

DFR-A – whirling anemostat



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).

type	Ø D [mm]	D [mm]	DFR-A S	DFR-A R
DFR-A 300×8	298	295×295	•	•
DFR-A 400×16	398	395×395	•	•
DFR-A 500×16	498	495×495	•	•
DFR-A 600×16	598	595×595	•	•
DFR-A 625×16	623	620×620	•	•
DFR-A 500×24	498	495×495	•	•
DFR-A 600×24	598	595×595	•	•
DFR-A 625×24	623	620×620	•	•
DFR-A 600×48	598	595×595	•	•
DFR-A 625×54	623	620×620	•	•
DFR-A 800×72	798	795×795	•	•
DFR-A 825×72	823	820×820	•	•

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

	throat	inlet				outlet			
A×A [mm]	Ø [mm]	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
300	123	•	•	•	•	•	•	•	•
400	148	•	•	•	•	•	•	•	•
500	198	•	•	•	•	•	•	•	•
600	248	•	•	•	•	•	•	•	•
625	298	•	•	•	•	•	•	•	•
800	348	•	•	•	•	•	•	•	•
825	348	•	•	•	•	•	•	•	•

PQZ / PQZI plenum boxes for DFR-A S

	throat	inlet				outlet			
A×B [mm]	Ø [mm]	PQZ-V RE-S	PQZI-V RE-S	PQZ-H RE-S	PQZI-H RE-S	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

				inlet		outlet	
	A×A [mm]	Ø D [mm]	Ø E [mm]	PDC RE-S	PDCI RE-S	PDC	PDCI
298	400	123	290	•	•	•	•
398	500	148	390	•	•	•	•
498	600	198	490	•	•	•	•
598	700	248	590	•	•	•	•
623	700	298	615	•	•	•	•
798	900	348	790	•	•	•	•
823	900	348	815	•	•	•	•

DFR-A – whirling anemostat

■ Type key for ordering

whirling anemostat

DFR-A 400 × 16 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

PDC 398 RE-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

PQZ-V 600 RE-S
1 2 3 4 5

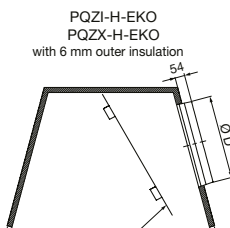
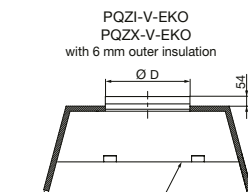
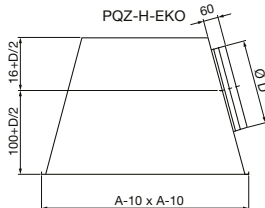
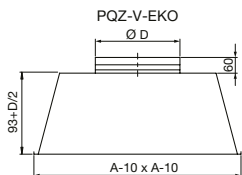
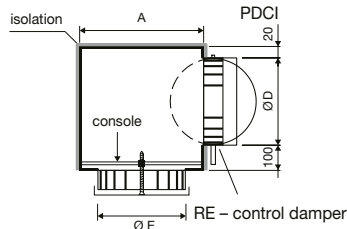
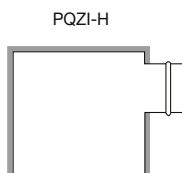
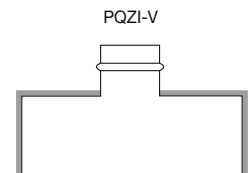
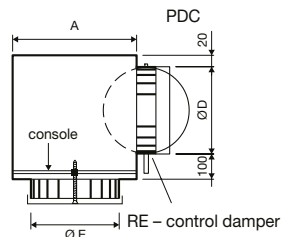
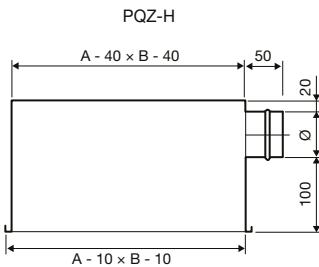
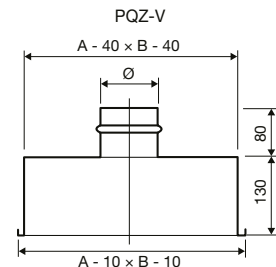
- 1 – design
 - PQZ – standard
 - PQZI – with external insulation 6 mm
- 2 – connection
 - V – vertical
 - H – horizontal
- 3 – dimensional range of boxes
- 4 – RE – control damper (inlet/outlet)
- 5 – S – perforated plate (inlet)

