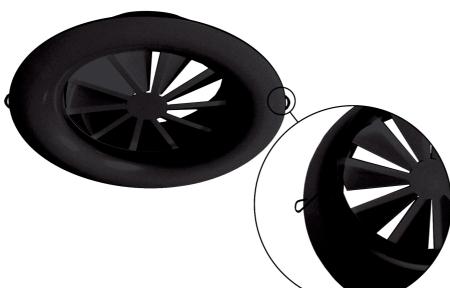
Ceiling diffusers and grilles

Circular Steel

Black, RAL 9005

**RWR-2C** (RAL9005)





### Black circular swirl ceiling diffusers with clip mounting type RWR-2C (RAL9005)

Round swirl ceiling diffusers with flat frame and fixed blades, mounted by clips

#### **Brand**

Cairox

#### **Application**

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

#### **Material**

Steel

#### Colour

- Black, RAL 9005
- Other colours available upon request

#### Composition

- Fixed blades
- Clip mounting

#### Mounting

• Fixing directly on the collar without plenum box

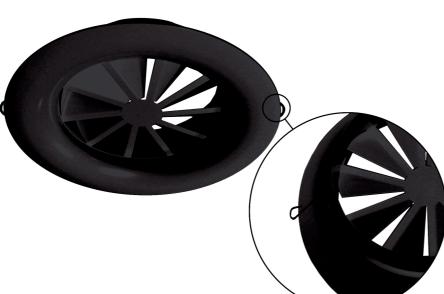
#### **Order example**

RWR-2C (RAL 9005), 200

Explanation

**RWR-2C** = Diffuser with clip mounting type

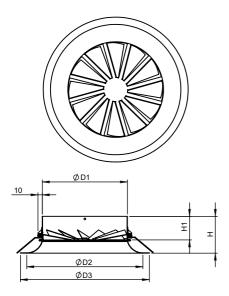
200 = Neck size of diffuser



### **CAIROX**



# Ceiling diffusers and grilles



Dimensions												
RWR-2C	ØD1 [mm]	ØD2 [mm]	ØD3 [mm]	H [mm]	H1 [mm]	#Blades						
100	98	134	150	74	45	10						
125	123	170	190	86	55	10						
160	158	220	250	86	55	10						
200	198	270	300	86	55	10						

Quick selection															
RWR-2C			100			125			160			200			
		Ak			0.0056		0.0086		0.0141		0.0224				
Q		В		1.2	2.4	3.6	1.2	2.4	3.6	1.2	2.4	3.6	1.2	2.4	3.6
40		H=	2.7	0.51	0.25	0.15	0.28	0.13	0.07						
	Vz	H=	3.2	0.28	0.16	0.1	0.14	0.08	0.05						
		H=	3.8	0.16	0.1	0.07	0.08	0.05	0.03						
		Vk			2			1.3							
		X0,25			2.1			1.6							
		Ps			24			10							
		Lw(A)			25			<20							
60		H=	2.7	0.77	0.38	0.22	0.4	0.18	0.1	0.31	0.14	0.08			
	Vz	H=	3.2	0.42	0.24	0.16	0.21	0.11	0.07	0.16	0.09	0.05			
		H=	3.8	0.24	0.16	0.11	0.11	0.07	0.05	0.09	0.05	0.04			
		Vk			3			1.9			1.2				
		X0,25			2.6			1.8			1.7				
		Ps			54			21			6				
		Lw(A)			38			22			<20				
		H=	2.7				0.68	0.31	0.17	0.52	0.24	0.13	0.39	0.17	0.09
	Vz	H=	3.2				0.35	0.19	0.12	0.26	0.14	0.09	0.19	0.1	0.06
		H=	3.8				0.19	0.12	0.08	0.14	0.09	0.06	0.1	0.06	0.04
100	Vk							3.2			2			1.2	
		X0,25						2.3			2			1.8	
		Ps						59			17			5	
		Lw(A)						38			30			<20	
		H=	2.7							0.78	0.35	0.2	0.61	0.27	0.15
	Vz	H=	3.2							0.4	0.21	0.13	0.31	0.16	0.1
		H=	3.8							0.21	0.13	0.09	0.16	0.1	0.07
150		Vk									3			1.9	
	X0,25						2.4					2.2			
	_	Ps									37			13	
		Lw(A)									43		0.81	25	0.0
200	Vz	H= H=	2.7 3.2										0.81	0.36 0.22	0.2
	VZ	H=	3.2										0.4	0.22	0.13
	_	H=_ Vk	5.8										0.22	2.5	0.09
		X0,25												2.5	
		Ps												23	
		Lw(A)												33	
		H=	2.7										1	0.45	0.24
250	Vz	H=	3.2										0.5	0.43	0.24
	V2	H=	3.8										0.27	0.27	0.10
		Vk	J.0										0.27	3.1	0.11
		X0,25												2.7	
		Ps												35	
		Lw(A)												40	
		LW(A)												40	

### **Symbols and specifications**

- Q = Air volume in m³/h

- Q = Air volume in m³/h
   Ak = Effective surface (free area) in m²
   B = Distance between the diffusers in m
   H = Installation height of the diffusers in m
   Vz = Maximum velocity at the occupied zone according to distance between the diffusers and installation height in m/s
   Vk = Average effective velocity through the diffuser in m/s
   X0.25 = Throw length in m at an end velocity Vt of 0,25m/s
   Ps = Static pressure loss given in Pa
   Lw(A) = Acoustic power in dB(A)



## Ceiling diffusers and grilles

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 dividing 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 diffusers without damper of with fully opened damper.

  The acoustic power values Lw(A) are given for diffusers 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**

