PRN (RAL9010)

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

Round ceiling diffusers type PRN (RAL9010)

Round ceiling diffusers with fixed diffusion rings

Application

- Used for air supply and exhaust in ventilation and air conditioning systems.

Material

- Aluminium

Colour

- White, RAL 9010

Composition

- Fixed diffusion rings

Mounting

- Fixing directly on the collar
- Fixing with central screw

Accessories

- Damper type **DR**

Text for tender

- The circular ceiling diffusers have fixed diffusion blades. They are made of aluminium with white powder coating finish RAL 9010 and supplied with a volume control damper .
- **Cairox** type **PRN**+**DR**

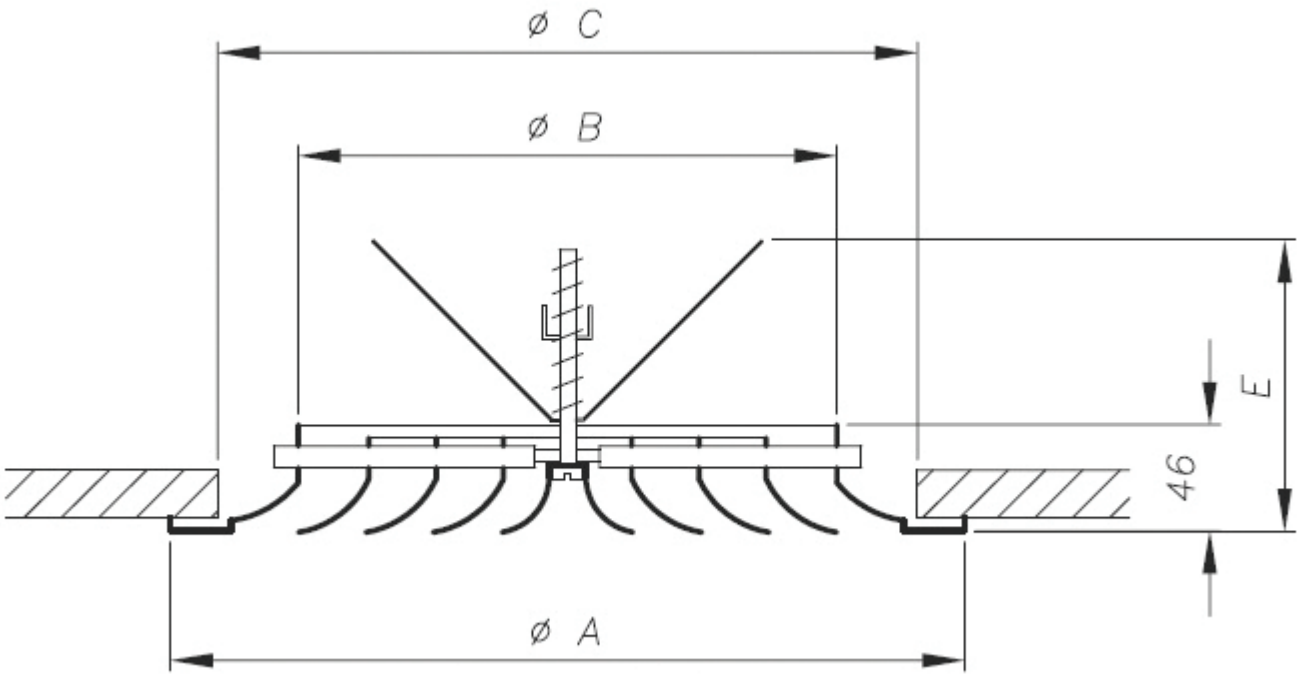
Other available products

- Diffuser in plate 595x595mm type **PS/PRN** available upon request

Order example

- **PRN, 200 +DR**

Explanation
PRN = Diffuser type
200 = Diffuser size (Ø diffuser neck connection)
Accessories
DR = Damper
160 = Plenumbox connection diameter 160



Dimensions				
PRN	ØA [mm]	ØB [mm]	ØC [mm]	E [mm]
150	245	150	210	115
200	295	200	260	140
250	342	250	310	165
300	395	300	360	190
350	445	350	410	215

Quick selection						
PRN		150	200	250	300	350
Q	Ak	0.009	0.014	0.02	0.028	0.036
100	Vk	3.2				
	X0,25	0.7				
	Ps	4				
	Lw(A)	<20				
150	Vk	4.8	3			
	X0,25	1.1	0.9			
	Ps	9	4			
	Lw(A)	<20	<20			
200	Vk	6.4	4	2.8		
	X0,25	1.5	1.2	1		
	Ps	16	6	3		
	Lw(A)	29	<20			
300	Vk	9.6	6	4.1	3	
	X0,25	2.2	1.8	1.5	1.3	
	Ps	37	15	7	4	
	Lw(A)	43	29	<20	<20	
400	Vk	12.8	8	5.5	4	
	X0,25	3	2.4	2	1.7	
	Ps	65	26	12	6	
	Lw(A)	53	39	27		
500	Vk		10	6.9	5	3.8
	X0,25		3	2.4	2.1	1.8
	Ps		40	19	10	6
	Lw(A)		47	35	25	
600	Vk			8.3	6	4.6
	X0,25			2.9	2.5	2.2
	Ps			27	14	8
	Lw(A)			41	32	23
700	Vk			9.6	7	5.3
	X0,25			3.4	2.9	2.5
	Ps			37	20	11
	Lw(A)			47	37	29
800	Vk				8	6.1
	X0,25				3.3	2.9
	Ps				26	15
	Lw(A)				42	33
900	Vk				9	6.9
	X0,25				3.8	3.3
	Ps				33	19
	Lw(A)				46	38
1000	Vk					7.6
	X0,25					3.6
	Ps					23
	Lw(A)					41

Symbols and specifications

- Q = Air Volume in m³/h
- Ak = Effective surface (free area) in m²
- Vk = Average effective velocity through the grill in m/s
- X0.25 = Throw length in m at an endvelocity Vt of 0,25m/s
- Ps = Static pressure loss given in Pa
- Lw(A) = Acoustic power in dB(A)

- The throw X0.25 is given at an end velocity of 0.25m/s for a smooth ceiling without any obstacles.
- The values are given for isothermal supply air. Throw distances for cooling conditions at -11K can be calculated by deviding the X0.25 values with factor 1.1. For heating purposes at Dt of +11K a multiplier of 1.1 should be applied to the given X0.25 value.
- 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.

Symbols and specifications

- See introduction pages

Placement instruction