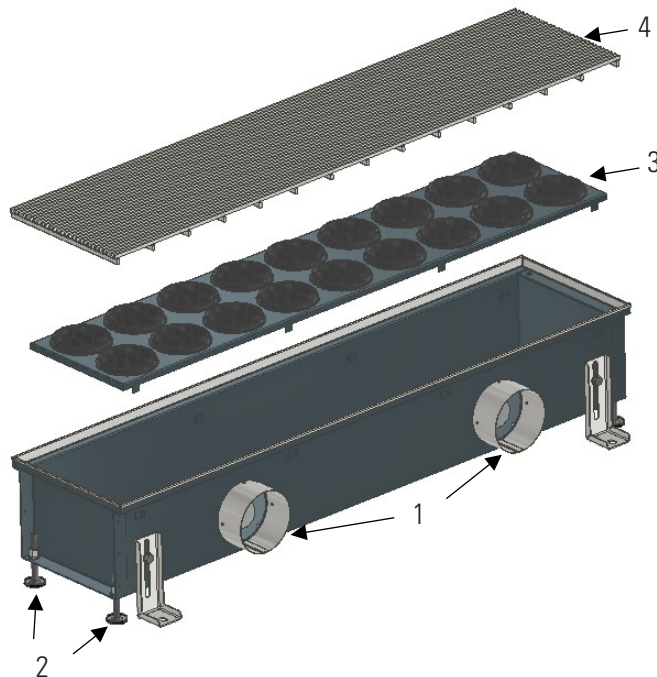
Other dimensions on request

Construction:



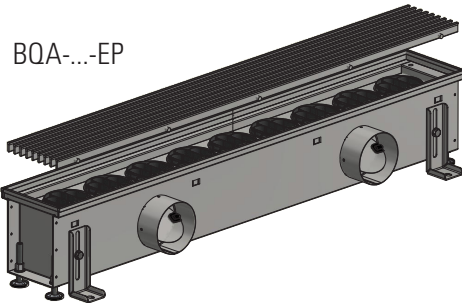
Floor diffuser in isometric view

The low velocity floor diffuser consists of the floor pan with supply air connection 1, adjustable feet to adapt to building tolerances 2, a distribution plate with inserted scoop elements 3 and a grating 4.

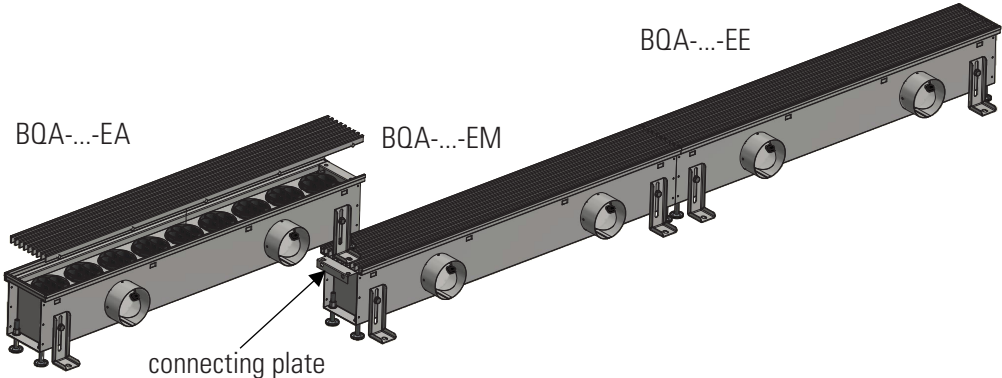


Finish:

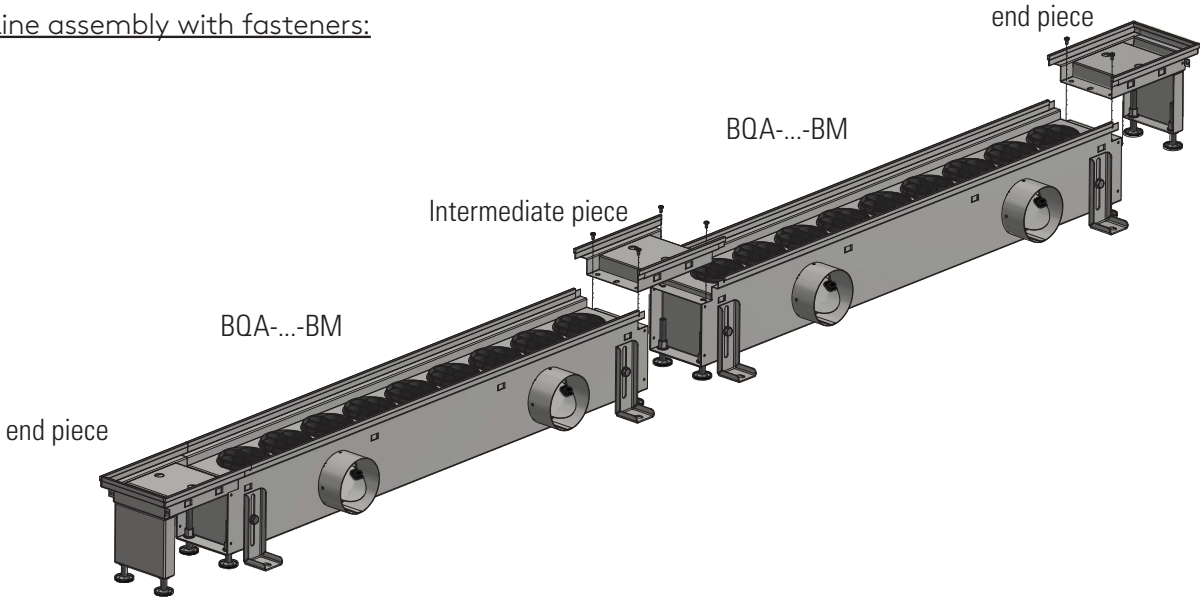
Single position:



