

JPK-RBW

Circular radial diffuser for industrial applications and large rooms



QUICK FACTS

- Circular diffuser with adjustable control cone for a horizontal or vertical distribution pattern
- Control cone can be adjusted manually, via electric motor or through a thermal drive (no external power required)
- Ensures draught-free ventilation even with large air volumes and temperature differences
- Optimized for spaces such as production halls

Size	Horizontal									
	L _{WA} = 30 dB		L _{WA} = 35 dB		L _{WA} = 40 dB		L _{WA} = 45 dB		L _{WA} = 50 dB	
	V (m ³ /h)	Δ p (Pa)	V (m ³ /h)	Δ p (Pa)	V (m ³ /h)	Δ p (Pa)	V (m ³ /h)	Δ p (Pa)	V (m ³ /h)	Δ p (Pa)
25	510	15	633	24	757	34	885	47	1060	68
31	677	15	869	24	1080	37	1310	55	1540	73
35	932	14	1190	22	1460	33	1750	47	2080	64
40	1160	13	1520	20	1910	29	2330	41	2830	56
45	1390	12	1780	19	2210	28	2600	38	3200	54
50	1750	12	2190	18	2650	25	3170	35	3850	49
60	2520	8	3120	13	3770	19	4300	26	5120	35
63	2910	7	3640	11	4430	17	5020	22	5880	30

Size	Vertical									
	L _{WA} = 30 dB		L _{WA} = 35 dB		L _{WA} = 40 dB		L _{WA} = 45 dB		L _{WA} = 50 dB	
	V (m ³ /h)	Δ p (Pa)	V (m ³ /h)	Δ p (Pa)	V (m ³ /h)	Δ p (Pa)	V (m ³ /h)	Δ p (Pa)	V (m ³ /h)	Δ p (Pa)
25	458	12	546	18	644	25	729	33	837	42
31	610	11	748	16	873	22	1020	29	1130	37
35	830	10	1010	14	1220	20	1440	27	1600	33
40	1050	9	1270	14	1530	19	1800	25	2020	31
45	1210	9	1480	13	1770	18	2080	24	2330	30
50	1410	9	1740	13	2090	18	2420	24	2760	29
60	2060	8	2500	12	2940	17	3440	23	3860	28
63	2960	7	3600	11	4350	15	5040	22	5710	27

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Technical description

Design

The JPK-RBW circular radial diffuser features a perforated sheet cylinder with a closed base plate, as well as an internal height-adjustable control cone. The distribution pattern is adjusted by moving the control cone manually, by electric motor or via a thermal drive without auxiliary power.

The diffuser's design enables air directions ranging from diagonally upwards to vertically downwards. The umbrella-shaped radial air discharge ensures draught-free ventilation of large room areas, in particular in cooling mode, even with large air volumes and temperature differences.

Due to the comparatively high air flows that can be achieved, this diffuser is primarily used in production halls with large room volumes.

Functionality

Air enters the control cone through the spigot. Depending on the control cone's position, it produces either vertical air discharge ("up" position) or radial air discharge with a diagonally upward axis ("down" position). Between these end positions, the distribution pattern can be infinitely varied by continuously adjusting the cone.

This adaptation enables good flushing of the occupancy zone in heating and cooling mode according to the specific operating conditions.

Material and surface treatment

- Made of finely galvanised sheet steel.
- Standard colour:
 - Non-painted
- Alternative standard colours:
 - RAL 9010, pure white, gloss 70
 - RAL 9003, signal white, gloss 70
 - RAL 9006, white aluminium, gloss 70
 - RAL 9005, jet black, gloss 70
 - RAL 7035, light grey, gloss 70

Adaptation

- Other colours available on request.
- Available in stainless steel or aluminium on request.

