

DFR-A – whirling anemostat



type	Ø D [mm]	D [mm]	DFR-A S	DFR-A R
DFR-A 300x8	298	295x295	•	•
DFR-A 400x16	398	395x395	•	•
DFR-A 500x16	498	495x495	•	•
DFR-A 600x16	598	595x595	•	•
DFR-A 625x16	623	620x620	•	•
DFR-A 500x24	498	495x495	•	•
DFR-A 600x24	598	595x595	•	•
DFR-A 625x24	623	620x620	•	•
DFR-A 600x48	598	595x595	•	•
DFR-A 625x54	623	620x620	•	•
DFR-A 800x72	798	795x795	•	•
DFR-A 825x72	823	820x820	•	•

Technical parameters

Version

Swirling anemostats with adjustable slats.

Construction

Anemostats are made of galvanized sheet with white firing paint (RAL 9010). The slats are made of plastic and are painted black (RAL 9005).

Installation

Anemostats are intended for installation in the ceiling for air supply and exhaust (without slats). Installation height 2.5–4.1 m.

Mounting

using a central screw or side screws (on request).

Accessories

Galvanized steel plenum boxes, standard or insulated. Inlet boxes come standard with a regulating valve, a perforated sheet and a bracket for mounting the anemostat plate. Drainage boxes are standard only with a bracket for mounting the anemostat plate (regulating flap on request).

PQZ-EKO / PQZI-EKO plenum boxes for DFR-A S

AxA [mm]	Ø [mm]	throat				inlet				outlet			
		PQZ-V EKO RE-S	PQZI-V EKO RE-S	PQZ-H EKO RE-S	PQZI-H EKO RE-S	PQZ-V EKO	PQZI-V EKO	PQZ-H EKO	PQZI-H EKO	PQZ-V EKO	PQZI-V EKO	PQZ-H EKO	PQZI-H EKO
300	123	•	•	•	•	•	•	•	•	•	•	•	•
400	148	•	•	•	•	•	•	•	•	•	•	•	•
500	198	•	•	•	•	•	•	•	•	•	•	•	•
600	248	•	•	•	•	•	•	•	•	•	•	•	•
625	298	•	•	•	•	•	•	•	•	•	•	•	•
800	348	•	•	•	•	•	•	•	•	•	•	•	•
825	348	•	•	•	•	•	•	•	•	•	•	•	•

PQZ / PQZI plenum boxes for DFR-A S

AxB [mm]	Ø [mm]	throat				inlet				outlet			
		PQZ-V RE-S	PQZI-V RE-S	PQZ-H RE-S	PQZI-H RE-S	PQZ-V	PQZI-V	PQZ-H	PQZI-H	PQZ-V	PQZI-V	PQZ-H	PQZI-H
300	123	•	•	•	•	•	•	•	•	•	•	•	•
400	148	•	•	•	•	•	•	•	•	•	•	•	•
500	198	•	•	•	•	•	•	•	•	•	•	•	•
600	248	•	•	•	•	•	•	•	•	•	•	•	•
625	298	•	•	•	•	•	•	•	•	•	•	•	•
800	348	•	•	•	•	•	•	•	•	•	•	•	•
825	348	•	•	•	•	•	•	•	•	•	•	•	•

PDC / PDCI plenum boxes for DFR-A R

	AxA [mm]	Ø D [mm]	Ø E [mm]	inlet		outlet	
				PDC RE-S	PDCI RE-S	PDC	PDCI
	400	123	290	•	•	•	•
	500	148	390	•	•	•	•
	600	198	490	•	•	•	•
	700	248	590	•	•	•	•
	700	298	615	•	•	•	•
	900	348	790	•	•	•	•
	900	348	815	•	•	•	•

DFR-A – whirling anemostat

Type key for ordering

whirling anemostat

D F R - A 4 0 0 × 1 6 R
 1 2 3

- 1 – anemostat size
- 2 – number of adjustable blades
- 3 – design
 - R – circular panel
 - S – square panel

plenum boxes for DFR-A R

P D C 3 9 8 R E - S
 1 2 3 4

- 1 – design
 - PDC – standard
 - PDCI – with external insulation 6 mm
- 2 – box size range
- 3 – RE – control damper (inlet/outlet)
- 4 – S – perforated sheet (inlet)

plenum boxes for DFR-A S

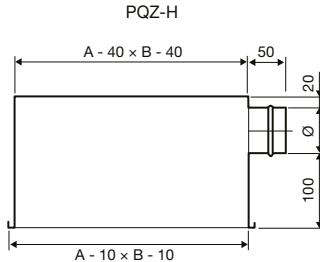
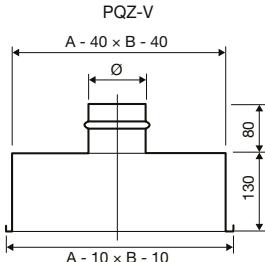
P Q Z - V 6 0 0 R E - S
 1 2 3 4 5

