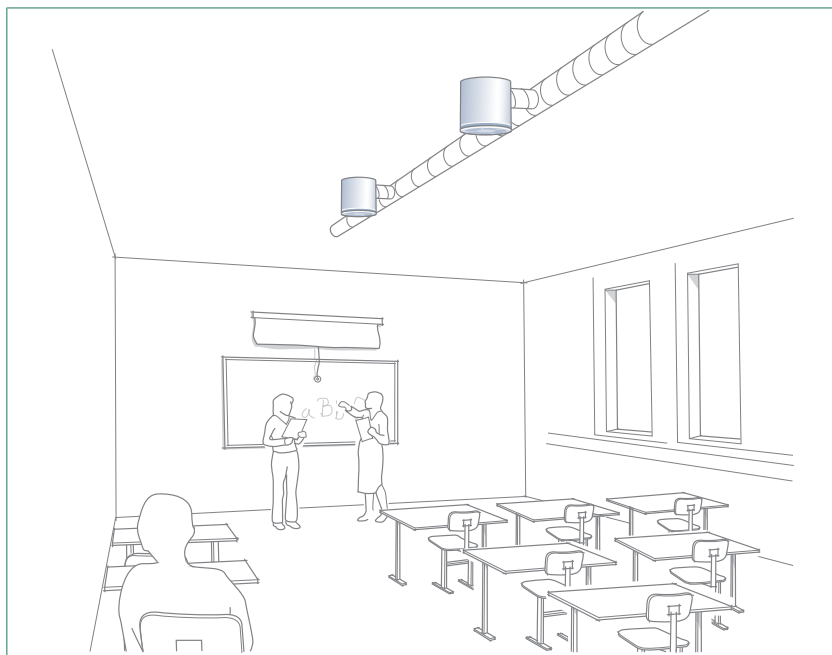


Supply air diffuser ROFB, RPFB



ROFB and RPFB are supply air diffusers with an integrated plenum box for freely suspended installation in a ceiling. The diffuser ROFB comes with an unperforated and RPFB with a perforated diffuser plate. Patented measurement and adjustment damper ZAEF is included in the plenum box. The slot height of the diffuser can be set at 20 or 35 mm.

Quick Selection

ROFB/RPFB with 20 mm slot, at 50 Pa

Air diffuser Size	Connection, mm	Air flow l/s at sound level		
		25 dB(A)	30 dB(A)	35 dB(A)
R(O,P)FB-100	100	10	18	34
R(O,P)FB-125	125	19	37	47
R(O,P)FB-160	160	28	43	54
R(O,P)FB-200	200	38	59	75
R(O,P)FB-250	250	-	44	95
R(O,P)FB-315	315	-	100	160
R(O,P)FB-400	400	-	-	230

- = outside working area

NOTE! With size Ø400 adjustment with IRIS damper (included).

Specifications

- Easy to install and adjust
- Low sound level
- Adjustable air slot 20 or 35 mm
- Adjustable diffusion pattern
- Measurement and adjustment damper ZAEF included
- 7 connection sizes

Product code example

Supply air diffuser RPFB-160.

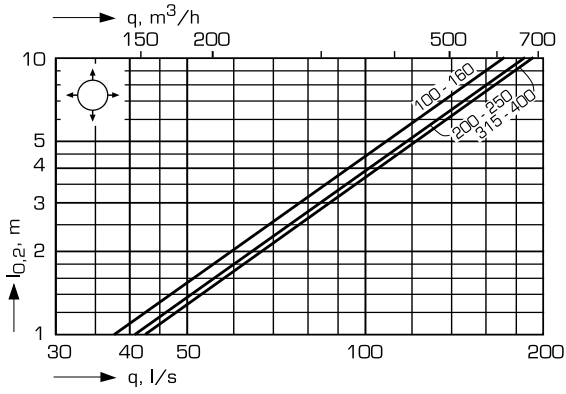
AIRTREND Ltd
 Predstavništvo u Beogradu
 Kumanovska 14, 11000 Beograd
 Tel: 011/3836886, 3085740
 Faks: 011/3444113
 e-mail: gوبرid@eunet.rs
 web: www.airtrend.rs

