

**SRR-D
(RAL9016)**

- Circular conical diffusers
- Circular
- Aluminium
- White, RAL 9016



Round ceiling diffusers type SRR-D (RAL9016)

Round ceiling diffusers with adjustable cones

Brand

- Cairox

Application

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

Material

- Aluminium
- Inner cone made of ABS

Colour

- White, RAL 9016
- Other colours available upon request

Composition

- Adjustable rings
- Adjustable damper in plastic

Mounting

- Direct mounting by the collar in the duct

Accessories

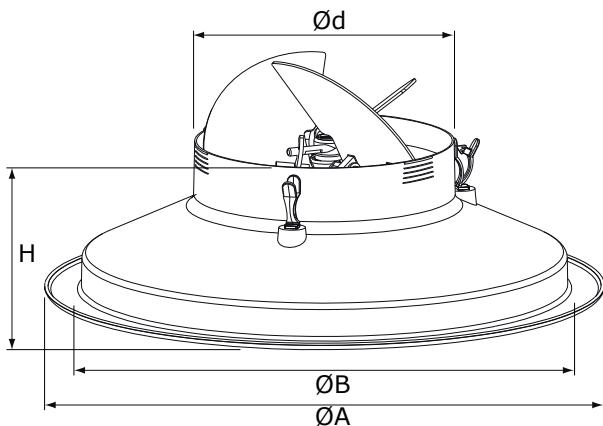
- Clips mounting system **SRR-DMC** for plasterboard ceiling

Text for tender

- The circular ceiling diffusers shall have adjustable diffusion rings. They shall be made of aluminium with white powder coated finish RAL 9016 and supplied with volume control damper
- Cairox type **SRR-D**

Order example■ **SRR-D, 200**

Explanation

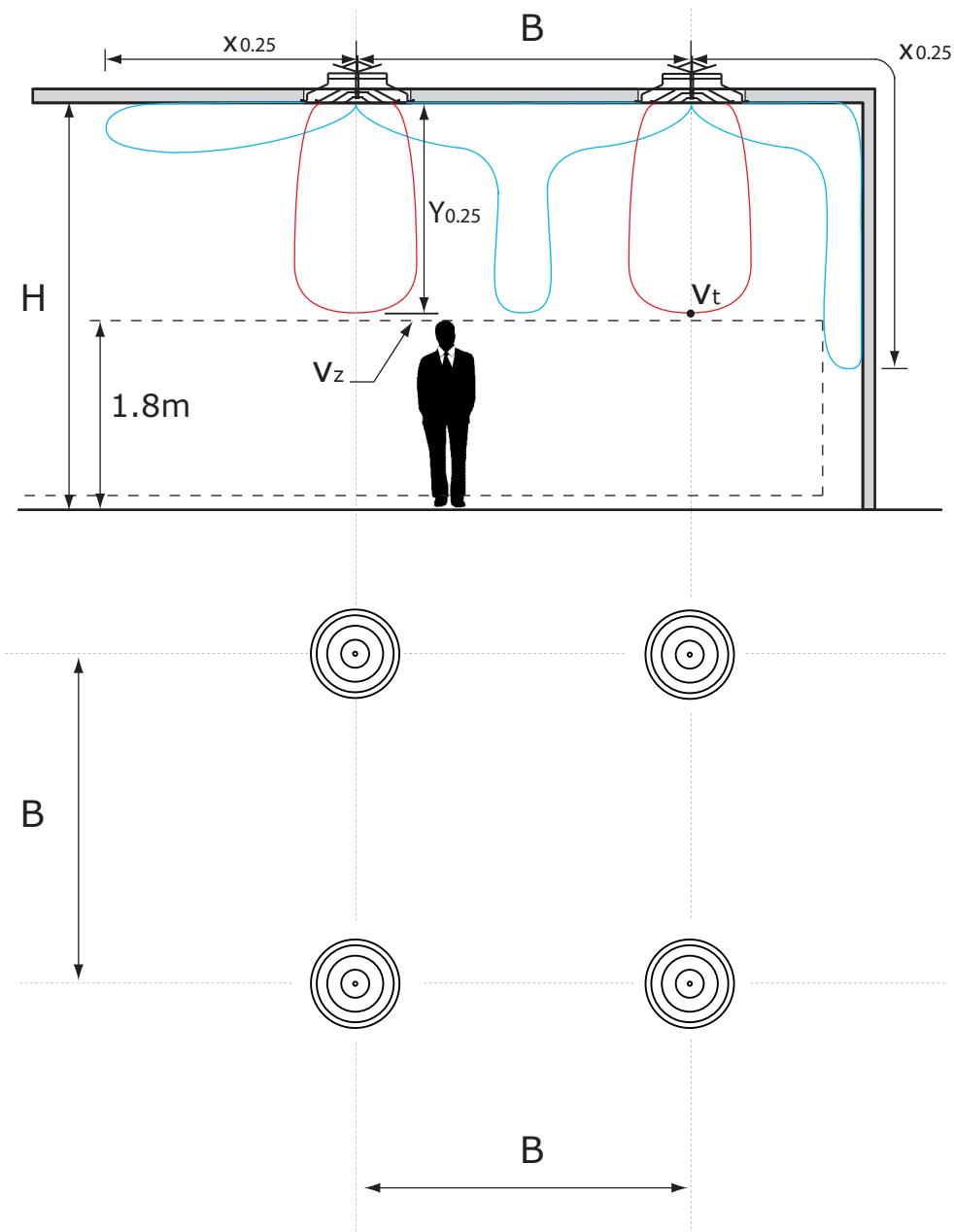
SRR-D = Type diffuser**200** = Size diffuser (\varnothing diffuser neck connection)