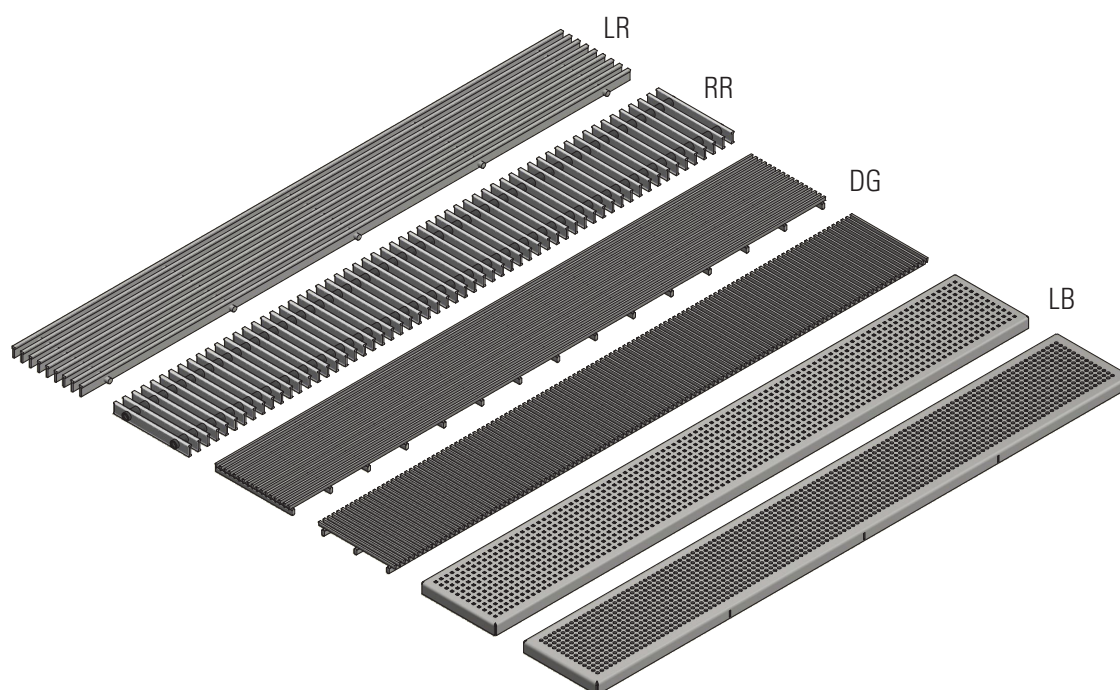
Easy line assembly:



Line assembly with fasteners:



Coverage:



LR: linear grid, aluminium 18x5

RR: rolling grille, aluminium 18x5

DG: DSM stainless steel longitudinally, transversely

LB: hole covers of different designs (e.g. Qg 4/10, Rg 5/8 ...)

Tendertext:

BQA

- Low velocity floor diffuser for a mixed/low velocity flow according to VDI 3804, for installation in raised floors. Easy to clean thanks to a closed sheet metal level below the grille with inserted scoop elements. Even flow of supply air over the entire outlet area. The step stable housing is made of finely galvanized sheet steel, coated in black, matt (RAL9005), with external adjustable and sound-insulated height adjustments (preassembled) with mounting brackets. With supply air connection made of galvanized steel sheet. The linear grid consists of stable longitudinal profile bars, anodized in a natural color, with a profile bar dimension of 18 x 5 mm, free cross section approx. 60%. Optional cover as a roll-up grille with double T profiles made of natural anodized aluminium, connection made of galvanized steel springs, with color-matching plastic spacer sleeves, rod dimensions 18 x 5 mm, free cross section approx. 70%. Other anodized colors on request.

Assembly-position

- BM/EM (middle of assembly), BA/EA (beginning of assembly), BE/EE (end of assembly), EP (single position)

Manufacturer

SLT · Lenzfeld 8 · D - 49811 Lingen (Ems)
phone +49(0)591/97337-0 · Fax +49(0)591/97337-50 · info@slt-lingen.de

Type

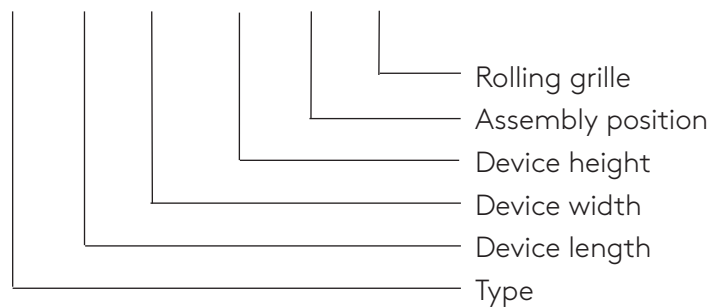
BQA -

Quantity

..... pieces

Order example

BQA - 1450 - 200 - 200 - BM - RR



KOV [Underfloor convector]



Description:

The KOV underfloor convector generates a mixed/low velocity flow for cooling or heating comfort rooms such as offices and conference rooms, especially with floor-to-ceiling glazing and the associated cooling or heating loads. For installation in raised or hollow floors. It is placed on the unfinished floor using adjustment feet and forms a level with the raised floor.

Function:

The KOV floor system brings tempered air into the room close to the facade. For this purpose, air is suctioned from the room using axial fans and passed through the installed heat exchanger. After that, the tempered air flows back into the room through a grating. The axial fans are stepless adjustable and ensure effective cooling or heating in recirculation mode.

In addition, fresh respectively primary air can be supplied to the room via an optional nozzle on the floor duct.

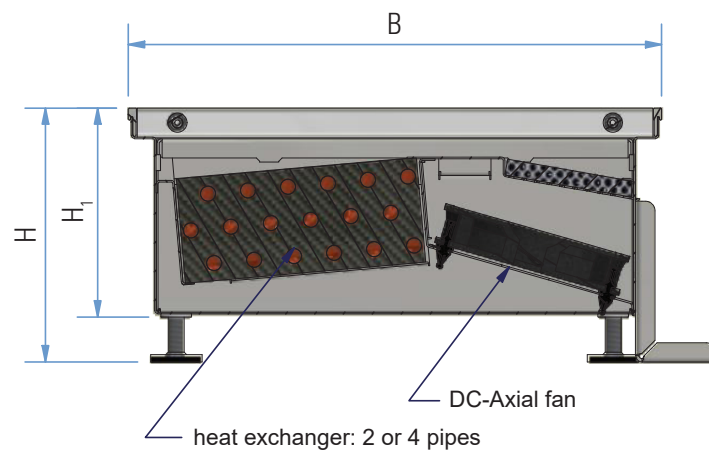
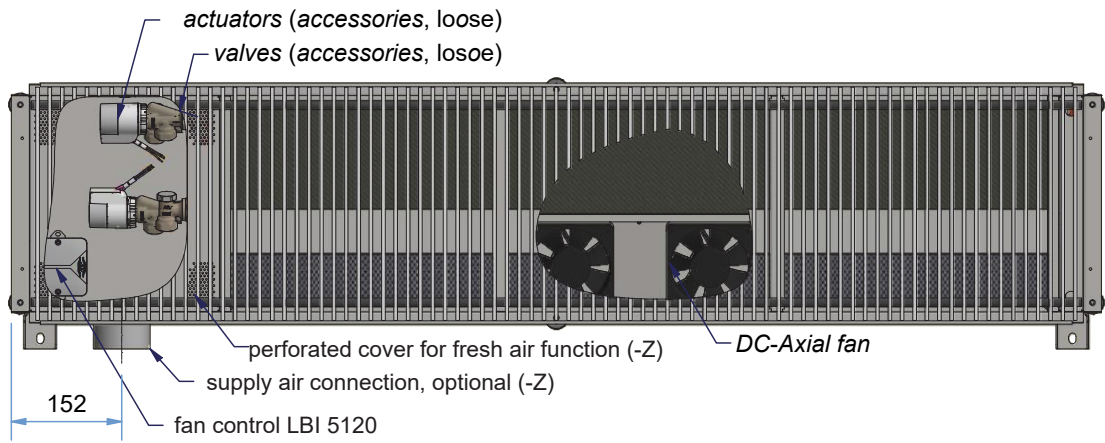
Material:

- housing made of galvanized sheet steel, visible parts coated in black
- convector consisting of copper tubes and aluminium fins
- aluminium grating

Accessories / Options:

- designed as a line assembly with intermediate pieces, end pieces, mitered corners and column cutouts
- as 2-wire (change-over operation) or 4-wire
- grating as a linear grating or rolling grating made of aluminium
- stainless steel grille with linear or transverse front profiles
- in a special version, coated in the RAL color of your choice.