Accessories

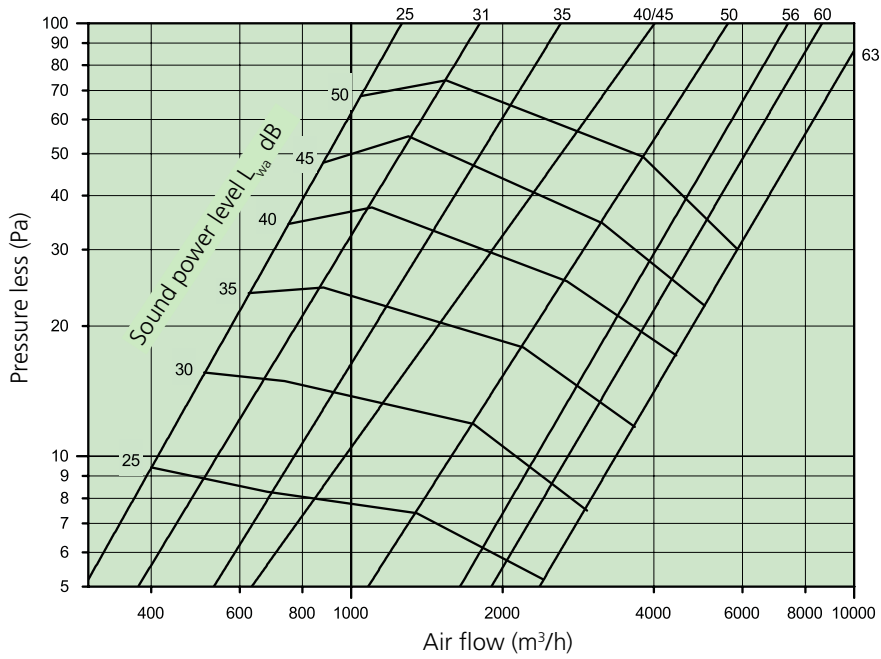
- Reduction of the discharge geometry to 180° or 90°.
Version in front of columns or in room corners.
- Wall mount.



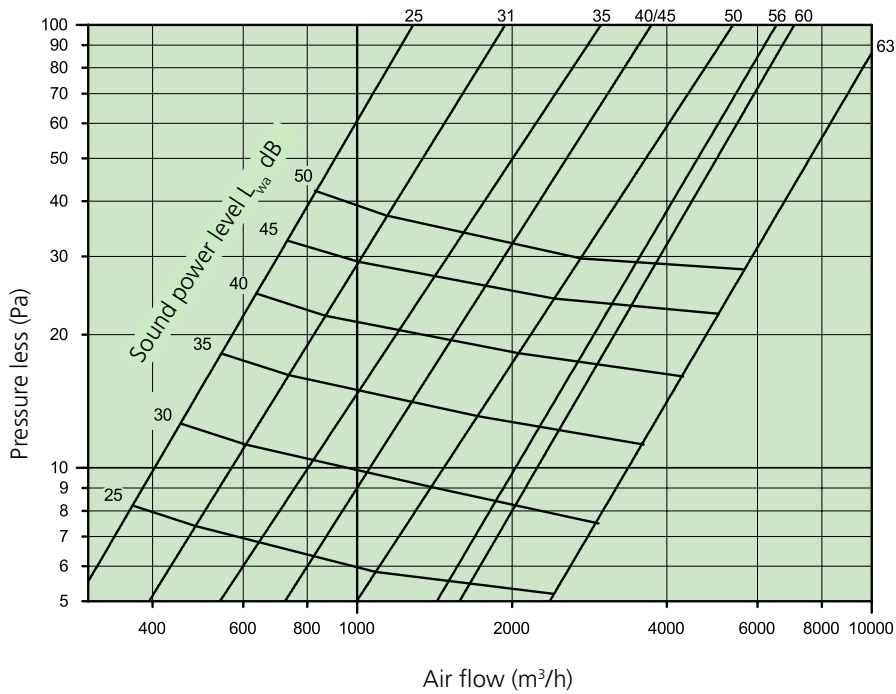
Technical data

Sizing diagram

Horizontal distribution pattern



Vertical distribution pattern



Dimensions

Connection diameter		
Size	D (mm)	H (mm)
25	248	975
31	313	975
35	353	975
40	398	975
45	448	975
50	498	975
56	558	975
60	598	975
63	628	975