Air flow, throw, pressure drop, sound level

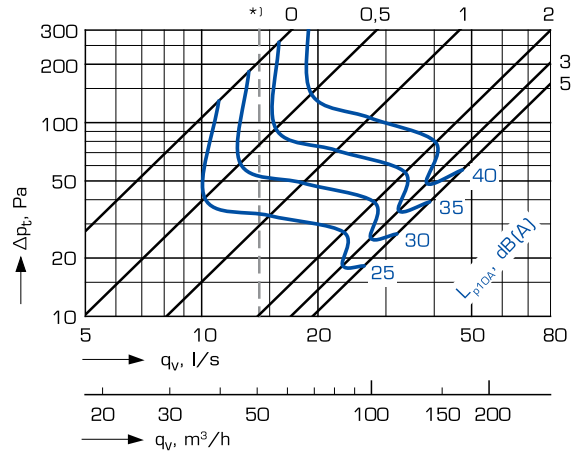
Supply air diffuser R(O,P)FB with 20 mm slot, 4-way diffusion

Throw (isothermal)

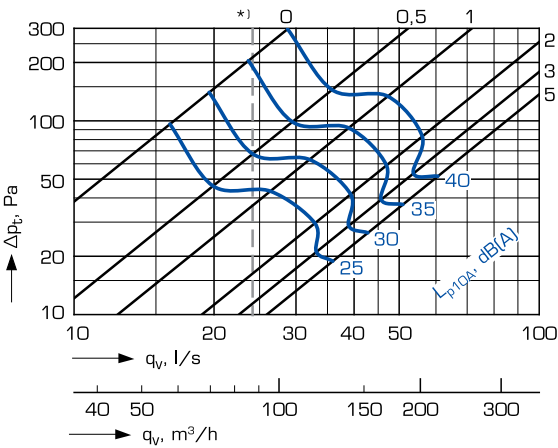
Sizes in the diagram below refer to air diffuser connection in mm.