Dimensions:

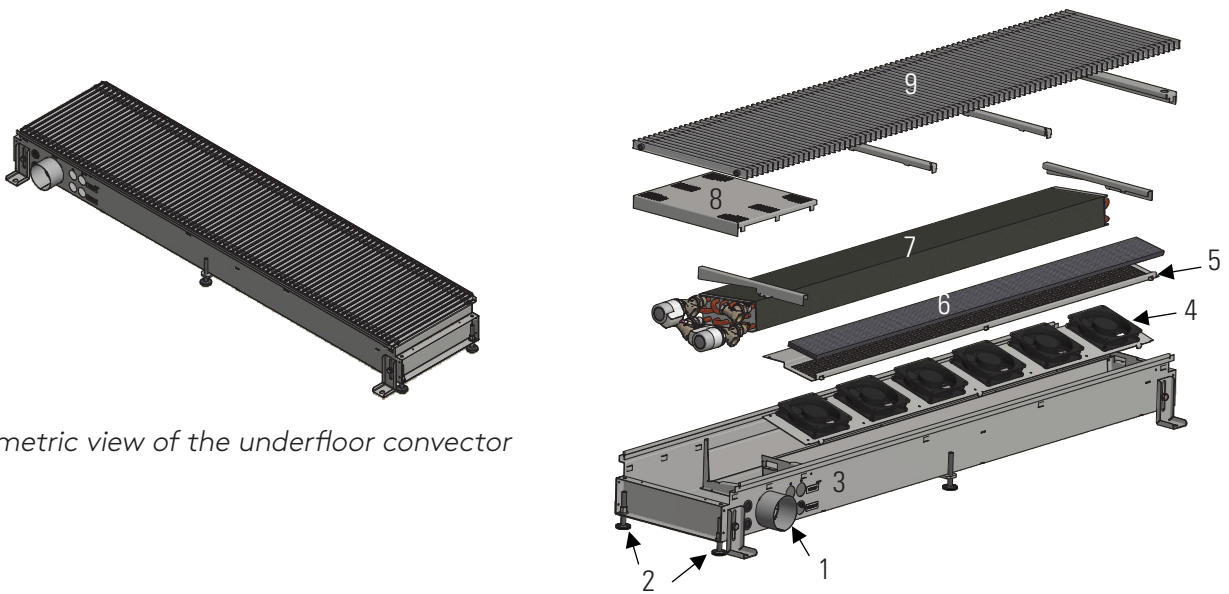


length L [mm]	width B [mm]	height H [mm]	H ₁ [mm]	air connection ø d [mm]
600 - 2000	240 - 390	122 - 260	112 - 200	78

Other dimensions on request

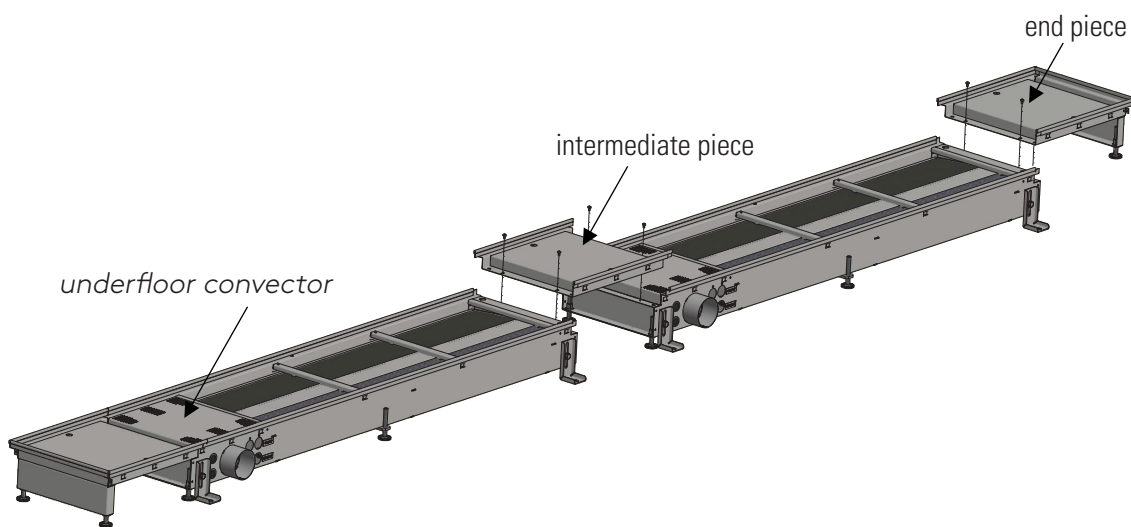
Construction:

The floor induction diffuser consists of a supply air box with connecting piece 1, adjustable feet to adapt to building tolerances 2, a housing with a bushing for water connections and electronic connection cables 3, a fan plate with axial fans 4, an intervention protection 5, a filter mat 6, a convector 7, a cover plate 8 and a grating 9.



isometric view of the underfloor convector

construction of underfloor convector



constructed as a line assembly using connecting elements

Technical data:

Cooling - circulating air - 4 conductors						
Nominal size: KOV-Z-4-1450-332-130-BM-L						
Control voltage [V]						
		2	4	6	8	10
Power consumption [W]						
		4,5	6	8,1	11,5	13,5
³⁾ Sound pressure level [dB(A)]						
		24	31	37	42	45
¹⁾ IN / OUT [°C]	²⁾ RT [°C]	Cooling capacity [W]				
15 / 17	30	263	418	554	702	799
	28	230	365	486	618	704
	26	196	310	417	531	607
	24	161	254	346	441	506
16 / 18	30	247	392	520	660	752
	28	213	338	452	575	656
	26	179	282	382	487	557
	24	143	226	309	395	454
16 / 19	30	238	378	503	639	728
	28	204	324	435	553	632
	26	170	269	364	464	532
	24	134	212	290	371	427

¹⁾ IN = water inflow, OUT = water return

²⁾ RT = room temperature

³⁾ Sound pressure level measured at a distance of 2 m without deducting room attenuation.

