SRR-N RAL 9010

- Ceiling diffusers
- Circular
- Aluminium
- White, RAL 9010

Round ceiling diffusers type SRR-N RAL 9010

Round ceiling diffusers with adjustable cones

Application

- For supply and exhaust air in ventilation and air conditioning systems.

Material

Aluminium

Colour

- White, RAL 9010

Composition

- Adjustable rings

Mounting

- Direct mounting by the collar in the duct

Accessories

- Damper **DV-N** for circular ceiling diffuser for SRR-N Ø100 to Ø630

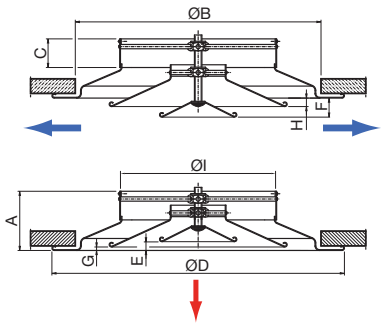
Text for tender

- The circular ceiling diffusers shall have adjustable diffusion rings. They shall be made of aluminium with white epoxy powder paint RAL 9010 and supplied with volume control damper
- **Cairox** type **SRR-N**+**DV-N**

Order example

- **SRR-N, 200 + DV-N**

Explanation
SRR-N = Type diffuser
200 = Size diffuser (Ø diffuser neck connection)
Accessories (optional)
DV-N = Volume damper



Dimensions									
SRR-N	A [mm]	ØB [mm]	C [mm]	ØD [mm]	E [mm]	F [mm]	G [mm]	H [mm]	ØI [mm]
100	75	198	30	230	15	33.5	8	14.5	98
150	105	288	45	335	15	33.5	8	14.5	148
160	105	288	45	335	15	33.5	8	14.5	157
200	118	370	48	423	15	33.5	8	14.5	198
250	130	461	48	517	15	33.5	8	14.5	248
300	146	576	48	640	15	33.5	8	14.5	298
315	146	576	48	640	15	33.5	8	14.5	313
350	185	656	65	730	29	33.5	9	14.5	348
355	185	656	65	730	29	33.5	9	14.5	353
400	185	700	65	776	40	33.5	20	14.5	398
450	185	755	65	825	50	33.5	25	14.5	448
500	185	825	65	917	54	33.5	30	14.5	498
630	185	963	65	1045	56	33.5	37	14.5	628

Horizontal Discharge														
Q	Ø	100	150	160	200	250	300	315	350	355	400	450	500	630
	Aeff	0.013	0.027	0.031	0.046	0.069	0.097	0.106	0.128	0.131	0.163	0.202	0.245	0.373
100	veff	2.12	1.01											
	Lth	2.12	1.39											
	Ps	10	2											
	Lw	<20	<20											
150	veff	3.18	1.52	1.35										
	Lth	3.17	2.08	1.93										
	Ps	23	4	3										
	Lw	28	<20	<20										
200	veff	4.24	2.03	1.8	1.2									
	Lth	4.23	2.77	2.58	1.98									
	Ps	40	7	5	2									
	Lw	38	<20	<20										
300	veff		3.04	2.7	1.8	1.2								
	Lth		4.15	3.86	2.97	2.22								
	Ps		16	12	5	2								
	Lw		31	28										
400	veff		4.06	3.61	2.4	1.6	1.15							
	Lth		5.53	5.15	3.96	2.96	2.25							
	Ps		28	21	8	3	1							
	Lw		41	38	25									
500	veff			4.51	3	2	1.44	1.31	1.08					
	Lth			6.43	4.95	3.7	2.82	2.6	2.17					
	Ps			33	13	5	2	2	1					
	Lw			45	33	20								
600	veff				3.6	2.4	1.72	1.58	1.3	1.27	1.02			
	Lth				5.94	4.43	3.38	3.12	2.6	2.54	2.01			
	Ps				18	7	3	3	2	2	1			
	Lw				39	27								
800	veff					3.2	2.3	2.1	1.74	1.69	1.36	1.1		
	Lth					5.91	4.5	4.16	3.47	3.38	2.68	2.07		
	Ps					12	6	5	3	3	2	1		
	Lw					37	26	23						
1000	veff					4	2.87	2.63	2.17	2.11	1.7	1.37	1.13	
	Lth					7.38	5.63	5.2	4.34	4.22	3.35	2.59	1.99	
	Ps					19	9	7	5	4	3	2	1	
	Lw					44	33	30	24	23				
1200	veff						3.45	3.15	2.6	2.54	2.04	1.65	1.36	0.89
	Lth						6.75	6.24	5.2	5.07	4.02	3.11	2.39	1.18
	Ps						13	10	7	6	4	2	1	1
	Lw						40	37	30	29	21			
1400	veff						4.02	3.68	3.04	2.96	2.38	1.92	1.59	1.04
	Lth						7.88	7.28	6.07	5.91	4.69	3.62	2.79	1.38
	Ps						17	14	9	8	5	3	2	1
	Lw						45	42	35	34	26	<20		
1600	veff								3.47	3.38	2.72	2.2	1.81	1.19
	Lth								6.93	6.75	5.36	4.14	3.19	1.57
	Ps								12	11	7	4	2	1
	Lw								40	39	31	23	<20	
1800	veff								3.9	3.81	3.06	2.47	2.04	1.34
	Lth								7.8	7.6	6.03	4.66	3.58	1.77
	Ps								15	14	8	5	3	1
	Lw								44	43	35	27	<20	
2000	veff									4.23	3.4	2.75	2.27	1.49
	Lth									8.44	6.69	5.17	3.98	1.97
	Ps									17	10	6	4	1
	Lw									47	39	31	23	
2500	veff										4.25	3.43	2.83	1.86
	Lth										8.37	6.46	4.98	2.46
	Ps										16	10	6	2
	Lw										47	38	31	
3000	veff											4.12	3.4	2.23
	Lth											7.75	5.97	2.95
	Ps											14	9	3
	Lw											45	37	<20
3500	veff												3.97	2.6
	Lth												6.96	3.44
	Ps												12	4
	Lw												42	25
4000	veff												4.53	2.98
	Lth												7.96	3.93
	Ps												16	6
	Lw												47	29
5000	veff													3.72
	Lth													4.91
	Ps													9
	Lw													37