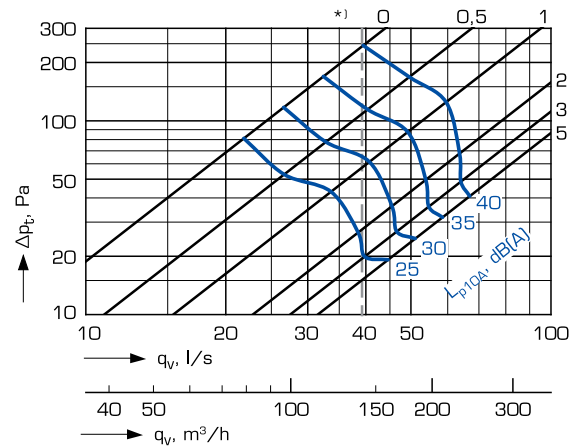
R(O,P)FB-100



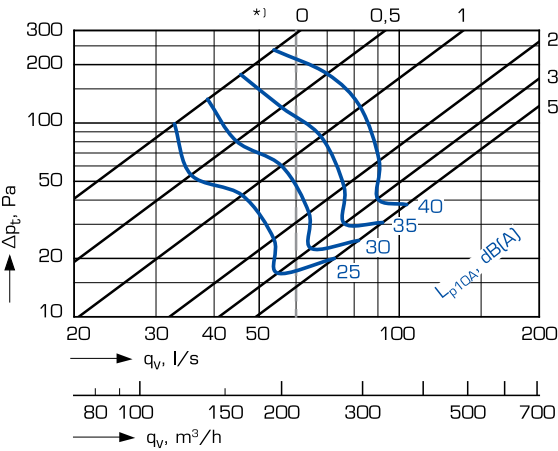
R(O,P)FB-125



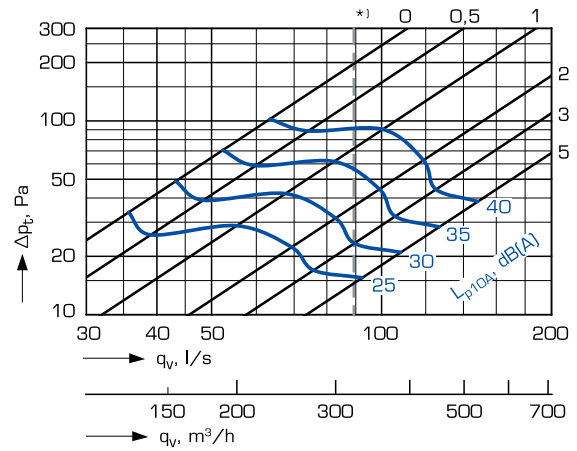
R(O,P)FB-160



R(O,P)FB-200



R(O,P)FB-250



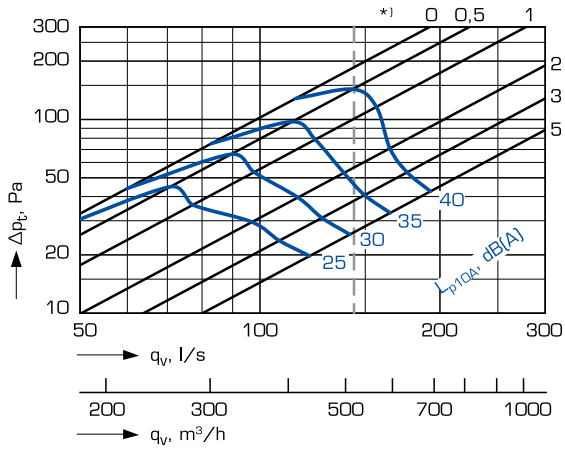
*) adjustment position

--- Min. airflow required to obtain sufficient measuring pressure.

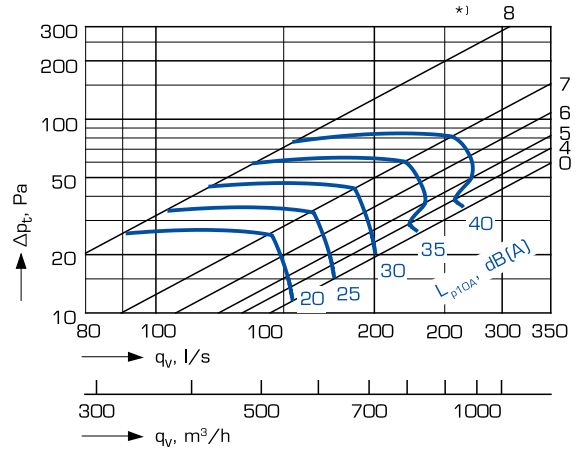
Air flow, pressure drop, sound level

Supply air diffuser R(O,P)FB with 20 mm slot, 4-way diffusion

R(O,P)FB-315



R(O,P)FB-400



*) adjustment position

- - - Min. airflow required to obtain sufficient measuring pressure.

Sound Power level L_w

R(O,P)FB with 20 mm slot

R(O,P)FB	Correction of sound level K (dB)							
	63	125	250	500	1000	2000	4000	8000
100	10	9	8	0	-2	-8	-14	-12
125	6	7	5	0	0	-7	-16	-17
160	6	8	5	1	0	-7	-15	-16
200	4	7	2	2	0	-5	-15	-16
250	3	8	2	3	13	-7	-16	-16
315	10	13	4	1	-2	-6	-15	-17
400	15	13	5	2	-6	-12	-12	-8
Tolerance \pm	6	3	2	2	2	2	2	3

Sound power levels by octave bands are obtained by adding to total sound pressure level L_{p10A} , dB(A), the correction K_{oct} presented in the table according to the following formula:

$$L_w = L_{p10A} + K_{oct}$$

Correction K_{oct} is average value in range of use of the device.