Technical Data:

Heating - circulating air - 4 conductors						
Nominal size: KOV-Z-4-1450-332-130-BM-L						
Control voltage [V]						
		2	4	6	8	10
Power consumption [W]						
		4,5	6	8,1	11,5	13,5
³⁾ Sound pressure level [dB(A)]						
		24	31	37	42	45
¹⁾ IN / OUT [°C]	²⁾ RT [°C]	Heating capacity [W]				
75 / 65	15	2108	2678	3170	3622	3895
	18	1997	2535	2999	3427	3683
	20	1992	2440	2885	3298	3542
	22	1848	2344	2770	3168	3401
55 / 45	15	1361	1721	2027	2321	2483
	18	1248	1576	1855	2125	2271
	20	1172	1480	1741	1994	2129
	22	1096	1383	1626	1863	1988
35 / 30	15	695	873	1021	1173	1245
	18	580	726	848	974	1032
	20	502	628	732	842	890
	22	424	530	616	709	748

¹⁾ IN = water inflow, OUT = water return

²⁾ RT = room temperature

³⁾ Sound pressure level measured at a distance of 2 m without deducting room attenuation.

Tendertext:

KOV

- Underfloor convector with fan convection, consisting of a ready-to-install base tray for the floor area. The step stable base tray is made of finely galvanized sheet steel, coated in black, mat (RAL9005), with external adjustable and sound-isolated height adjustments (pre-assembled) with mounting brackets. The connection side of the convectors can be designed either on the left or right side of the room and has an additional screen panel. The design can be a 2- or 4-wire finish.

The tray is equipped with the required openings for the on-site connections. The fans with energy-efficient DC technology from 0-10V input for stepless speed control have contact protection and internal motor monitoring. The heat exchanger consists of copper tubes and aluminium fins, also coated black (RAL9005). The standard connections are 2 x 1/2" at the front with an integrated vent valve, or in a special finish of your choice. Suitable for a maximum operating pressure of 16 bar and a maximum operating temperature of 130 °C. The standard cover is an aluminium linear grille, installed in the base tray in a sound-insulated manner. The linear grid consists of stable longitudinal profile bars, anodized in a natural color, with a profile bar dimension of 18 x 5 mm, free cross section approx. 60%. Optional cover as a roll-up grille with double T profiles made of natural anodized aluminium, connection made of galvanized steel springs, with color-matching plastic spacer sleeves, rod dimensions 18 x 5 mm, free cross section approx. 70%. Other anodized colors on request.

Assembly-position BM (middle of assembly), BA (start of assembly), BE (end of assembly), EP (single position)

Connection side L (connection on the left side of the room), R (connection on the right side of the room)

Supply air function Z with additional supply air connection for the introduction of pre-conditioned primary air via the underfloor convector

Note:

- on-site connection (hoses) not scope of delivery
- the connection and integration into the BMS is carried out on site
- the dimensions and performance data can be adjusted according to the requirements profile

Manufacture SLT · Lenzfeld 8 · D - 49811 Lingen (Ems)
Phone +49(0)591/97337-0 · Fax +49(0)591/97337-50 · info@slt-lingen.de

Typ KOV -

Quantity pieces

Order example KOV - Z - 4 - 1450 - 332 - 130 - BM - L

connection side
assembly position
device height
device width
device length
4-wire (or possible as 2 wires)
supply air connection
type

BIA-ID [Floor induction outlet]



Description:

The BIA-ID floor induction diffuser generates a mixed/low velocity flow for cooling or heating of comfort rooms such as offices and conference rooms, especially with floor-to-ceiling glazing and the associated cooling or heating loads. Installation takes place in raised or hollow floors. It is placed on the unfinished floor using adjustment feet and forms one level with the raised floor.

Function:

The centrally prepared primary air is supplied to the pressure box of the induction diffuser via a connection nozzle. Afterwards the primary air flows into the floor system in the form of individual nozzle jets via an induction-optimized nozzle plate below the heat exchanger. Due to the resulting negative pressure, the secondary air suctioned in from the room flows through the fins of the heat exchanger and conditioned accordingly. The proportion of the secondary air is a multiple of the primary air introduced.

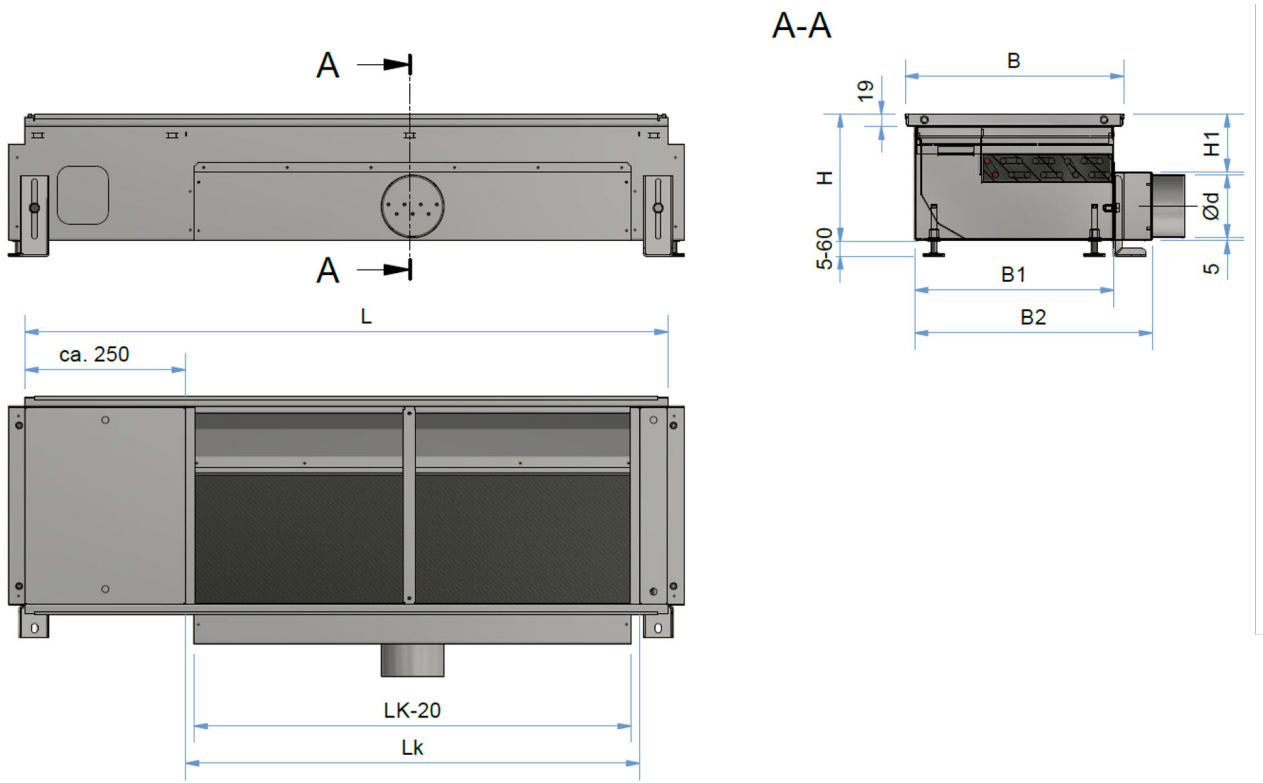
Material:

- housing, nozzle plate and pressure box made of galvanized sheet steel, visible parts coated in black
- convector consisting of copper tubes and aluminium fins
- aluminium grating

Accessories / Options:

- finish for line assembly with intermediate pieces, end pieces, mitered corners, column cutouts
- as 2-wire (change-over operation) or 4-wire
- grating as a linear grating or rolling grating made of aluminium
- stainless steel grille with linear or transverse front profiles
- in a special finish, coated in the RAL color of choice.

