

Swirl diffuser OD-15

Application:

- Suitable for cooling, heating and transition periods
- Effective operation across the wide range of air flows
- Installation into suspended ceilings

Advantages:

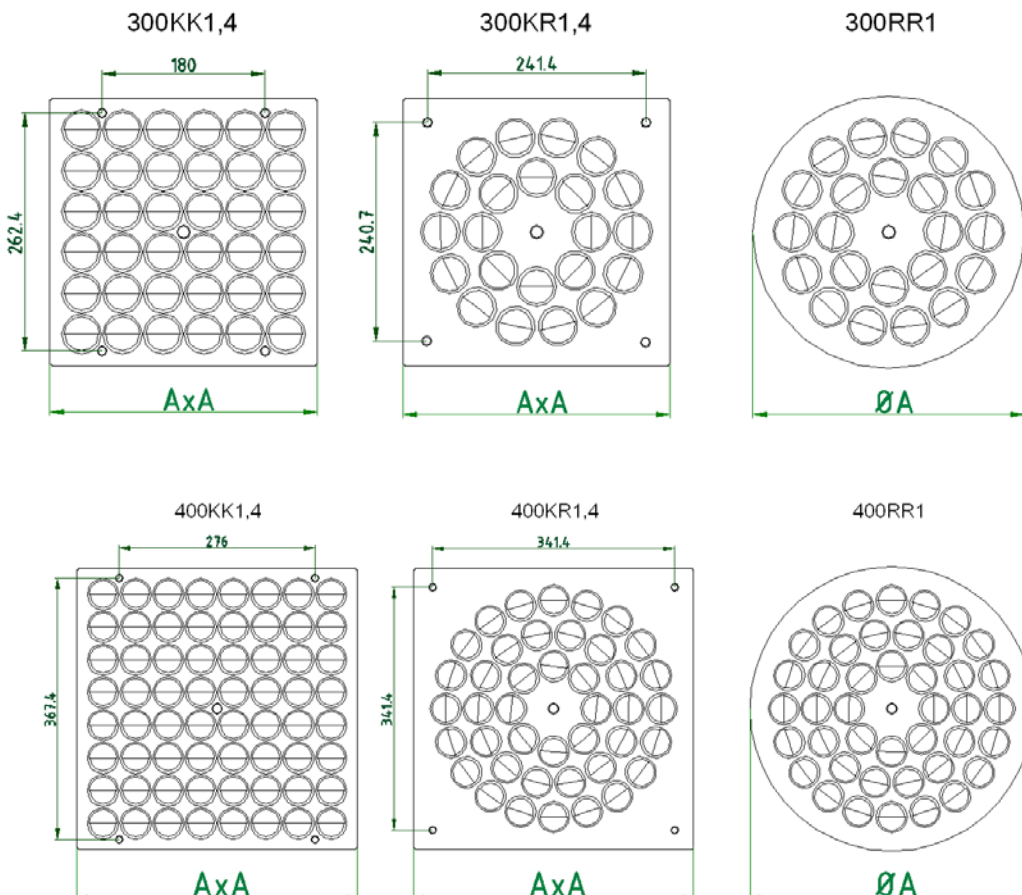
- Higher outlet air velocity on the nozzle: reaching of more intensive ceiling effect
- Reaching of the higher throw distance in the heating mode
- Lower static pressure drop
- Silent operation
- High induction