PQZ-V-EKO 600 RE-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

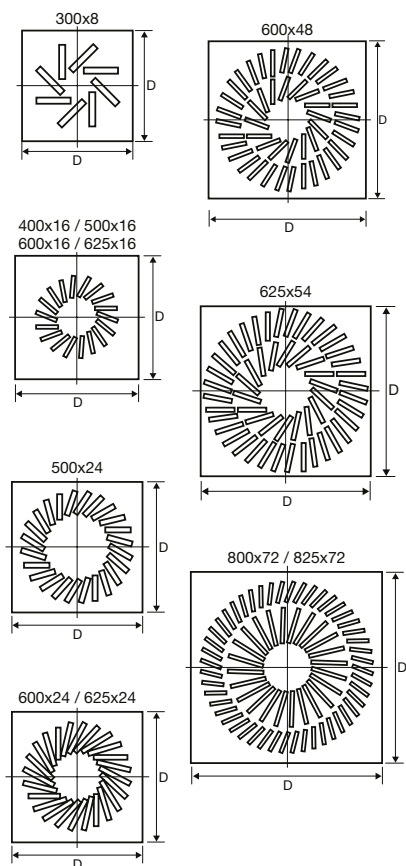


exhaust plenum box
without splitting plate

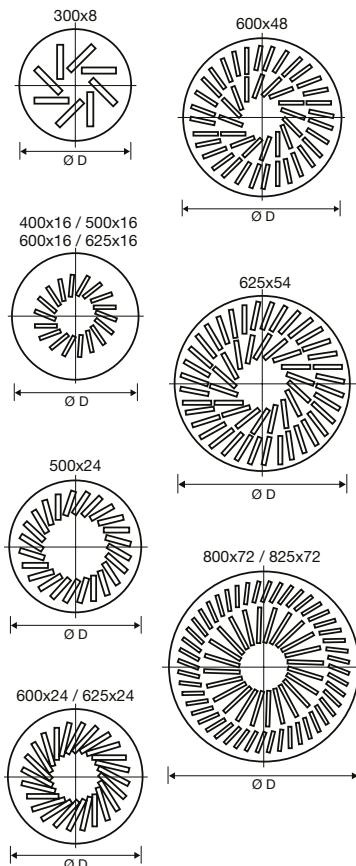
exhaust plenum box
without splitting plate

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Additional illustration



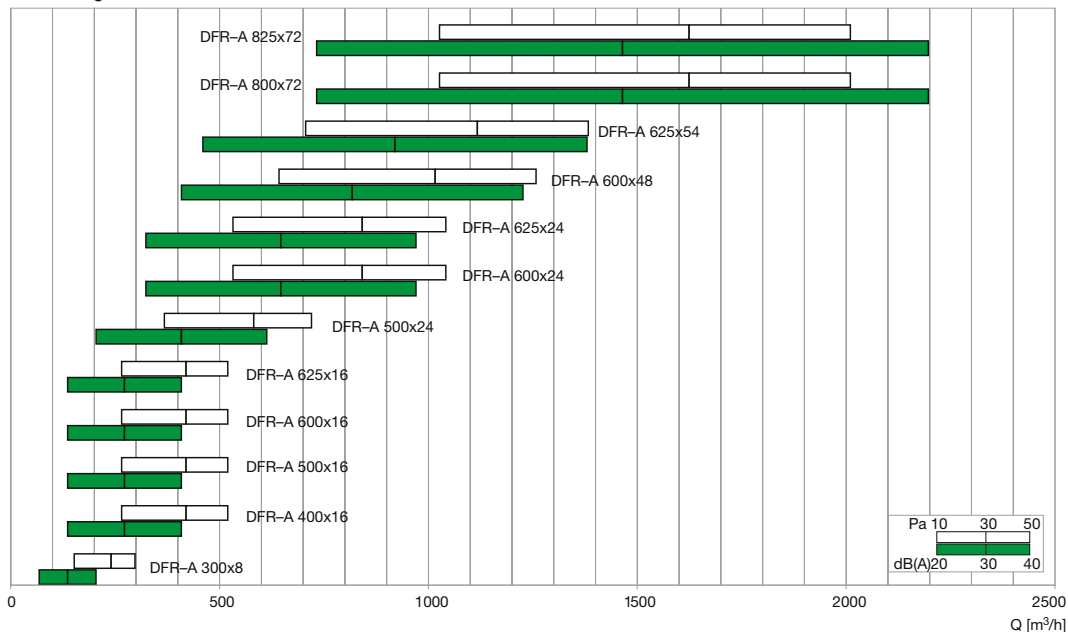
DFR-A S slot geometry



DFR-A R slot geometry

DFR-A – whirling anemostat

Quick Design Table



Type	A _k [m²]	Q [m³/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 [m³/h] air flow

A_k [m²] free discharge areaΔp_t [Pa] total pressure dropL_{WA} [dB(A)] acoustic performanceX_{0,20} [m] air flow range to obtain a comfortable air speed in the living area under isothermal conditions of 0.20 m/s