Dimensions:

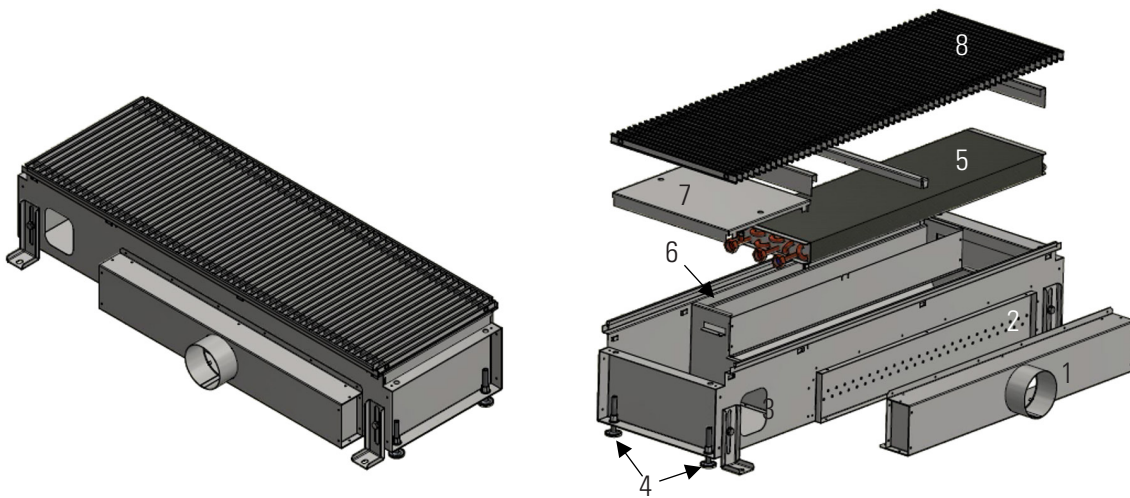


length L [mm]	width B [mm]	B1 [mm]	B2 [mm]	height H [mm]	H1 [mm]	air connection $\varnothing d$ [mm]
600 to 2000	340	310	385	200	90	98
	380	350	425	200	90	98
	405	375	450	200	90	98

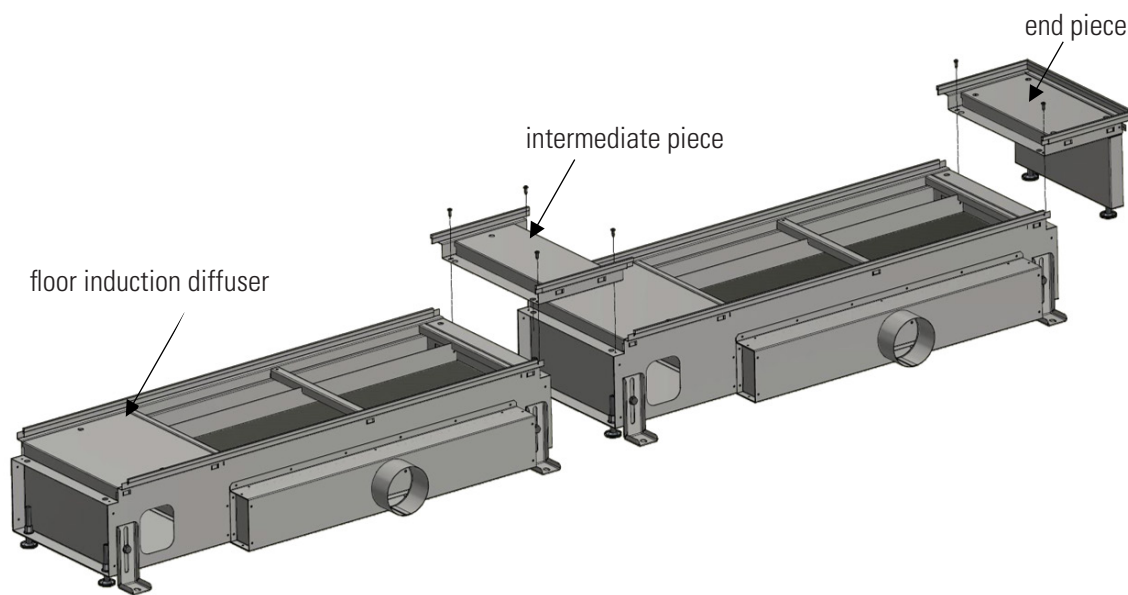
¹⁾ Other dimensions on request

Construction:

The floor induction diffuser consists of a supply air box with connection nozzle 1, a nozzle plate 2, the housing with a window for water connections and electronic connection cables 3, adjustable feet for adapting to building tolerances 4, the convector 5, the air outlet near the facade 6, a cover plate 7 and the grating 8.



structure of floor induction outlet



structure of the line assembly with connecting elements

Technical Data:

Cooling capacity

BIA-ID-1100/340/200, 2-wire										
Primary air volume [m ³ /h]		25			35			45		
Pressure [Pa]		36			68			110		
Sound pressure level [dB(A)]		24			29			33		
Cooling capacity [W]										
IN / OUT ¹ [°C]	RT ² [°C]	Water	Air	Total	Water	Air	Total	Water	Air	Total
15 / 17	30	217	102	319	333	143	476	390	184	574
	28	187	85	272	297	119	416	343	153	496
	26	156	68	224	241	95	336	294	122	416
	24	126	51	177	194	71	265	244	92	336
16 / 18	30	202	102	304	310	143	453	366	184	550
	28	172	85	257	264	119	383	318	153	471
	26	141	68	209	218	95	313	269	122	391
	24	111	51	162	171	71	242	218	92	310
16 / 19	30	194	102	296	298	143	441	354	184	538
	28	164	85	249	252	119	371	306	153	459
	26	134	68	202	206	95	301	257	122	379
	24	103	51	154	159	71	230	205	92	297

¹⁾ IN = water inflow, OUT = water return

²⁾ RT = room temperature

Given: Primary air temperature: 18 °C

Heating capacity

BIA-ID-1100/340/200, 2-wire										
Primary air volume [m ³ /h]		25			35			45		
Pressure [Pa]		36			68			110		
Sound pressure level [dB(A)]		24			29			33		
		Heating capacity [W]								
IN / OUT ¹ [°C]	RT ² [°C]	Water	Air	Total	Water	Air	Total	Water	Air	Total
75 / 65	15	1486	43	1529	1966	60	2026	2261	77	2338
	18	1410	17	1427	1859	24	1883	2138	31	2169
	20	1359	0	1359	1788	0	1788	2056	0	2056
	22	1308	-17	1291	1716	-24	1692	1973	-31	1942
70 / 55	15	1295	43	1338	1698	60	1758	1953	77	2030
	18	1218	17	1235	1590	24	1614	1829	31	1860
	20	1166	0	1166	1519	0	1519	1747	0	1747
	22	1115	-17	1098	1448	-24	1424	1665	-31	1634
55 / 45	15	972	43	1015	1251	60	1311	1439	77	1516
	18	893	17	910	1144	24	1168	1315	31	1346
	20	841	0	841	1073	0	1073	1233	0	1233
	22	788	-17	771	1001	-24	977	1151	-31	1120
45 / 40	15	745	43	788	983	60	1043	1130	77	1207
	18	695	17	712	876	24	900	1007	31	1038
	20	642	0	642	805	0	805	924	0	924
	22	588	-17	571	733	-24	709	842	-31	811
35 / 30	15	507	43	550	626	60	686	719	77	796
	18	425	17	442	519	24	543	596	31	627
	20	369	0	369	447	0	447	513	0	513
	22	313	-17	296	376	-24	352	431	-31	400

