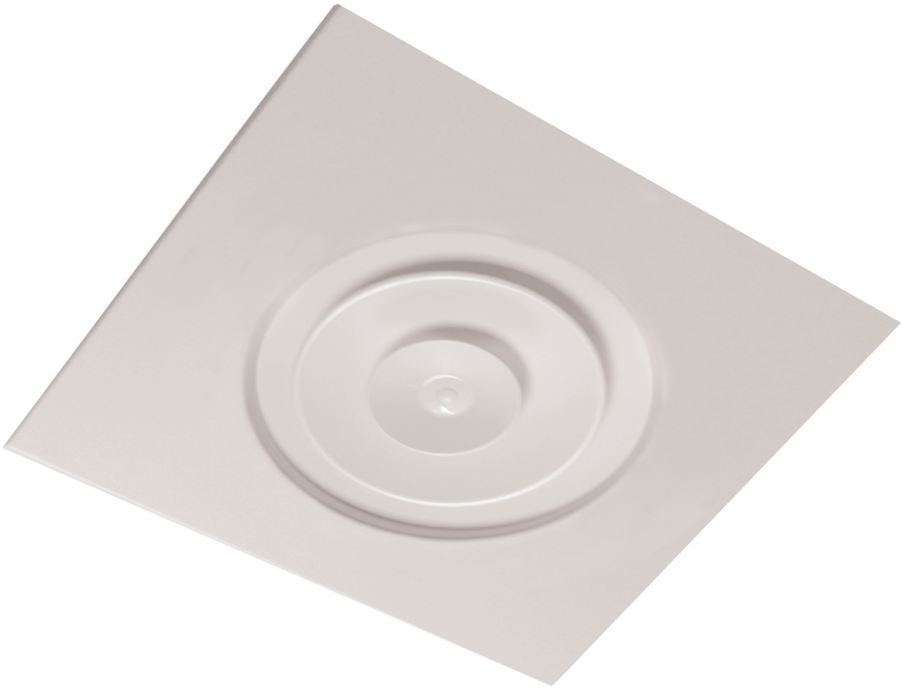
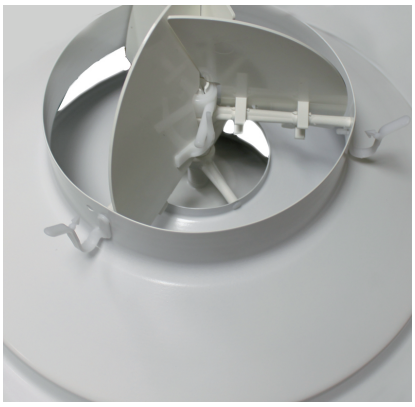
PS/SRR-D (RAL9016)

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





Round ceiling diffusers type PS/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

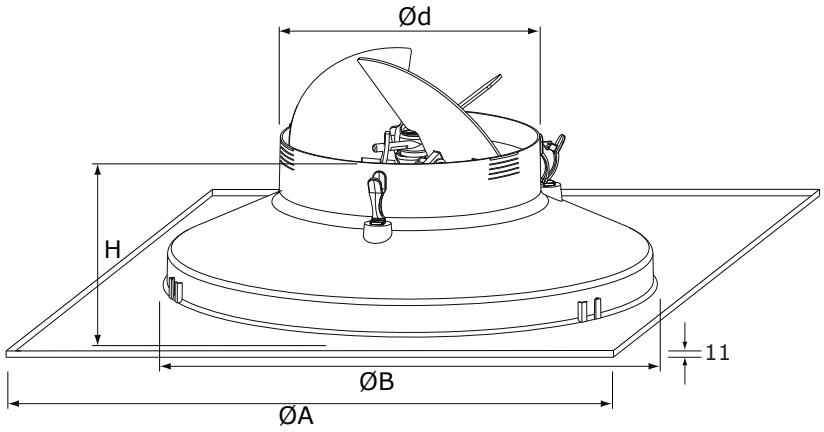
Colour
- White, RAL 9016

Composition
- Adjustable rings
- Adjustable damper in plastic

Mounting
- Direct mounting by the collar in the duct

Order example
- **SRR-D, 200**

Explanation
SRR-D = Diffuser
200 = Size connection



Dimensions				
PS/SRR-D	Ød [mm]	A [mm]	ØB [mm]	H [mm]
160	158	595x595	310	105
200	198	595x595	395	118
250	248	595x595	490	135
315	313	595x595	615	145