Symbols and specifications

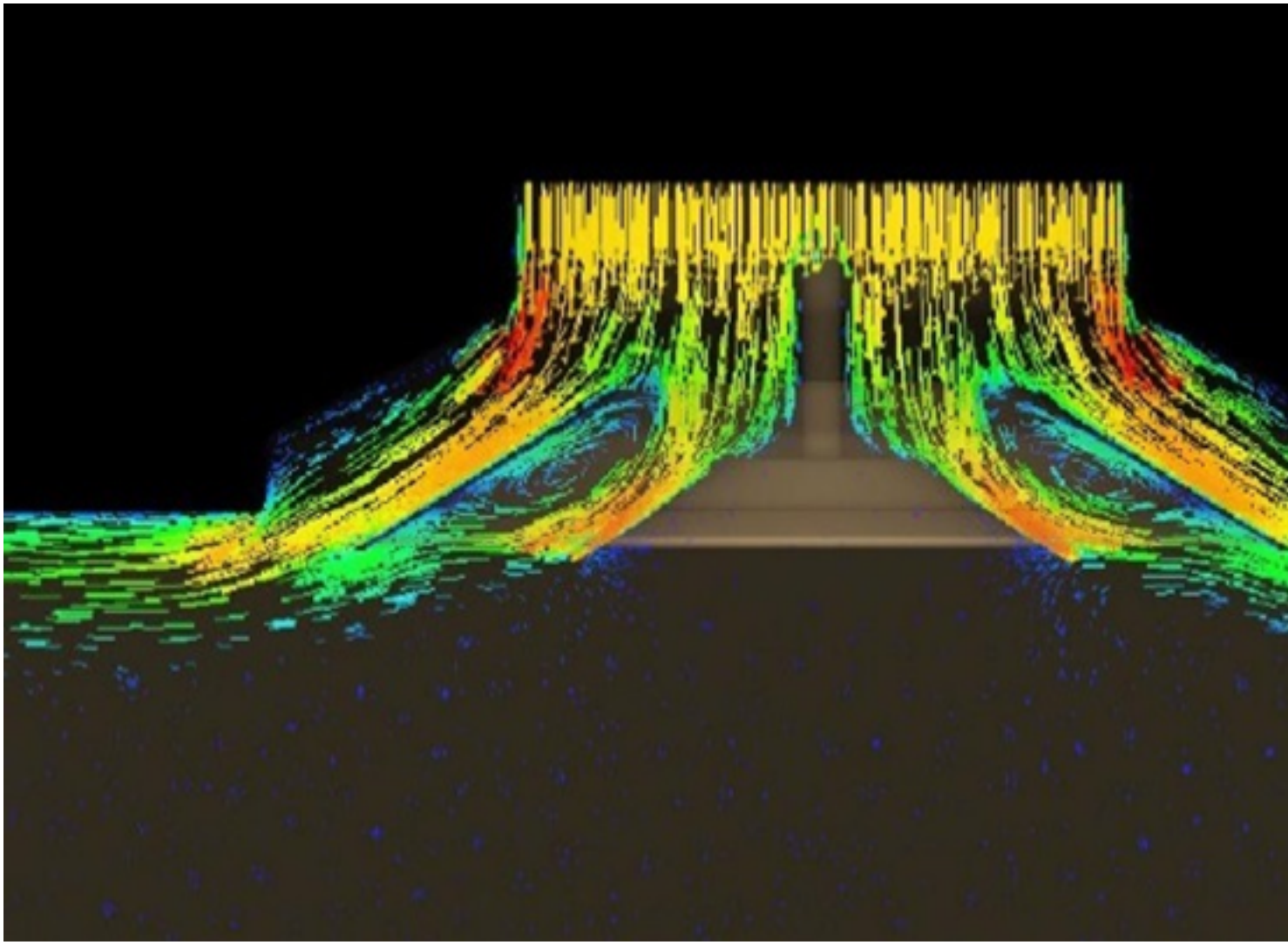
- Lth 0.25 = Horizontal throw in m at vt = 0.25m/s
- Ps = Static pressure loss in Pa
- Lw = Acoustic power in dB(A)
- Q = Air Volume in m³/h
- Ø = neck size diffuser in mm
- Aeff = Effective air passage in m²
- veff = Effective air velocity between the blades of the diffuser in m/s