¹) IN = water inflow, OUT = water return

²) RT = room temperature

Given: Primary air temperature: 20 °C

Heating capacity

BIA-ID-1100/340/200, 4-wire										
Primary air volume [m³/h]		25			35			45		
Pressure [Pa]		36			68			110		
Sound pressure level [dB(A)]		24			29			33		
		Heating Capacity [W]								
IN / OUT ¹ [°C]	RT ² [°C]	Water	Air	Total	Water	Air	Total	Water	Air	Total
75 / 65	15	1060	43	1103	1262	60	1322	1381	77	1458
	18	998	17	1015	1187	24	1211	1299	31	1330
	20	957	0	957	1138	0	1138	1245	0	1245
	22	915	-17	898	1088	-24	1064	1191	-31	1160
70 / 55	15	905	43	948	1076	60	1136	1178	77	1255
	18	844	17	861	1002	24	1026	1097	31	1128
	20	803	0	803	953	0	953	1044	0	1044
	22	762	-17	745	904	-24	880	990	-31	959
55 / 45	15	651	43	694	772	60	832	845	77	922
	18	591	17	608	701	24	725	767	31	798
	20	551	0	551	653	0	653	715	0	715
	22	512	-17	495	606	-24	582	663	-31	632
45 / 40	15	502	43	545	594	60	654	650	77	727
	18	443	17	460	524	24	548	573	31	604
	20	404	0	404	478	0	478	523	0	523
	22	366	-17	349	432	-24	408	472	-31	441
35 / 30	15	308	43	351	364	60	424	398	77	475
	18	252	17	269	297	24	321	324	31	355
	20	214	0	214	252	0	252	276	0	276
	22	178	-17	161	209	-24	185	228	-31	197

¹⁾ IN = water inflow, OUT = water return

²⁾ RT = room temperature

Given: Primary air temperature: 20 °C

Tendertext:

BIA-ID Floor induction diffuser with high thermal capacity for a mixed/low velocity air flow for installation in the raised floor, with induction function for introducing preconditioned primary air, consisting of a supply air box with a connection nozzle, a nozzle plate with highly inducing air nozzles, the housing with windows for water connections and electronic connection cables, adjustable feet for adapting to building tolerances, the convector in 2 or 4-pipe finish and a cover grille. The housing is made of Sendzimir galvanized sheet metal, visible parts coated black on both sides. Convector made of round copper tubes with black coated aluminium fins. Cover grille and grille frame made of aluminium, natural anodized.

Assembly-position BM (middle of assembly), BA (start of assembly), BE (end of assembly), EP (single position)

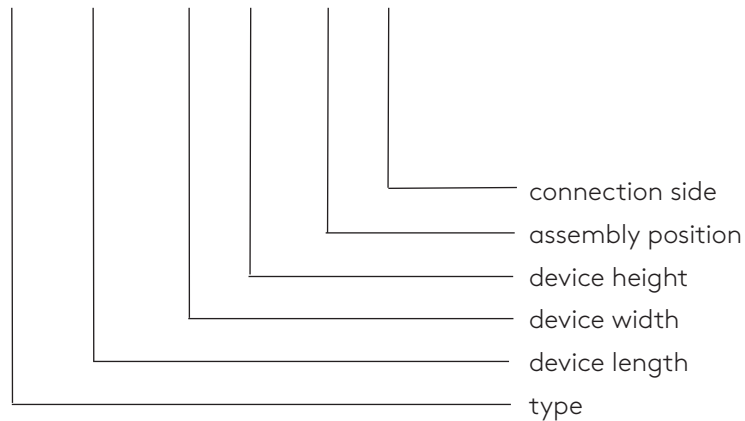
Connection side L (connection on the left side of the room), R (connection on the right side of the room)

Manufacture SLT · Lenzfeld 8 · D - 49811 Lingen (Ems)
Phone +49(0)591/97337-0 · Fax +49(0)591/97337-50 · info@slt-lingen.de

Type BIA-ID-.....

Quantity pieces

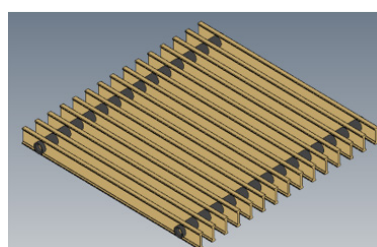
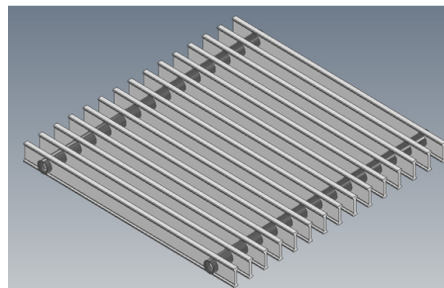
Order example BIA-ID - 1200 - 340 - 200 - BM - L



ROLLING GRATE

T18A:

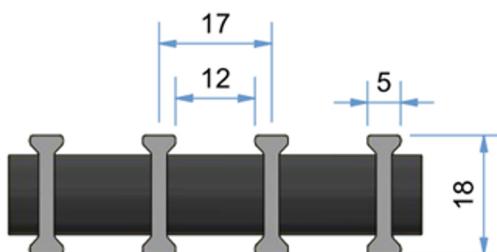
Rolling grate with transverse profile bars made of aluminium (AlMgSi0.5), E6/CO(EV1) natural anodized in double-T design, bar width 5 mm, bar height 18 mm; can be used on both sides; walkable; Bar design full profile. The profile bars are connected using galvanized steel springs. The rod spacing is defined by the use of black plastic spacer sleeves (standard 70% fr. Q.). Other spacer sleeves on request.