Sound attenuation ΔL

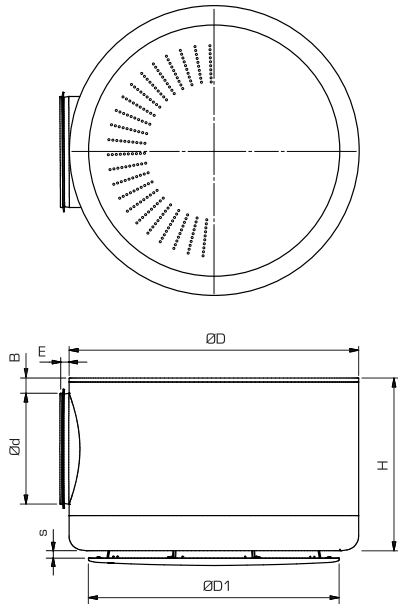
R(O,P)FB with 20 mm slot

R(O,P)FB	Sound attenuation (dB)							
	63	125	250	500	1000	2000	4000	8000
100	21	12	5	14	8	7	6	7
125	18	6	7	11	6	9	6	7
160	18	8	6	10	9	8	7	7
200	13	4	10	7	7	6	5	8
250	10	3	9	9	7	6	7	7
315	8	2	9	9	5	4	6	7
400	5	5	9	5	7	6	7	9
Tolerance \pm	6	3	2	2	2	2	2	3

The average sound attenuation ΔL from duct to room including the orifice attenuation of the connecting duct in ceiling installation, is obtained in the table above.

Dimensions and weights

Supply air diffuser ROFB, RPFB



s = 20 or 35 mm

Size	ØD [mm]	ØD1 [mm]	Ød [mm]	B [mm]	E [mm]	H [mm]	Weight kg
100	450	363	99,3	30	50	240	4,5
125	450	363	124,3	30	50	265	4,5
160	450	363	159,3	30	50	300	4,8
200	650	563	199,3	30	50	340	9,0
250	650	563	249,3	30	50	390	9,6
315	750	663	314,3	30	50	455	12,7
400	750	663	393,3	15	50	515	19,3*

* weight of IRIS damper is included (6.4 kg)

General

Execution and function

ROFB and RPFB are supply air diffusers with an integrated plenum box for freely suspended installation in a ceiling. The diffuser ROFB comes with an unperforated and RPFB with a perforated diffuser plate.

The slot height of the diffuser can be set at 20 or 35 mm. Diffusers are manufactured in 7 connection sizes.

The plenum box has a combined measurement and adjustment damper with very low noise generation. The patented multipoint measurement of the measurement and adjustment damper enables balanced and accurate values. The regulating handle of the measurement and adjustment damper has a position indicator and a locking device. The measurement and adjustment damper can be easily removed for inspection and cleaning without changing the setting of the damper.

The measurement hoses from the adjustment damper are very easily accessible inside the diffuser. This facilitates measurement and balancing.

Material and surface finish

Diffuser is made from steel sheet.

The diffuser is powder-coated for a high surface finish.

The standard colour is RAL 9010. Other diffuser colours are available on special order.

Installation, adjustment and maintenance

The instructions for installation, adjustment and maintenance are available at www.flaktgroup.com. The k-factors for supply air are also provided on the plenum box.

Technical data and design

For complete design details, please see the FläktGroup product selection program. The program can be found on the Internet at www.flaktgroup.com.

Product description

Round supply air diffusers ROFB (unperforated front plate) / RPFB (perforated front plate) by FläktGroup with an integrated plenum box for freely suspended installation in a ceiling. The diffuser front plate can be set to provide an air slot of 20 or 35 mm. The supply air device includes a quiet, easily removable measurement and adjustment damper (ZAEF).

Product code

Supply air diffuser

Supply air diffuser, special colour
(with integrated plenum box)

Type (O, P)

P = perforated

O = unperforated

Size (aaa)

100, 125, 160, 200, 250, 315, 400

R(O,P)FB-aaa

R(O,P)FB-aaa-E

Accessories

Strip for setting the diffusion
pattern (kit)

Length 3 x 370 mm

(Two size-adapted strips are always supplied with a
diffuser.)

RHSZ-03