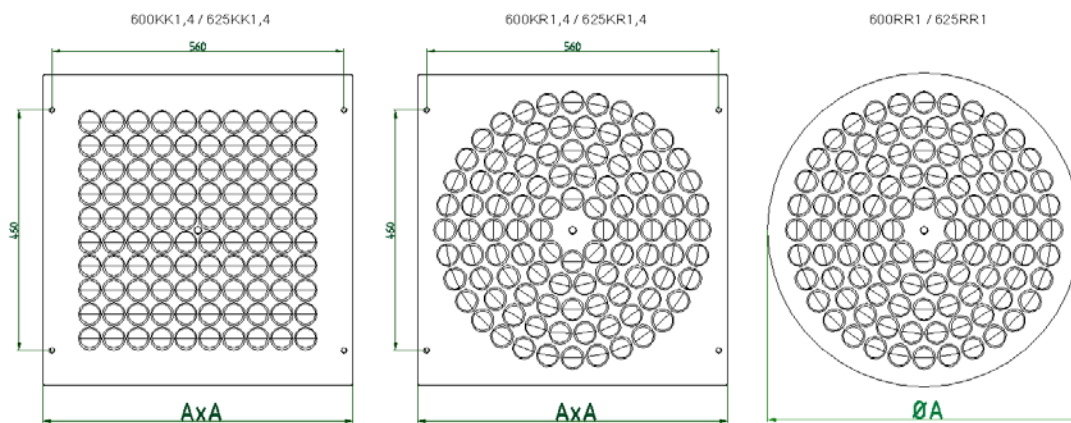
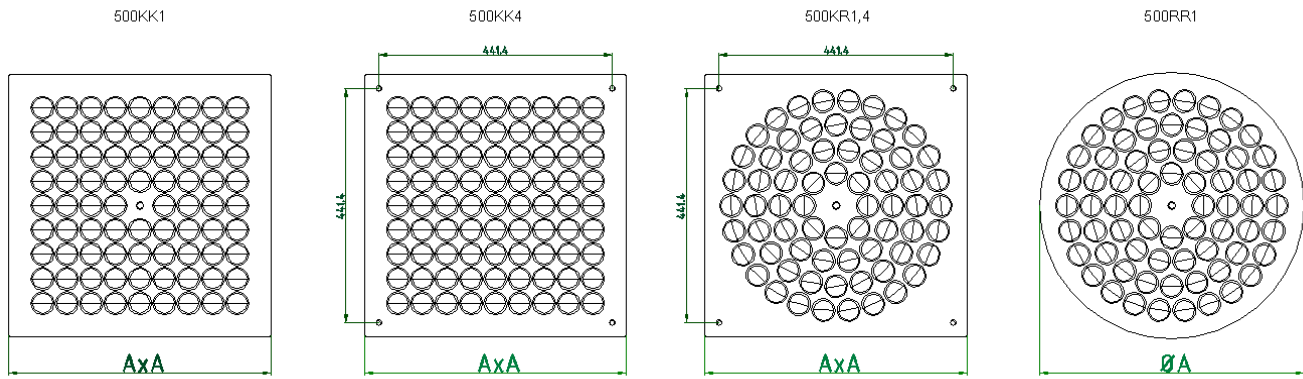
Description:

- Large number of rotational nozzles allow variable and precise discharge direction
- Pickled steel sheet plate
- Metal part of the diffuser plate is powder-coated in RAL 9010 or according to customer specifications
- Square diffuser plate with the rectangular nozzle layout – KK version
- Square diffuser plate with the circular nozzle layout – KR version
- Circular diffuser plate with the circular nozzle layout – RR version.

Features of a single nozzle:

- Aerodynamic shape
- Distinctive and discrete design





Dimension	AxA (mm)	Number of nozzles
300KK	295x295	36
300KR	295x295	22
300RR	Ø300	22
400KK	395x395	64
400KR	395x395	42
400RR	Ø400	42
500KK	495x495	80
500KR	495x495	68
500RR	Ø500	68
600KK	595x595	100
600KR	595x595	100
600RR	Ø600	100
625KK	620x320	100
625KR	620x620	100
625RR	Ø625	100

* tolerances according to standard DIN 7168 T1, middle tolerance class (m) ... ±0.8 mm

Quick selection tables

Type	Q	[l/s]	34,7	41,7	48,6	55,6	62,5	69,4
		[m ³ /h]	125	150	175	200	225	250
OD-15/KK/Z/S/M size 300 ød=125	Lwa	[dB (A)]	28	31	36	39	43	45
	Δp _t	[Pa]	18	25	34	45	57	70

Type	Q	[l/s]	34,7	41,7	48,6	55,6	62,5	69,4
		[m ³ /h]	125	150	175	200	225	250
OD-15/KK/Z/V/M size 300 ød=125	Lwa	[dB (A)]	27	30	34	38	41	44
	Δp _t	[Pa]	17	24	33	43	54	67