Accessories / Options:

- E6/C32(EV3) - brass colored anodized
- E6/C33(EV4) - medium bronze
- E6/C35(EV6) - black
- other anodized colors on request
- other roller frame widths on request

Dimensions:

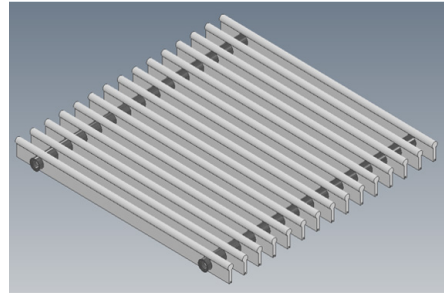


Rolling grill bar width [mm]	Bar spacing [mm]	free cross section[%]
165	12	70
190	12	70
215	12	70
240	12	70
265	12	70
290	12	70
315	12	70
340	12	70
365	12	70
390*	12	70
415*	12	70

*) 3 Rows of spacer sleeves

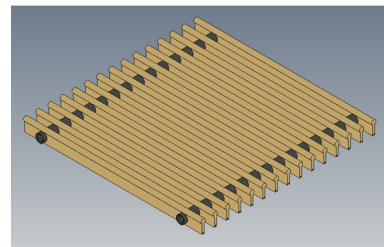
K18A:

Rolling grate with transverse profile bars made of aluminium (AlMgSi0.5), E6/C0(EV1) natural anodized in teardrop design, bar width 6 mm, bar height 18 mm; can be used on both sides; walkable; Bar design full profile. The profile bars are connected using galvanized steel springs. The bar spacing is defined by the use of black plastic spacer sleeves. Other spacer sleeves on request.

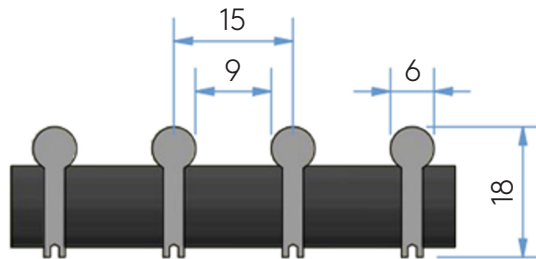


Accessories / Options:

- E6/C31(EV2) - bronzed
- E6/C32(EV3) - brass colored anodized
- E6/C33(EV4) - medium bronze
- other anodized colors on request
- other roller frame widths on request



Dimensions:

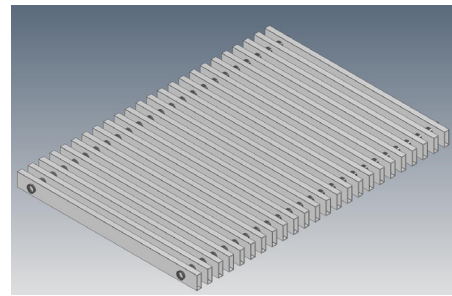


Rolling grill bar width [mm]	Bar spacing [mm]	free cross section [%]
165	9	55
190	9	55
215	9	55
240	9	55
265	9	55
290	9	55
315	9	55
340	9	55
365	9	55
390*	9	55
415*	9	55

*) 3 Rows of spacer sleeves

R22A:

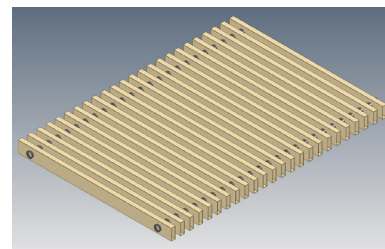
Rolling grate with transverse profile bars made of aluminium (AlMgSi0.5) in a rectangular shape, bar width 8 mm, bar height 22 mm; can be used on both sides; walkable; Rod design hollow profile. The profile bars are connected using galvanized steel springs. The bar spacing is defined by the use of black plastic spacer sleeves.



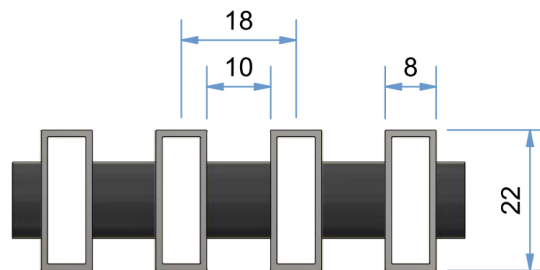
(Other spacer sleeves on request).

Accessories / Options:

- E6/C32(EV3) - brass colored anodized
- E6/C33(EV4) - medium bronze
- E6/C35(EV6) - black
- other anodized colors on request
- other roller frame widths on request



Dimensions

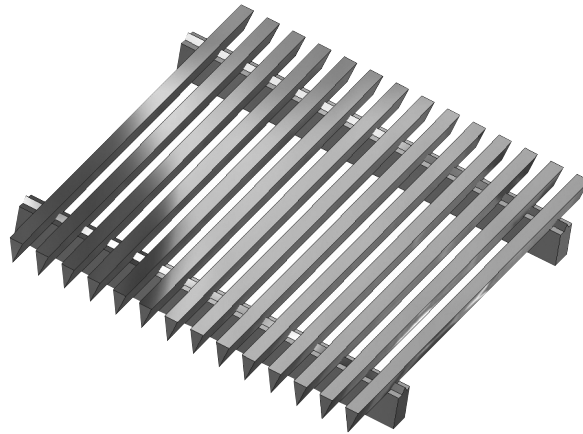


Rolling grill bar width [mm]	Bar spacing [mm]	free cross section [%]
150	10	55
200	10	55
250	10	55
300	10	55
350	10	55
400*	10	55
450*	10	55
500*	10	55
550*	10	55
600**	10	55
650**	10	55
700**	10	55

*) 3 Rows of spacer sleeves

**) 4 Rows of spacer sleeves

DSM [Desing structures]



Description:

DSM design elements made of drawn stainless steel profiles in different shapes and different arrangements of the structural edges, which are invisibly welded to the support profiles.

Different free cross sections can be implemented, so that specific adaptation to the respective requirements is possible.

The elements can be created in any rectangular, round or curved shape in flat or three-dimensional structures with vertical or horizontal progression of the individual profiles.

Function:

The design elements can be used in a variety of functions. As a purely design element, ventilation components and other room installations can be covered.

The stainless steel structures can also be used directly as front surfaces of air diffusers (particularly low velocity diffusers, floor diffusers, etc.).

Material:

Front and support profiles are made of non-oxidizing stainless steel

Accessories / Options

- different types of surface treatment

Selection of available profile shapes:

Execution of the front profiles

Shape	Designation	Width [mm]	Height [mm]
•	∅ 0,8	0,8 (Durchmesser)	-
•	∅ 1	1,0 (Durchmesser)	-
•	∅ 2	2,0 (Durchmesser)	-
▼	10S	0,75	1,425
▼	11S	0,75	1,8
▼	12S	1	2
▼	12SL	1	2
▼	18S	1,5	2,5
▼	22S	1,8	3,7
▼	28S	2,2	4,5
▼	34S	2,8	5,5
▼	42S	3,4	6,8
▼	50S	3,4	7,5

