Difair

Serie DR10



CIRCULAR DIFFUSER

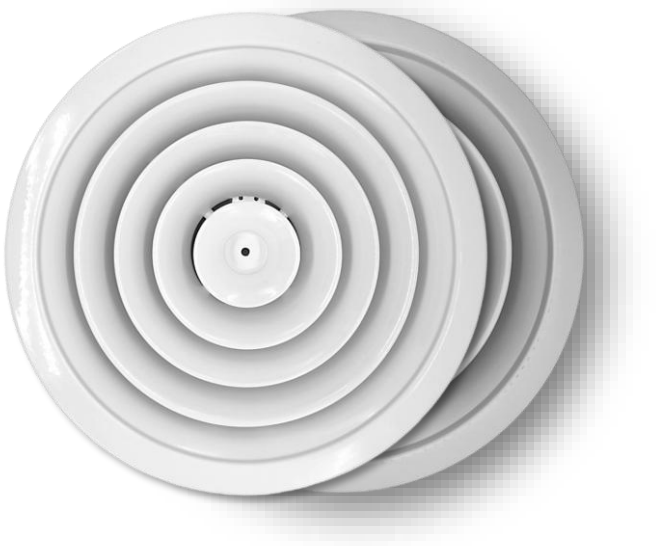
(+34) 91 3235805
(+34) 91 3235703

www.difair.es

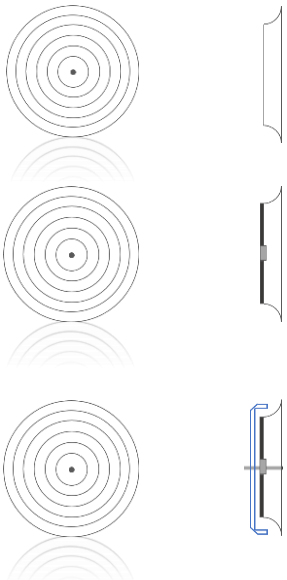
info@difair.es

Avd. del Cno de lo Cortao, 28A, Nave 1
28703 San Sebastián de los Reyes, Madrid.

CIRCULAR DIFFUSER
SERIE DR



MODELS



DR10
Circular diffuser with fixed cones (without damper).

DR10C
Circular diffuser with fixed cones and butterfly style damper.

DR10C+PM
Circular diffuser with fixed cones, butterfly style damper and crossbar.

DR10PL
Circular diffuser with fixed cones in plate (without damper).



DR10CPL
Circular diffuser with fixed cones in plate (with damper).

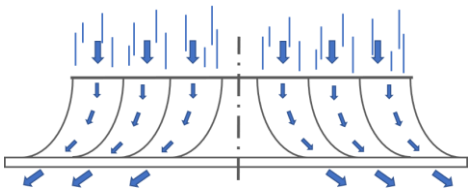


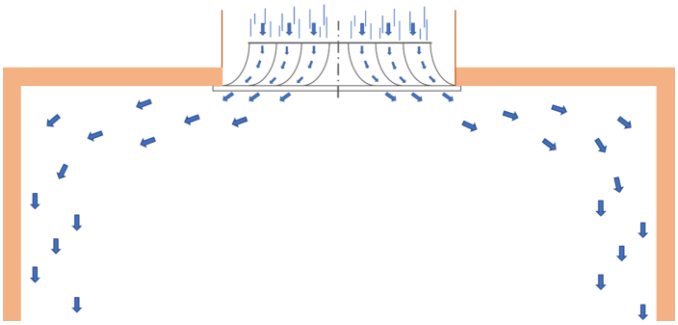
DESCRIPTION

DR Series circular diffuser, specially designed for air distribution in rooms with ceilings no higher than 3 meters.

The cones are arranged so that the airflow is parallel to the ceiling. It works best in rooms up to 3 meters high with a Δt of 15°.

The DR10PL model plate diffusers are specially designed to replace a modular ceiling tile. They consist of a 595 x 595 white-lacquered steel plate, into which a circular diffuser of various sizes (depending on the airflow rate) is installed. This diffuser can be supplied with an airflow regulator and/or a neck. This design eliminates the need to cut openings in modular ceiling panels to accommodate the diffuser.