Type	Q	[l/s]	22,2	27,8	34,7	41,7	48,6	55,6
		[m ³ /h]	80	100	125	150	175	200
OD-15/KR/ZR/S/M size 300 ød=160	Lwa	[dB (A)]	27	31	37	40	43	49
	Δp _t	[Pa]	11	17	26	37	51	66

Type	Q	[l/s]	22,2	27,8	34,7	41,7	48,6	55,6
		[m ³ /h]	80	100	125	150	175	200
OD-15/KR/ZR/V/M size 300 ød=160	Lwa	[dB (A)]	26	29	34	37	40	45
	Δp _t	[Pa]	10	16	25	36	49	64

Type	Q	[l/s]	55,6	69,4	83,3	97,2	111,1	125,0
		[m ³ /h]	200	250	300	350	400	450
OD-15/KK/Z/S/M size 400 ød=200	Lwa	[dB (A)]	26	28	34	39	43	45
	Δp _t	[Pa]	9	14	21	28	37	47

Type	Q	[l/s]	55,6	69,4	83,3	97,2	111,1	125,0
		[m ³ /h]	200	250	300	350	400	450
OD-15/KK/Z/V/M size 400 ød=200	Lwa	[dB (A)]	26	28	33	38	42	45
	Δp _t	[Pa]	10	15	22	29	38	49

Type	Q	[l/s]	41,7	48,6	55,6	62,5	69,4	83,3
		[m ³ /h]	150	175	200	225	250	300
OD-15/KR/ZR/S/M size 400 ød=200	Lwa	[dB (A)]	28	31	35	38	41	43
	Δp _t	[Pa]	11	15	19	24	30	43

Type	Q	[l/s]	41,7	48,6	55,6	62,5	69,4	83,3
		[m ³ /h]	150	175	200	225	250	300
OD-15/KR/ZR/V/M size 400 ød=200	Lwa	[dB (A)]	27	29	32	35	38	41
	Δp _t	[Pa]	10	14	19	23	29	42

Type	Q	[l/s]	69,4	83,3	97,2	111,1	125,0	138,9
		[m ³ /h]	250	300	350	400	450	500
OD-15/KK/Z/S/M size 500 ød=200	Lwa	[dB (A)]	26	29	33	37	41	44
	Δp _t	[Pa]	13	18	25	32	41	50

Type	Q	[l/s]	69,4	83,3	97,2	111,1	125,0	138,9
		[m ³ /h]	250	300	350	400	450	500
OD-15/KK/Z/V/M size 500 ød=200	Lwa	[dB (A)]	26	28	32	37	41	44
	Δp _t	[Pa]	12	17	24	31	39	48

Type	Q	[l/s]	55,6	69,4	83,3	97,2	111,1	125,0
		[m ³ /h]	200	250	300	350	400	450
OD-15/KR/ZR/S/M size 500 ød=200	Lwa	[dB (A)]	28	32	36	40	44	47
	Δp _t	[Pa]	10	15	22	29	39	49

Type	Q	[l/s]	55,6	69,4	83,3	97,2	111,1	125,0
		[m ³ /h]	200	250	300	350	400	450
OD-15/KR/ZR/V/M size 500 ød=200	Lwa	[dB (A)]	29	31	35	40	44	47
	Δp _t	[Pa]	9	15	21	29	38	47

Type	Q	[l/s]	97,2	111,1	125,0	138,9	152,8	166,7
		[m ³ /h]	350	400	450	500	550	600
OD-15/KK/Z/S/M size 600,625 ød=250	Lwa	[dB (A)]	29	32	35	39	41	44
	Δp _t	[Pa]	13	16	21	26	31	37

Type	Q	[l/s]	97,2	111,1	125,0	138,9	152,8	166,7
		[m ³ /h]	350	400	450	500	550	600
OD-15/KK/Z/V/M size 600,625 ød=250	Lwa	[dB (A)]	29	31	35	38	41	44
	Δp _t	[Pa]	13	17	21	27	32	38

Type	Q	[l/s]	97,2	111,1	125,0	138,9	152,8	166,7
		[m³/h]	350	400	450	500	550	600
OD-15/KR/ZR/S/M size 600,625 ød=250	Lwa	[dB (A)]	30	33	37	40	43	45
	Δp _t	[Pa]	13	17	21	26	32	38