Execution of the support profiles

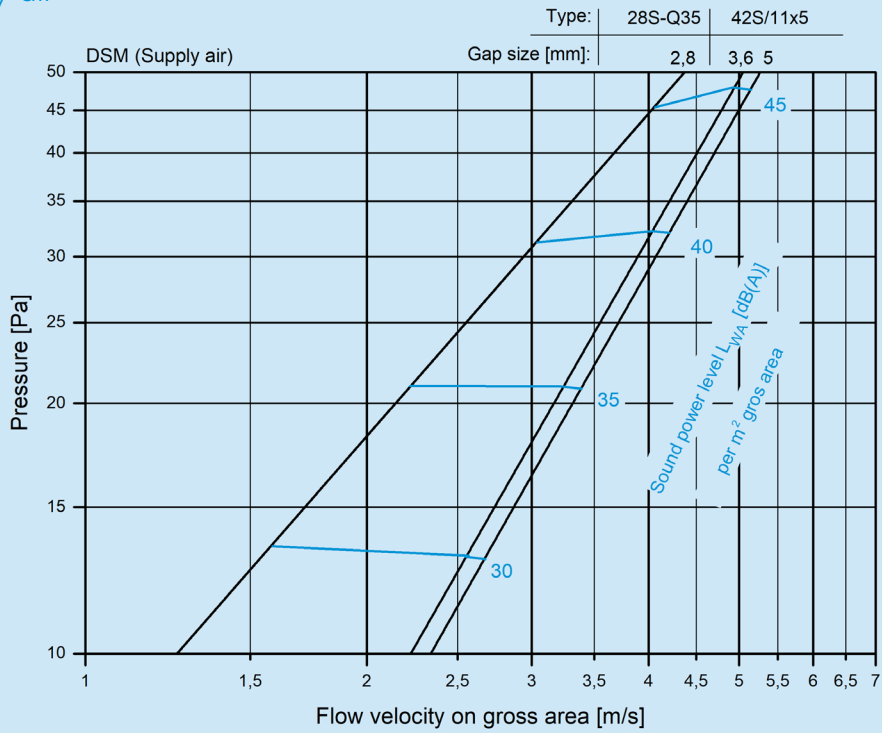
Shape	Designation	Width [mm]	Height [mm]
⬆	Q20	2	2,28
⬆	Q25	2	3
⬆	Q35	3	5
⬆	Q53	5	3
⬆	D45	4	5,6
—	10 x 3	3	10
⬆	11 x 5	5	11
—	25 x 3	3	25
—	50 x 3	3	50

For special tasks, additional front and support profiles can be processed and combined to form the desired structures.

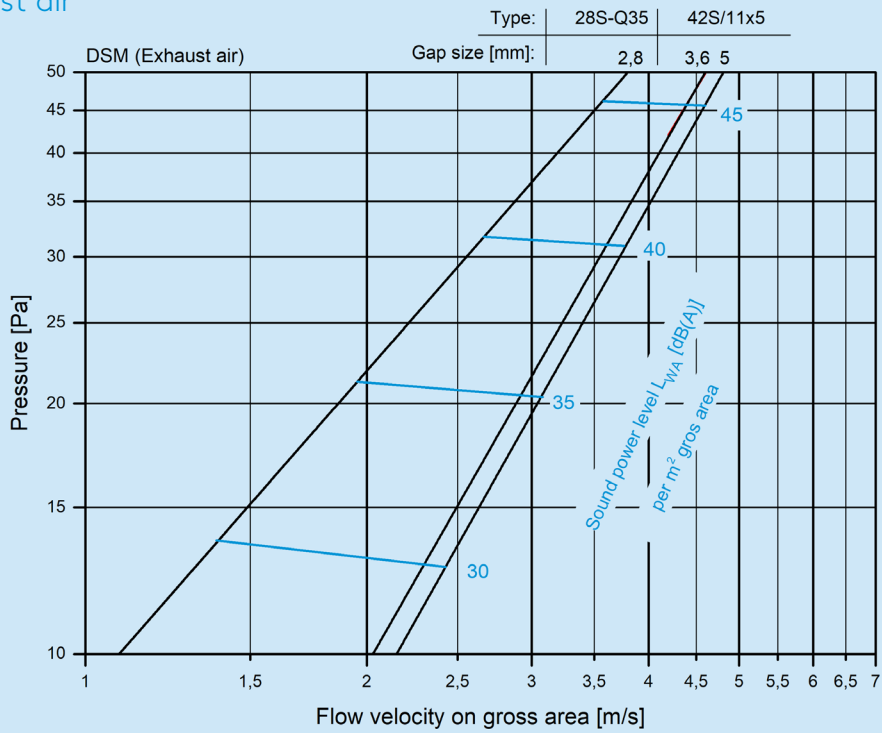
Depending on the expected mechanical and chemical loads, various stainless steel qualities and surface treatments can also be made.

Flow data DSM (example):

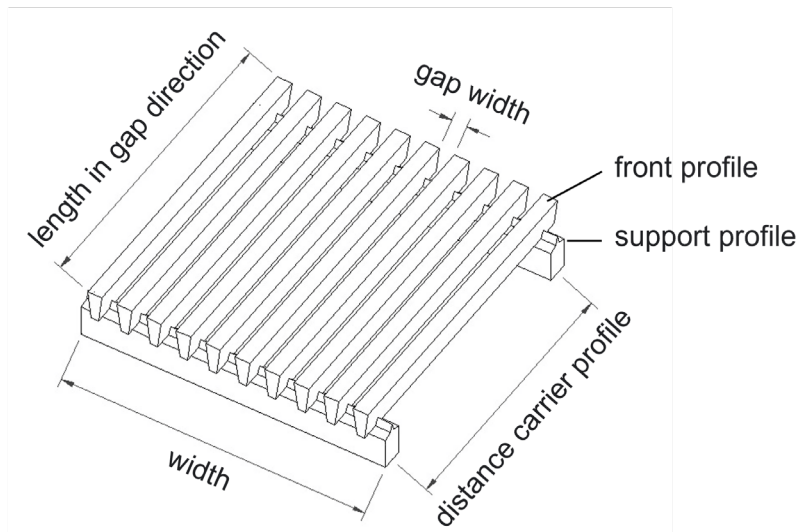
Supply air



Exhaust air



Finish:



Tendertext

DSM

Special diffuser, optically and functionally adapted to the on-site requirements, consisting of drawn stainless steel front profiles in different shapes with optional arrangement of the structural edges, invisibly welded to support profiles, suitable for any design in a flat (rectangular, rounded) or three-dimensional shape with vertical or horizontal course of the individual profiles. Front and support profiles made of non-oxidizing stainless steel.

Manufacture SLT · Lenzfeld 8 · D - 49811 Lingen (Ems)
Phone +49(0)591/97337-0 · Fax +49(0)591/97337-50 · info@slt-lingen.de

Type DSM -

Quantity pieces



LUFTECHNIK IN PERFEKTION

[ventilation perfection]

1. Auflage, © SLT 2023

Hauptsitz [Headquarter]

Unser Unternehmen ist im südlichen Emsland beheimatet. Hier arbeiten Entwicklungs- und Produktionsabteilung sowie der Vertrieb Hand in Hand.

Our company is based in Lingen/Ems, in the southern Emsland, where our development-, production- and sales department work hand in hand.

Swegon SLT GmbH

Lenzfeld 8, 49811 Lingen (Ems)

Telefon: 0591/97337-0

Fax: 0591/97337-50

E-Mail: Info@slt-lingen.de

www.slt-lingen.de