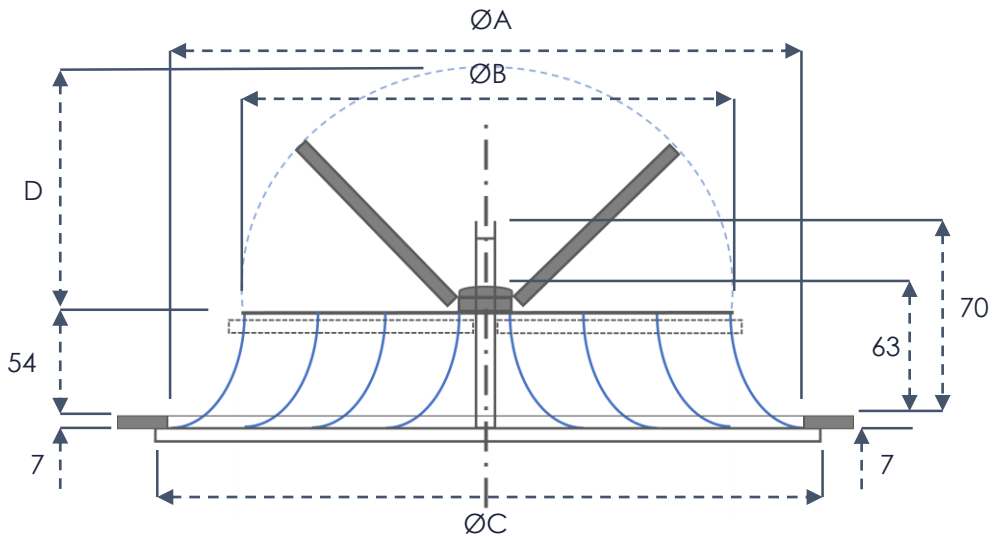
ACCESSORIES

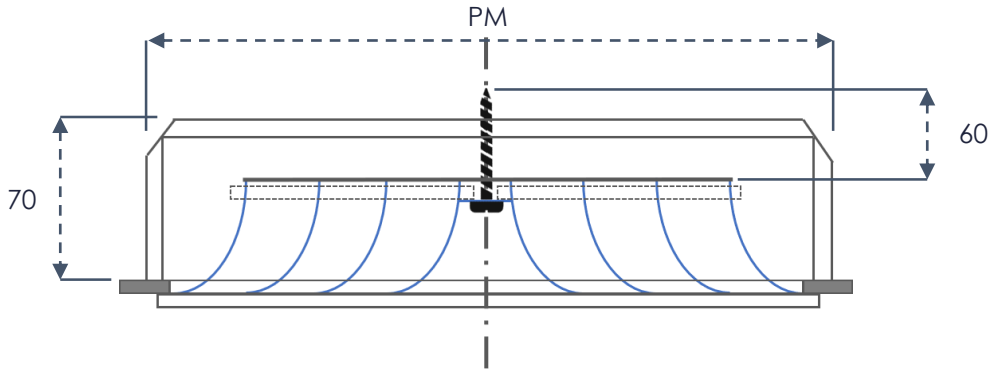
- **Mounting crossbar (PM_CF).**
- **Flexible duct collar (CF).**
- Insulated **(PADR10)** and uninsulated **(PDR10) Plenum.**

FINISH (Diffuser)

- **WHITE LACQUER.**
- **ANODIZED ALUMINUM.**
- On request, it can be manufactured in other colors from the **RAL** color chart.