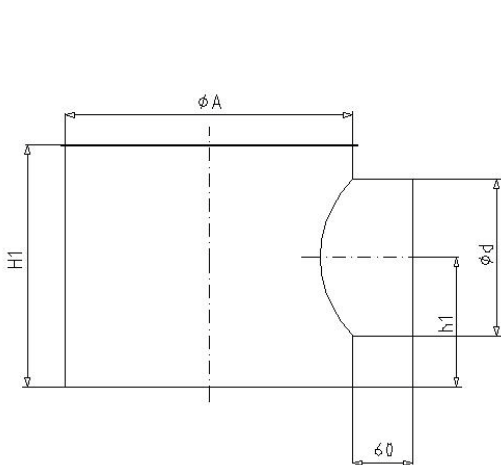
Type	Q	[l/s]	97,2	111,1	125,0	138,9	152,8	166,7
		[m³/h]	350	400	450	500	550	600
OD-15/KR/ZR/V/M size 600,625 ød=250	Lwa	[dB (A)]	30	33	37	40	43	45
	Δp _t	[Pa]	13	17	21	26	32	38

* L_{WA} and Δp_t are given at 100% open regulation damper

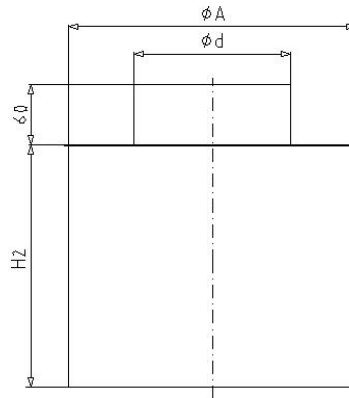
L_{WA} A-weighted sound power level
 Δp_t Total pressure drop calculated to normal conditions
 Q Air flow

Plenum box:

- Material: galvanized steel
- Surface finish: /



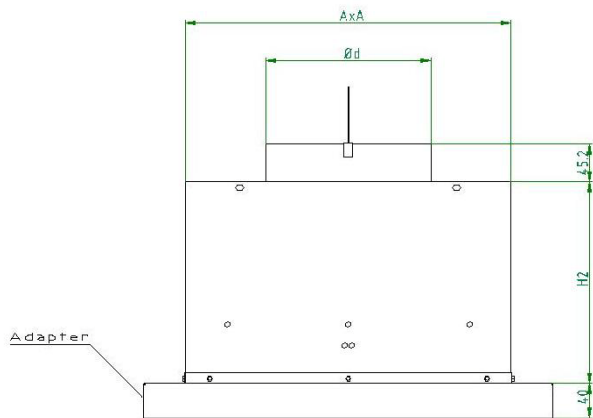
(S) side entry spigot



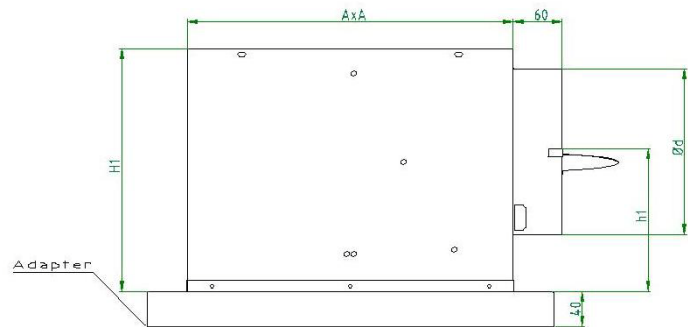
(V) top entry spigot

Plate	Round plenum box side entry spigot				Round plenum box vertical entry spigot		
	øA (mm)	H1 (mm)	ød (mm)	h1 (mm)	øA (mm)	H2 (mm)	ød (mm)
300KR,RR	290	245	158	143	290	245	123
400KR,RR	390	285	198	163	390	280	198
500KR,RR	488	285	198	163	488	280	198
600KR,RR	590	335	248	188	590	330	248
625KR,RR	590	335	248	188	590	330	248

* tolerances according to standard DIN 7168 T1, middle tolerance class (m) ... ±0.8 mm