Quick selection														
PS/SRR-D			160			200			250			315		
	Ak summer		0.031			0.046			0.069			0.106		
	Ak winter		0.029			0.042			0.06			0.088		
Q	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
200	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							
	Lw(A) summer			<20			<20							
	Lw(A) winter			30			<20							
300	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			1.2				
	Vk winter			2.9			2			1.4				
	X0,25			3.9			3			2.2				
	Y0,25 @Dt +10K			3.2			2.8			2				
	Ps summer			12			5			2				
	Ps winter			36			16			8				
	Lw(A) summer			27			<20			<20				
	Lw(A) winter			44			33			21				
400	Vz	H= 2.7	0.86	0.61	0.48	0.66	0.47	0.37	0.35	0.27	0.25	0.18	0.17	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	0.14	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	0.12	0.11
	Vk summer			3.6			2.4			1.6			1	
	Vk winter			3.8			2.6			1.9			1.3	
	X0,25			5.2			3.9			3			2	
	Y0,25 @Dt +10K			4.2			3.4			3.2			2.6	
	Ps summer			21			8			3			1	
	Ps winter			62			27			14			6	
	Lw(A) summer			37			26			<20			<20	
	Lw(A) winter			54			43			31			<20	
600	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	0.24
		H= 3.2	0.97	0.74	0.6	0.74	0.57	0.46	0.43	0.35	0.32	0.25	0.23	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	0.19	0.18
	Vk summer			5.4			3.6			2.4			1.6	
	Vk winter			5.7			4			2.8			1.9	
	X0,25			7.7			5.9			4.4			3.2	
	Y0,25 @Dt +10K			6			4.7			4.1			3.8	
	Ps summer			47			18			7			3	
	Ps winter			137			63			29			13	
	Lw(A) summer			52			40			27			<20	
	Lw(A) winter			68			57			45			32	
800	Vz	H= 2.7				1.32	0.94	0.73	0.7	0.55	0.49	0.39	0.35	0.32
		H= 3.2				0.99	0.76	0.62	0.57	0.46	0.42	0.32	0.3	0.27
		H= 3.8				0.76	0.62	0.52	0.46	0.39	0.36	0.27	0.25	0.24
	Vk summer						4.8			3.2			2.1	
	Vk winter						5.3			3.7			2.5	
	X0,25						7.9			5.9			4.2	
	Y0,25 @Dt +10K						6.1			5			4.5	
	Ps summer						32			12			5	
	Ps winter						110			51			22	
	Lw(A) summer						50			37			23	
	Lw(A) winter						67			55			42	