DIMENSIONS

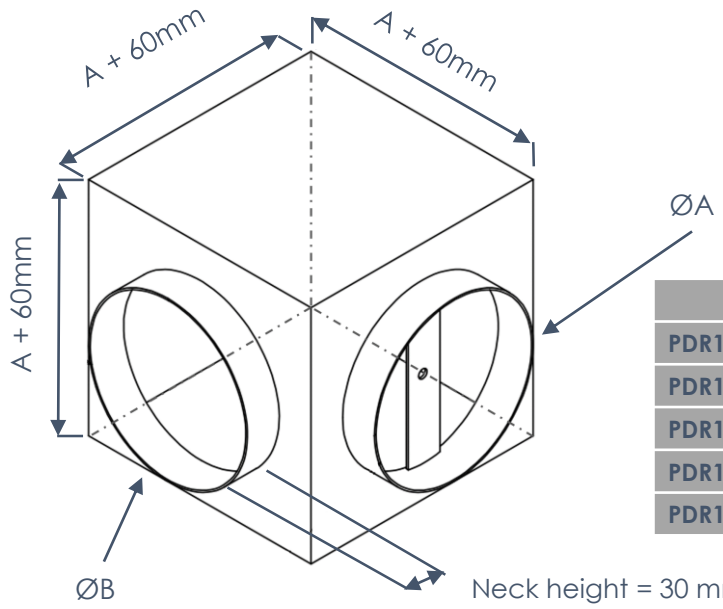




DIMENSIONS TABLE (mm)					
NOMINAL	ØA HOLE	ØB NECK	ØC EXTERNAL	CROSSBAR (PM)	D (H DAMPER)
6”	195	142	238	225	68
8”	250	198	300	275	96
10”	305	248	356	335	121
12”	365	300	414	385	147
14”	415	367	457	435	180

USABLE AREA m²		
SIZE	Ø mm	m²
6”	150	0,0085
8”	200	0,0157
10”	250	0,0257
12”	300	0,0381
14”	350	0,0536

PLENUM



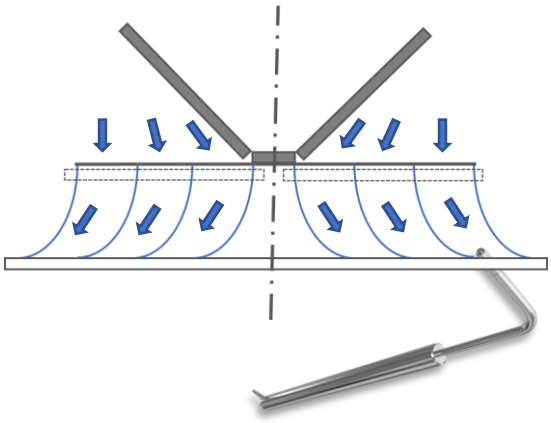
Model	ØA (mm)	ØB (mm)
PDR10 / PADR10 6"	170	148
PDR10 / PADR10 8"	230	198
PDR10 / PADR10 10"	280	248
PDR10 / PADR10 12"	330	313
PDR10 / PADR10 14"	395	353

AIR FLOW MEASUREMENT

There are two ways to do this:

1ª- Measuring air speed at the neck.