- 1 – design
 - PQZ – standard
 - PQZI – with external insulation 6 mm
- 2 – connection
 - V – vertical
 - H – horizontal
- 3 – dimensional range of boxes
- 4 – RE – control damper (inlet/outlet)
- 5 – S – perforated plate (inlet)

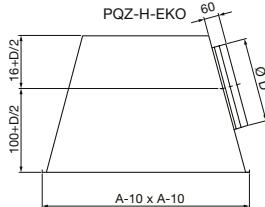
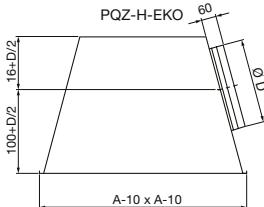
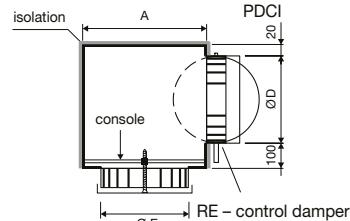
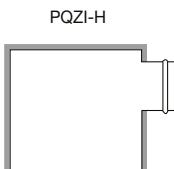
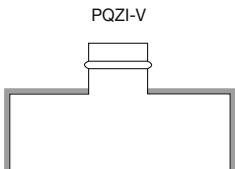
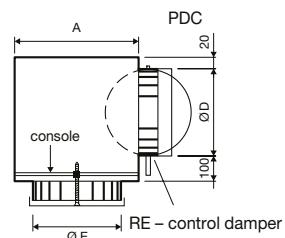
P Q Z - V - E K O 6 0 0 R E - S
 1 2 3 4 5

- 1 – type
 - PQZ – standard
 - PQZI – with external Mirelon insulation
 - PQZX – with external Armaflex insulation
- 2 – connection
 - V – vertical
 - H – horizontal
- 3 – dimensional range of boxes
- 4 – RE – control damper (inlet/outlet)
- 5 – S – perforated plate (inlet)

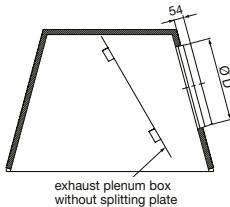
Plenum boxes PQZ / PQZI / PQZ EKO / PQZI EKO pro DFR-A S