Vertical Discharge														
Q	Ø	100	150	160	200	250	300	315	350	355	400	450	500	630
	Aeff	0.013	0.026	0.029	0.042	0.06	0.081	0.88	0.104	0.107	0.13	0.157	0.187	0.273
100	veff	2.08	1.07											
	Ltv	1.85	1.34											
	Ps	22	5											
	Lw	28	<20											
150	veff	3.12	1.61	1.44										
	Ltv	2.86	1.86	1.35										
	Ps	49	12	9										
	Lw	42	23	20										
200	veff	4.16	2.14	1,93	1.34									
	Ltv	3.86	2.39	2.28	2.11									
	Ps	86	21	16	7									
	Lw	52	33	30										
300	veff		3.21	2.89	2	1.39								
	Ltv		3.44	3.23	2.77	2.02								
	Ps		45	36	16	7								
	Lw		47	44	33	21								
400	veff		4.28	3.85	2.67	1.85	1.37							
	Ltv		4.49	4.18	3.44	3.16	2.54							
	Ps		80	64	29	13	7							
	Lw		57	54	43	31	21							
500	veff			4.82	3.34	2.32	1.72	1.59	1.33					
	Ltv			5.12	4.1	3.62	3.52	2.94	2.55					
	Ps			99	45	20	11	9	6					
	Lw			62	51	39	29	26	<20					
600	veff				4.01	2.78	2.06	1.9	1.6	1.56	1.29			
	Ltv				4.77	4.09	3.87	3.85	3.29	3.29	2.57			
	Ps				64	29	15	13	9	8	5			
	Lw				57	45	35	32	26	25	<20			
800	veff					3.71	2.75	2.54	2.13	2.09	1.71	1.41		
	Ltv					5.02	4.57	4.49	4.39	4.37	3.82	3.04		
	Ps					51	27	22	15	15	10	6		
	Lw					55	45	42	36	35	28			
1000	veff					4.63	3.44	3.17	2.67	2.61	2.14	1.77	1.49	
	Ltv					5.95	5.26	5.14	4.93	4.91	4.73	4.13	3.28	
	Ps					79	41	35	24	23	15	10	7	
	Lw					63	53	50	44	43	35	28	21	
1200	veff						4.12	3.81	3.2	3.13	2.57	2.12	1.78	1.22
	Ltv						5.96	5.78	5.47	5.44	5.17	4.9	4.22	1.72
	Ps						59	50	34	33	21	14	4	4
	Lw						59	56	50	49	42	34	27	
1400	veff						4.81	4.44	3.74	3.65	3	2.47	2.08	1.42
	Ltv						6.65	6.42	6.02	5.97	5.61	5.27	4.88	2.16
	Ps						80	67	46	44	29	19	13	6
	Lw						64	62	55	54	47	39	32	
1600	veff								4.27	4.17	3.43	2.83	2.38	1.63
	Ltv								6.56	6.5	6.05	5.63	5.19	2.64
	Ps								60	57	37	25	17	7
	Lw								60	59	52	44	37	
1800	veff								4.8	4.69	3.86	3.18	2.68	1.83
	Ltv								7.1	7.03	6.49	6	5.49	3.16
	Ps								76	72	47	31	21	9
	Lw								64	63	56	48	41	24
2000	veff									5.21	4.29	3.53	2.97	2.04
	Ltv									7.56	6.93	6.36	5.8	3.72
	Ps									89	58	38	26	12
	Lw									67	59	52	45	28
2500	veff										5.36	4.42	3.72	2.54
	Ltv										8.03	7.27	6.57	4.25
	Ps										90	59	41	18
	Lw										67	60	52	35
3000	veff											5.3	4.46	3.05
	Ltv											8.18	7.34	4.78
	Ps											85	58	26
	Lw											66	58	42
3500	veff												5.2	3.56
	Ltv												8.11	5.31
	Ps												79	35
	Lw												64	47
4000	veff												5.95	4.07
	Ltv												8.87	5.84
	Ps												102	45
	Lw												69	52
5000	veff													5.09
	Ltv													6.91
	Ps													70
	Lw													60

Symbols and specifications

- Ltv 0.25 = Vertical throw in m at vt = 0.25m/s
- Ps = Static pressure loss in Pa
- Lw = Acoustic power in dB(A)
- Q = Air Volume in m³/h
- Ø = neck size diffuser in mm
- Aeff = Effective air passage in m²
- veff = Effective air velocity between the blades of the diffuser in m/s

CFD simulation Cooling



CFD simulation Heating