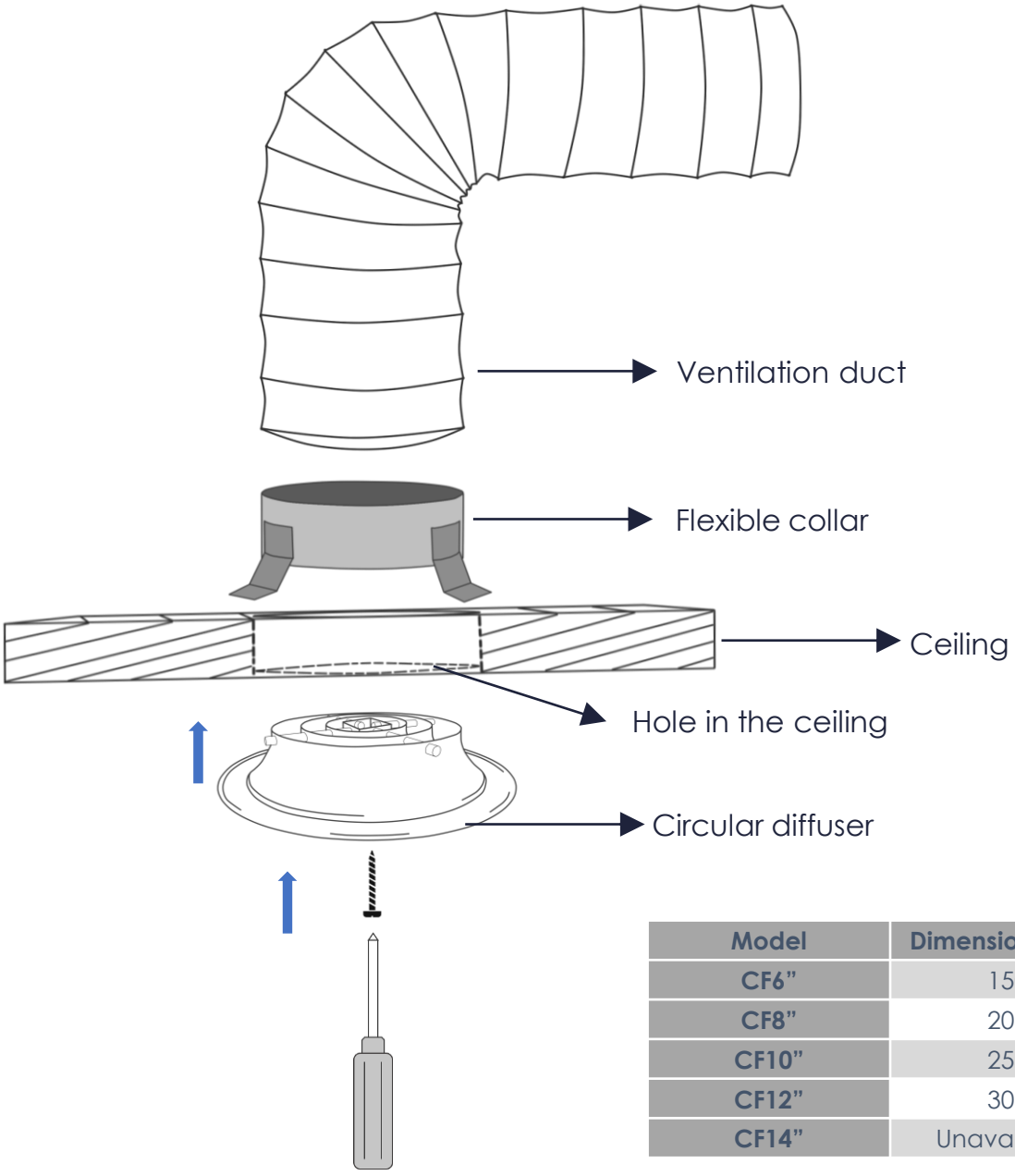
2ª- Measuring the effective flow speed using a Pitot tube at various points. m^2/h = Va × m^2 × 3600.



FLEXIBLE DUCT COLLAR

The **CF** collar is made of galvanized steel sheet and allows for the installation of **DR10** SERIES fixed-cone diffusers by connecting them directly to the duct, without the need for a plenum.





Model	Dimension (mm)
CF6"	150
CF8"	203
CF10"	253
CF12"	303
CF14"	Unavailable

QUICK SELECTION TABLE

SIZE		6"	8"	10"	12"	14"
m³/h	Ø Neck	140	196	252	308	364
100	Ve Δ P dB(A) L	3,3 0,65 15 0,5-0,8	1,8 0,1 5 0,2-0,6			
150	Ve Δ P dB(A) L	5 1,6 28 0,5-1	2,7 0,4 9 0,4-0,8			
200	Ve Δ P dB(A) L	6,6 2,6 36 0,8-1,4	3,6 0,9 20 0,7-,1,1	2,2 0,2 7 0,5-0,8		
250	Ve Δ P dB(A) L	8,2 4,2 43 0,9-1,6	4,5 1,3 25 0,8-1,4	2,8 0,4 10 0,6-1,1	1,9 0,1 9 0,6-0,9	
300	Ve Δ P dB(A) L		5,3 1,8 30 0,9-1,5	3,3 0,65 16 0,9-1,4	2,2 0,2 8 0,7-1,1	
350	Ve Δ P dB(A) L		6,2 2,5 34 1,1-1,8	3,9 1 23 0,9-1,4	2,6 0,4 9 0,8-1,3	1,9 0,1 11 0,7-1,1
400	Ve Δ P dB(A) L		7,1 4 42 1,3-2	4,4 1,2 25 1-1,6	3 0,5 13 0,9-1,4	2,1 0,1 10 0,8-1,3
450	Ve Δ P dB(A) L		8 4 42 1,4-2,1	5 1,5 29 1,2-1,9	3,4 0,7 20 1-1,6	2,4 0,2 12 0,9-1,4
500	Ve Δ P dB(A) L		9 5 46 1,5-2,3	5,5 1,9 32 1,3-2	3,7 0,9 23 1,2-1,8	2,6 0,3 11 1-1,5
550	Ve Δ P dB(A) L			6 2,3 34 1,4-2,1	4,1 1 24 1,2-1,9	3 0,5 15 1,1-1,7
600	Ve Δ P dB(A) L			6,6 2,7 37 1,5-2,3	4,5 1,3 27 1,3-2	3,1 0,5 16 1,2-1,9
650	Ve Δ P dB(A) L			7 3 36 1,5-2,4	4,9 1,5 29 1,4-2,1	3,5 0,8 22 1,3-1,9
700	Ve Δ P dB(A) L			7,8 3,8 43 1,6-2,6	5,2 1,7 31 1,5-2,3	3,7 0,9 24 1,4-2