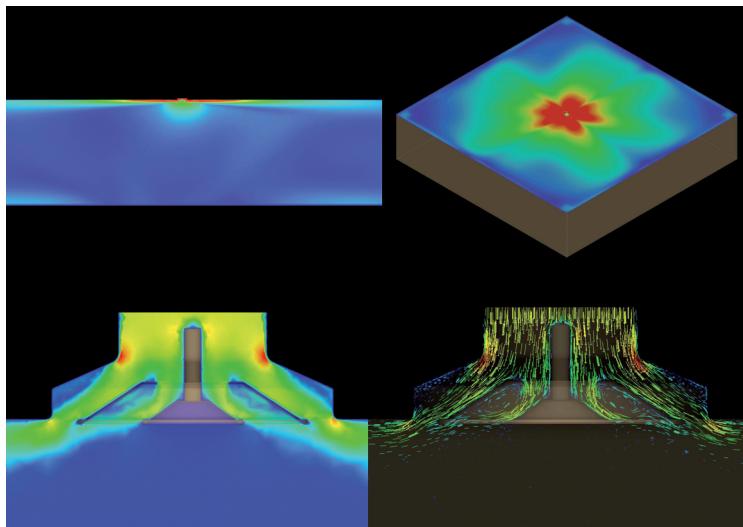
Dimensions				
SRR-D	$\varnothing d$ [mm]	$\varnothing A$ [mm]	$\varnothing B$ [mm]	H [mm]
160	158	335	310	105
200	198	423	395	118
250	248	517	490	135
315	313	640	615	145