(V) top entry spigot



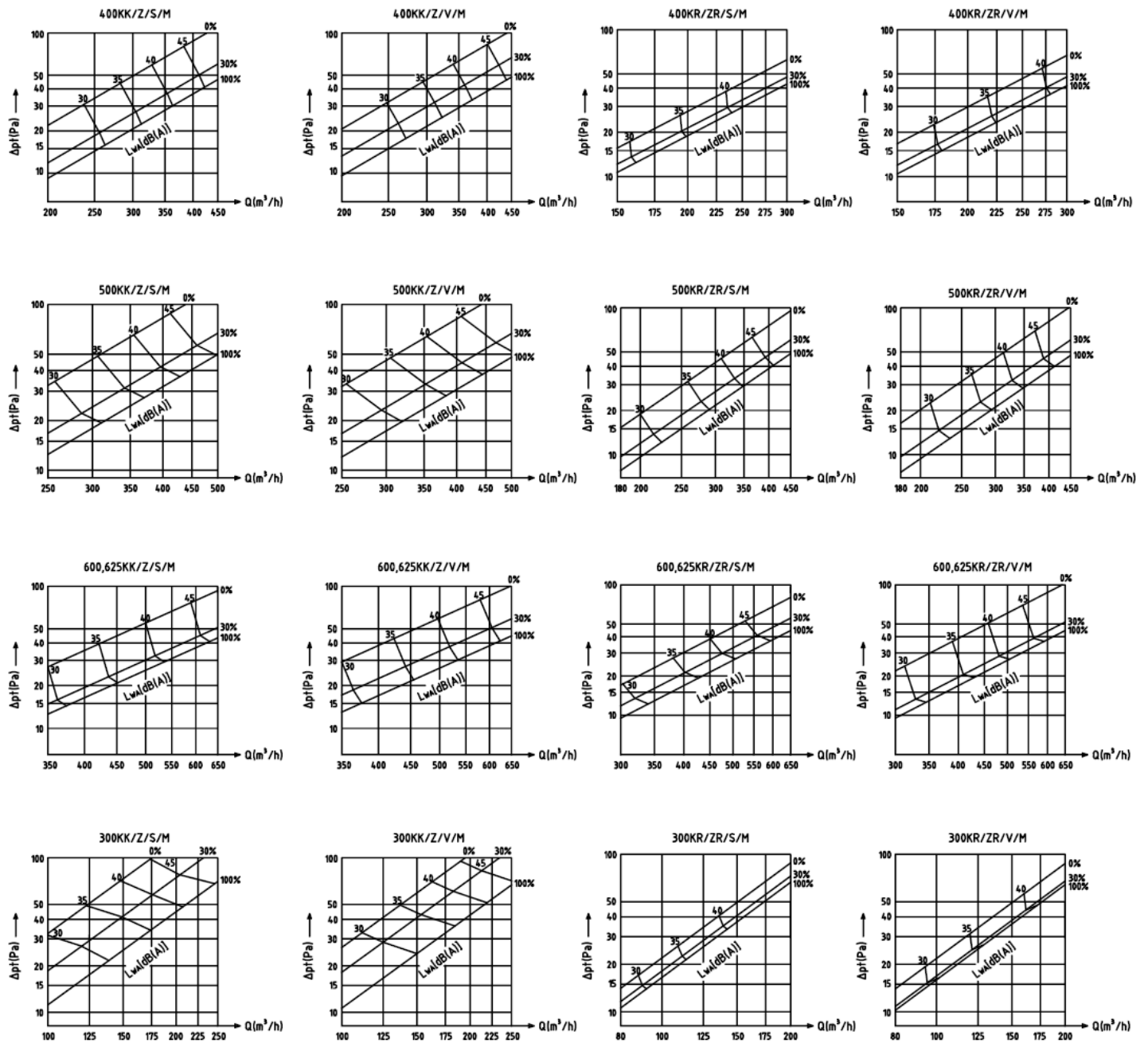
(S) side entry spigot

Plate	Square plenum box side entry spigot					Square plenum box vertical entry spigot				
	Size and type	AxA (mm)	H1 (mm)	ød (mm)	h1 (mm)	adapter	AxA (mm)	H2 (mm)	ød (mm)	adapter
300KK	280x280	280	210	123	125		280x280	200	123	
400KK	390x390	390	290	198	167		390x390	240	198	
500KK	390x390	390	290	198	167	x	390x390	240	198	x
600KK	590x590	590	325	248	177		590x590	240	248	
625KK	590x590	590	325	248	177		590x590	240	248	