SIZE		10"	12"	14"
m³/h	Ø Neck	252	308	364
750	Ve Δ P dB(A) L	8,2 4,2 44 1,8-2,8	5,7 1,9 34 1,5-2,4	4 1 26 1,4-2,1
800	Ve Δ P dB(A) L	8,6 4,9 46 1,9-2,9	6 2,2 35 1,7-2,5	4,2 1,1 27 1,4-2,3
850	Ve Δ P dB(A) L	9 5 47 1,9-3	6,4 2,4 36 1,8-2,7	4,5 1,3 31 1,5-24
900	Ve Δ P dB(A) L		6,8 2,5 37 1,8-2,9	4,6 1,4 29 1,6-2,5
950	Ve Δ P dB(A) L		7 3 40 1,9-2,9	5 1,5 32 1,7-2,6
1.000	Ve Δ P dB(A) L		7,3 3,4 41 2,3	5,2 1,7 33 1,8-2,8
1.100	Ve Δ P dB(A) L		8 4 45 2,1-3,3	5,8 2 36 1,9-3
1.200	Ve Δ P dB(A) L		8,7 5 48 2,3-3,6	6,2 2,5 38 2-3,2
1.300	Ve Δ P dB(A) L		9,5 5,8 50 2,5-3,8	6,7 2,7 41 2,2-3,4
1.400	Ve Δ P dB(A) L			7,3 3,4 43 2,4-3,6
1.500	Ve Δ P dB(A) L			8 4 46 2,5-3,9
1.600	Ve Δ P dB(A) L			8,5 4,5 48 2,6-4
1.700	Ve Δ P dB(A) L			9 5 50 2,8-4,3

Ve = Speed through the neck.

dB(A) = Sound level.

Δ P = Pressure drop in mm c.a.

L = Range in m for final speed 0,2-0,5 m/s.

CIRCULAR DIFFUSER
SERIE DR

Series	Model	Size
	10	
DR	10C	Ø"
	10PL	
	10CPL	

Finish
LB
ALU
RAL

Accesorios
PM_CF
CF
PADR10
PDR10



DR10C – 10" – LB + PM_CF

DESCRIPTION

SERIES

- DR: Circular diffuser.

MODEL

- DR10C: Circular diffuser with fixed cones and butterfly style damper.

SIZE

- Diameter: Ø 10".

FINISH

- LB: White laquered.

ACCESSORIES (optional)

- PM_CF: Crossbar for circular diffuser with fixed cones.

Order example: DR10C-10"-LB+PM_CF

- To order a Ø 10-inch circular fixed-cone diffuser, white lacquered, with airflow control damper and mounting crossbar, you should request:

Order	Description
1 Diffuser DR10C 10"-LB	10-inch circular fixed-cone diffuser, white lacquered, with airflow control damper.
1 Crossbar PM 10" CF	Mounting crossbar for a 10" circular fixed-cone diffuser.

Order example: DR10-8"-ALU + PDR10

- To order a Ø 8-inch circular fixed-cone diffuser, anodized aluminum with an uninsulated plenum, you should request:

Order	Description
1 Diffuser DR10 8"-Alu	8-inch circular fixed-cone diffuser, anodized aluminum.
1 Plenum box PDR10 8"	uninsulated plenum for Ø 8-inch circular diffuser.



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(+34) 91 3235805
(+34) 91 3235703
www.difair.es
info@difair.es
Manufacturas Difair-Clima, S.L.
Avd. del Cno de lo Cortao, 28A, Nave 1
28703 San Sebastián de los Reyes, Madrid.