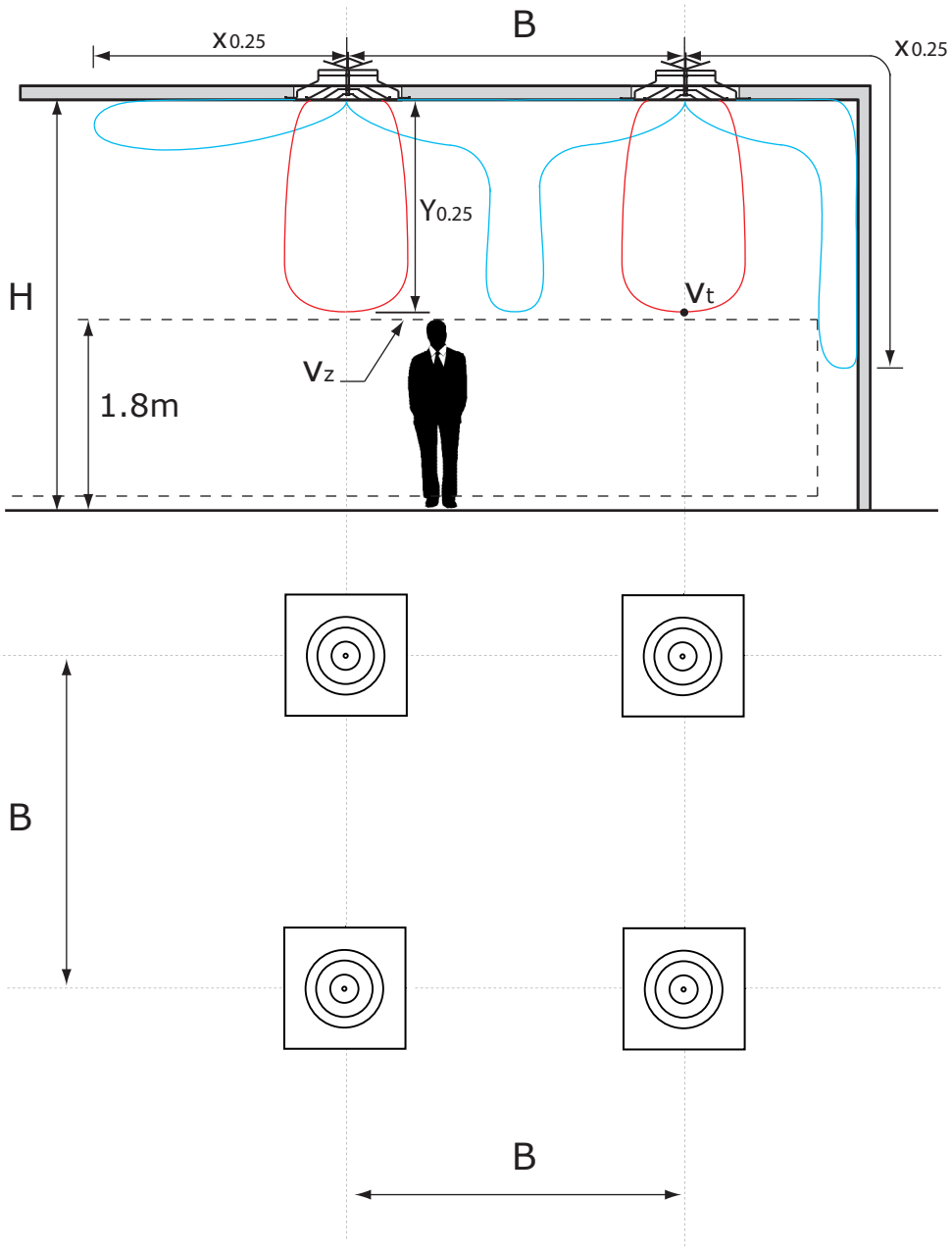
Symbols and specifications

- 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

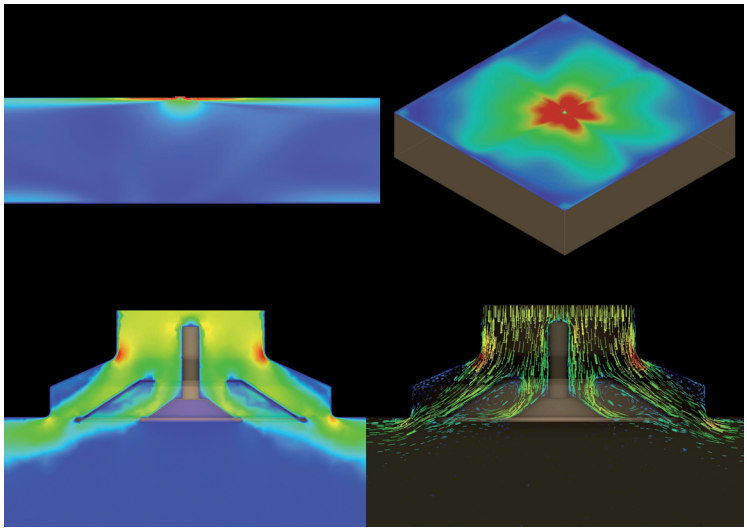
- H = Installation height of the diffusers in m
- Vz = Maximum velocity at the occupied zone, given for cooling at the lower position of the inner adjustable cone, regarding the distance between diffusers and installation height in m/s
- Vk winter = Average effective velocity for Ak winter through the 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 of with fully opened damper.
- The acoustic power Lw(A) are given for grilles without damper of 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