* tolerances according to standard DIN 7168 T1, middle tolerance class (m) ... ±0.8 mm

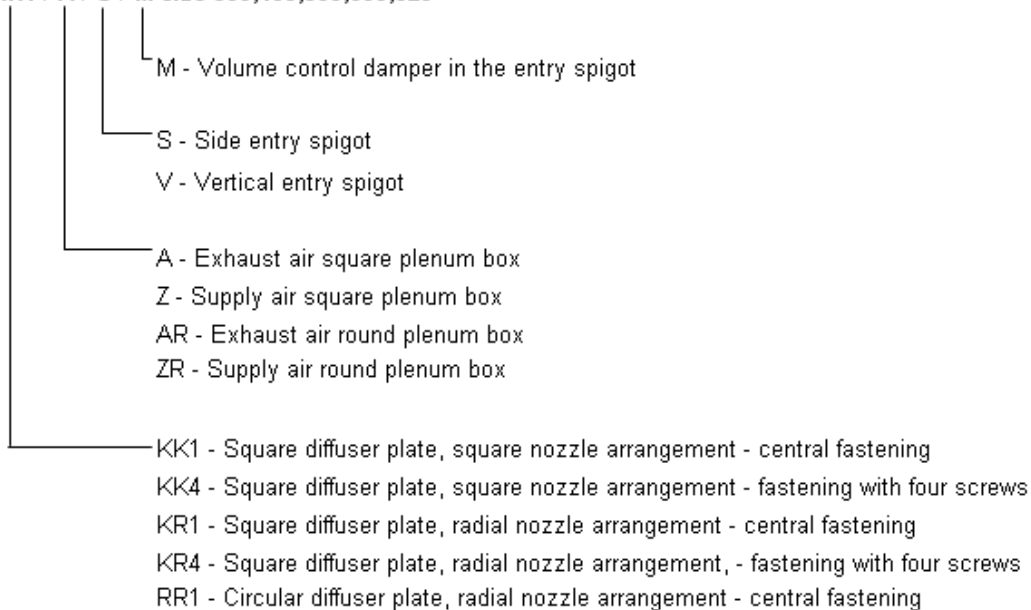
Pressure drop, sound level, throw length

Damper opening: 0% ... closed, 100% - opened



Type	Sound attenuation * [dB]						
	octave [Hz]						
	125	250	500	1k	2k	4k	8k
OD-15/KK/Z/S/M size 300	13	7	10	9	6	5	7
OD-15/KK/Z/V/M size 300	13	8	9	5	4	5	5
OD-15/KR/ZR/S/M size 300	13	8	13	9	7	7	7
OD-15/KR/ZR/V/M size 300	12	7	8	5	8	7	7
OD-15/KK/Z/S/M size 400	9	8	8	8	5	5	7
OD-15/KK/Z/V/M size 400	10	7	6	5	4	4	7
OD-15/KR/ZR/S/M size 400	11	8	12	10	7	6	7
OD-15/KR/ZR/V/M size 400	12	8	8	8	8	9	9
OD-15/KK/Z/S/M size 500	10	7	7	7	7	5	7
OD-15/KK/Z/V/M size 500	9	7	5	7	4	4	6
OD-15/KR/ZR/S/M size 500	9	8	9	7	5	5	6
OD-15/KR/ZR/V/M size 500	10	9	7	5	5	5	5
OD-15/KK/Z/S/M size 600,625	6	7	7	6	3	4	6
OD-15/KK/Z/V/M size 600,625	9	6	8	2	3	4	5
OD-15/KR/ZR/S/M size 600,625	5	8	7	6	4	4	5
OD-15/KR/ZR/V/M size 600,625	9	8	5	3	4	4	6

* Sound attenuation represents insertion losses; this means reduction in the level of sound power because unit (swirl diffuser OD-15) is inserted.

Ordering key:
OD-15 / KK1 / A / S / M size 300,400,500,600,625


Fastening with four screw is recommended for size 600, 625.

Versions KK4 and KR4 for dimensions 300, 400 and 500 are available only when ordering the diffuser plate without the plenum box.