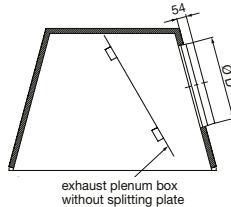
Plenum boxes PDC / PDCI pro DFR-A R



P Q Z I - H - E K O
 P Q Z X - H - E K O
 with 6 mm outer insulation

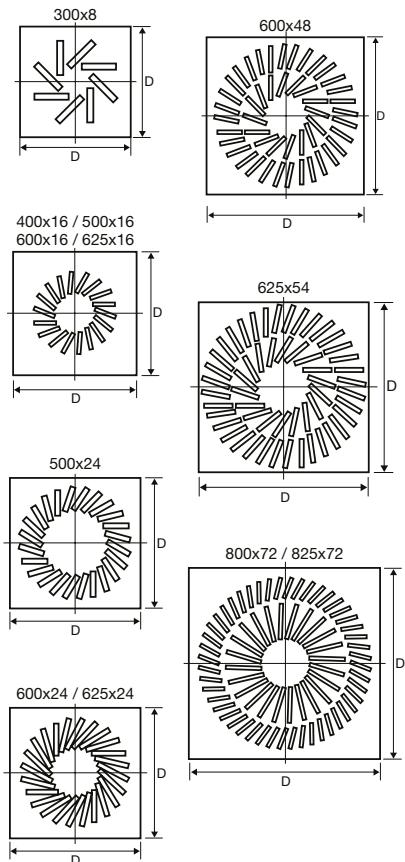


P Q Z I - H - E K O
 P Q Z X - H - E K O
 with 6 mm outer insulation

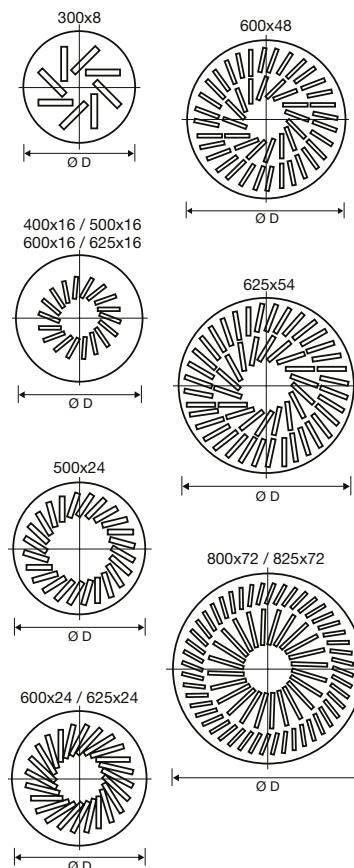


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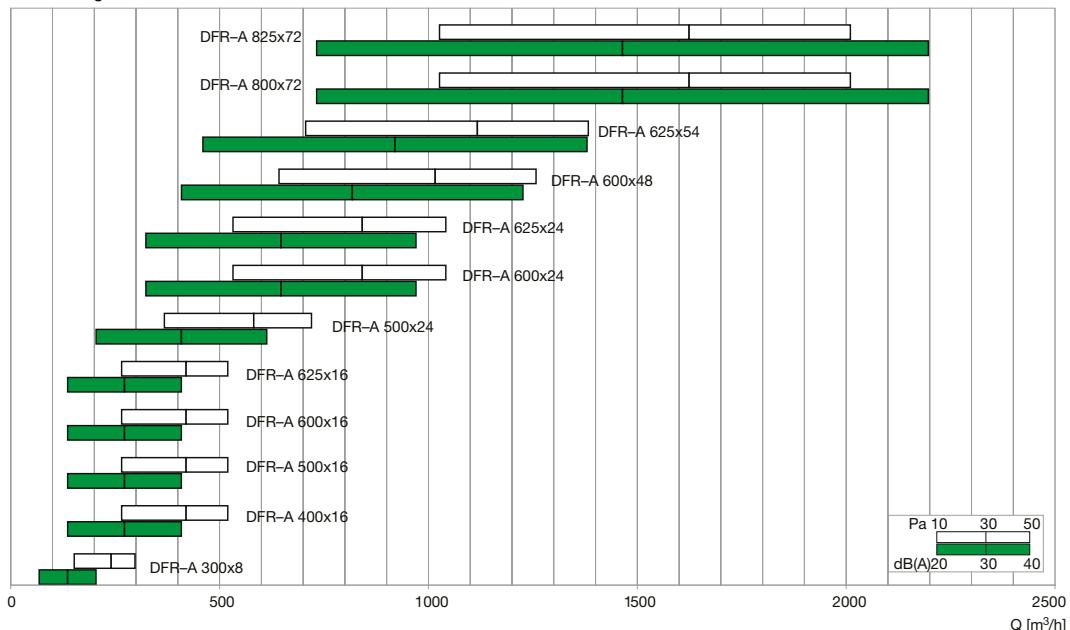
Additional illustration



DFR-A S slot geometry



DFR-A R slot geometry

Quick Design Table


Type	A_k [m^2]	Q [m^3/h]		L_{WA} [dB(A)]		$X_{[0,20]}$ [m]		Δp_t [Pa]	
		min	max	min	max	min	max	min	max
DFR-A 300x8	0.0095	150	300	32	54	1.8	3.5	10	50
DFR-A 400x16	0.0189	270	520	30	48	2.2	4.3	10	50
DFR-A 500x16	0.0189	270	520	30	48	2.2	4.3	10	50
DFR-A 600x16	0.0189	270	520	30	48	2.2	4.3	10	50
DFR-A 625x16	0.0189	270	520	30	48	2.2	4.3	10	50
DFR-A 500x24	0.0284	370	720	28	45	2.5	4.9	10	50
DFR-A 600x24	0.0449	530	1040	26	42	2.9	5.6	10	50
DFR-A 625x25	0.0449	530	1040	26	42	2.9	5.6	10	50
DFR-A 600x48	0.0568	640	1260	26	41	3.1	6.1	10	50
DFR-A 625x54	0.0639	710	1380	25	40	3.2	6.3	10	50
DFR-A 800x72	0.1017	1030	2010	24	37	3.7	7.2	10	50
DFR-A 825x72	0.1017	1030	2010	24	37	3.7	7.2	10	50

Explanatory notes:

- Q [m^3/h] air flow
 A_k [m^2] free discharge area
 Δp_t [Pa] total pressure drop
 L_{WA} [dB(A)] acoustic performance
 $X_{[0,20]}$ [m] air flow range to obtain a comfortable air speed in the living area under isothermal conditions of 0.20 m/s