

# DFRO



Catalogue Series 40.2



## Adjustable blade swirl diffuser



### Product description

Adjustable blades swirl diffuser, KOOLAIR, model **DFRO**, size \_\_, plate dimension of \_\_x\_\_. It incorporates a plenum box with side connection made in galvanised steel sheet, with spigot inlet volume control damper. Made in steel sheet. Finished in any RAL colour upon request. Recommended installation height between 2.5 and 3.5 m.

### Other models

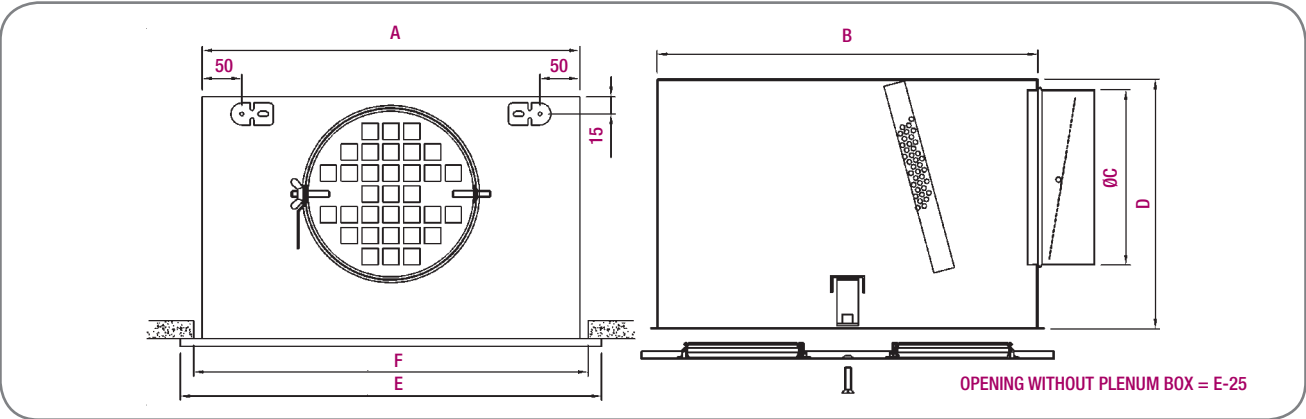
**DFRO-\_\_60**. Circular diffuser integrated in a plate of 595x595, to be installed in a modular false ceiling (up to size 4860).  
**DFRO-E**. Circular swirl diffuser for plaster ceiling plate.  
**DFRO-C**. Circular swirl diffuser for circular plate.  
**DFRO-A**. Circular swirl diffuser in plate, without blades.

*Note: On request, top plenum available insulated/ uninsulated (PDS-A-RE/PDS-RE).*

### Mounting

**PDL-RE**. Plenum with side connection without insulation for square panel,with manual damper accessible from false ceiling.  
**PDL-A-RE**. Plenum with side connection internally insulated for square panel,with manual damper accessible from false ceiling.  
**PDL-RL**. Plenum with side connection without insulation for square panel,with manual damper accessible from room.  
**PDL-A-RL**. Plenum with side connection internally insulated for square panel,with manual damper accessible from room.  
**PCDL-RL**. Plenum with side connection without insulation for round panel,with manual damper accessible from room.  
**PCDL-A-RL**. Plenum with side connection internally insulated for round panel,with manual damper accessible from room.  
**RPM**. Damper equipped to allow motorization.  
**PM**. Mounting bridge.To be installed without plenum in plaster ceilings, good for returning air or just decorative.

### General dimensions



Custom plenums available to suit reduced heights above false ceilings.

Diffuser	A	B	C	D	E	F
12	288	270	159	250	294	290
16	388	370	199	300	394	390
20	488	470	199	300	494	490
24 / 32 / 4860	588	570	249	350	594	590
36	616	598	249	350	623	618
40	663	645	314 OVAL	350	670	665
48	788	770	314	410	794	790

Unit mm

### Selection table

Size	Q (m³/h)	L <sub>wa</sub> [dB(A)]	ΔP <sub>t</sub> (Pa)	B (m)
12	140	24	15	1,2
	190	32	26	1,7
	240	40	43	3,0
16	210	24	9	1,5
	270	32	15	2,7
	360	40	26	3,6
20	300	24	10	2,5
	390	32	18	3,5
	510	40	30	4,3
24	400	24	9	3,2
	530	32	16	4,2
	690	40	27	5,5
32	470	24	10	3,0
	610	32	17	4,1
	790	40	29	4,8
4860	480	24	10	3,1
	620	32	17	4,2
	810	40	31	4,9
36	490	24	11	3,0
	640	32	18	4,0
	830	40	31	5,0
40	600	24	10	3,2
	790	32	18	4,3
	1030	40	30	5,0
48	730	24	10	3,7
	950	32	17	4,5
	1240	40	29	5,4



**LEGEND**  
Q (m³/h): Air flow.  
L<sub>wa</sub> [dB(A)]: Sound power level.  
ΔP<sub>t</sub> (Pa): Total pressure loss.  
B (m): Distance between diffuser axis for a maximum velocity at the occupied zone of 0.15 m/s, height installation of 2.7 m and ΔT = 0°C.