Quick selection													
SRR-D		160			200			250			315		
Q	Ak summer	0.031			0.046			0.069			0.106		
	Ak winter	0.029			0.042			0.06			0.088		
200	B	1.2	2.4	3.6	1.2	2.4	3.6	2.4	3.6	4.2	3.6	4.2	4.8
	Vz	H= 2.7	0.43	0.31	0.24	0.33	0.24	0.18					
		H= 3.2	0.32	0.25	0.2	0.25	0.19	0.15					
		H= 3.8	0.25	0.2	0.17	0.19	0.15	0.13					
	Vk summer		1.8		1.2								
	Vk winter		1.9		1.3								
	X0.25		2.6		2								
	Y0.25 @Dt +10K		2.3		1.4								
	Ps summer		5		2								
	Ps winter		16		7								
300	Lw(A) summer		<20		<20								
	Lw(A) winter		30		<20								
	Vz	H= 2.7	0.64	0.46	0.36	0.49	0.35	0.27	0.26	0.2	0.18		
		H= 3.2	0.48	0.37	0.3	0.37	0.28	0.23	0.21	0.17	0.16		
		H= 3.8	0.37	0.3	0.25	0.28	0.23	0.19	0.17	0.15	0.13		
	Vk summer		2.7		1.8								
	Vk winter		2.9		2								
	X0.25		3.9		3								
	Y0.25 @Dt +10K		3.2		2.8								
	Ps summer		12		5								
400	Ps winter		36		16								
	Lw(A) summer		27		<20								
	Lw(A) winter		44		33								
	Vz	H= 2.7	0.86	0.61	0.48	0.66	0.47	0.37	0.35	0.27	0.25	0.18	0.15
		H= 3.2	0.64	0.5	0.4	0.49	0.38	0.31	0.28	0.23	0.21	0.15	0.13
		H= 3.8	0.5	0.4	0.34	0.38	0.31	0.26	0.23	0.19	0.18	0.13	0.11
	Vk summer		3.6		2.4								1
	Vk winter		3.8		2.6								1.3
	X0.25		5.2		3.9								2
	Y0.25 @Dt +10K		4.2		3.4								2.6
600	Ps summer		21		8								1
	Ps winter		62		27								6
	Lw(A) summer		37		26								<20
	Lw(A) winter		54		43								<20
	Vz	H= 2.7	1.29	0.92	0.72	0.99	0.71	0.55	0.53	0.41	0.37	0.29	0.26
		H= 3.2	0.97	0.74	0.6	0.74	0.57	0.46	0.43	0.35	0.32	0.25	0.21
		H= 3.8	0.74	0.6	0.51	0.57	0.46	0.39	0.35	0.29	0.27	0.21	0.18
	Vk summer		5.4		3.6								1.6
	Vk winter		5.7		4								1.9
	X0.25		7.7		5.9								3.2
800	Y0.25 @Dt +10K		6		4.7								3.8
	Ps summer		47		18								3
	Ps winter		137		63								13
	Lw(A) summer		52		40								<20
	Lw(A) winter		68		57								32
	Vz	H= 2.7				1.32	0.94	0.73	0.7	0.55	0.49	0.39	0.35
		H= 3.2				0.99	0.76	0.62	0.57	0.46	0.42	0.32	0.27
		H= 3.8				0.76	0.62	0.52	0.46	0.39	0.36	0.27	0.24
	Vk summer					4.8							2.1
	Vk winter					5.3							2.5

Symbols and specifications

- Q = Air Volume in m³/h
- Ak winter = Effective surface (free area) in m² given at the upper position of the inner adjustable cone
- Ak summer = Effective surface (free area) in m² given at the lower position of the inner adjustable cone
- B = Distance between diffusers in m
- H = Installation height of the diffusers in m
- Vz = Maximum velocity at the occupied zone, given for cooling at the lower position of the inner adjustable cone, regarding the distance between diffusers and installation height in m/s
- Vk winter = Average effective velocity for Ak winter through the diffuser in m/s
- Vk summer = Average effective velocity for Ak summer through the diffuser in m/s
- X0.25 = Horizontal throw in m at an endvelocity Vt of 0,25m/s isothermal at the lower position of the inner cone
- Y0.25 = Vertical throw in m at an endvelocity Vt of 0,25m/s with a temperature difference of +10K at the upper position of the inner cone
- Ps winter = Static pressure loss for Ak winter given in Pa
- Ps summer = Static pressure loss for Ak summer given in Pa
- Lw(A) winter = Acoustic power for Ak winter in dB(A)
- Lw(A) summer = Acoustic power for Ak summer in dB(A)
- The throw X0.25 is given at an end velocity of 0.25m/s for a smooth ceiling without any obstacles.
- In order to achieve a high comfort level, selections can be made according to the maximal velocity at the occupied zone Vz. These values are given at distances between diffusers B and installation heights H. Velocities Vz lower than, or equal to 0,25m/s at the occupied zone are advised.
- The pressure losses Ps are given for grilles without damper or with fully opened damper.
- The acoustic power Lw(A) are given for grilles without damper or with fully opened damper without room attenuation. Acoustic powers below 20dB(A) are mentioned as "<20" in the tables.
- For all special requirements, please contact our engineering office.

Placement instruction

CFD simulation Cooling**CFD simulation Heating**