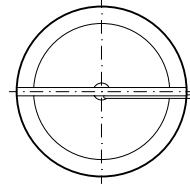
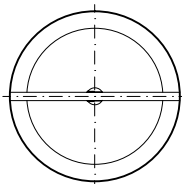
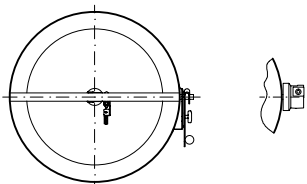
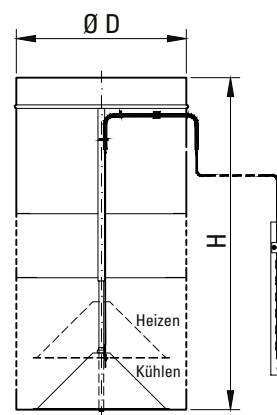
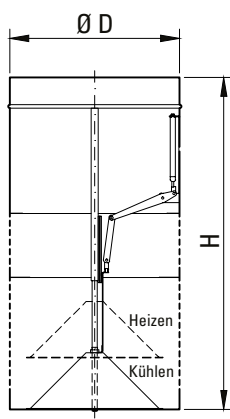
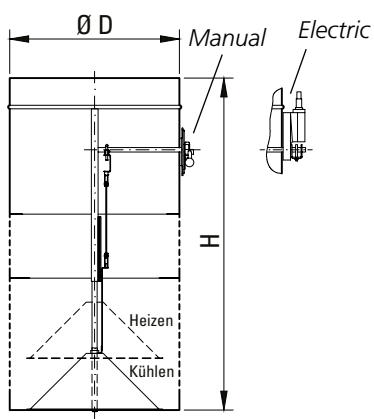


Figure 1. Manual adjustment and adjustment by electric motor.

Figure 2. Adjustment using thermal element (TH).

Figure 3. Adjustment using bowden cable.

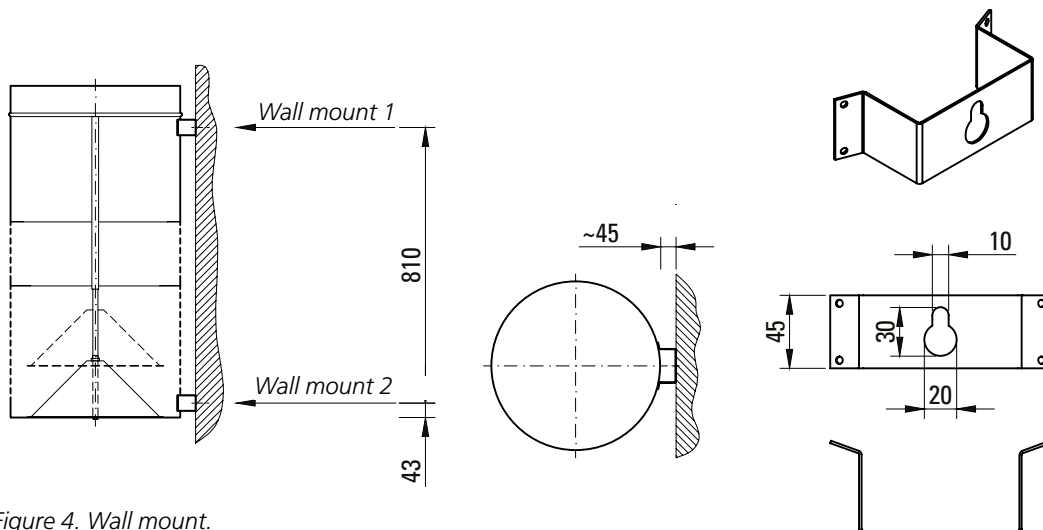


Figure 4. Wall mount.

Distribution patterns

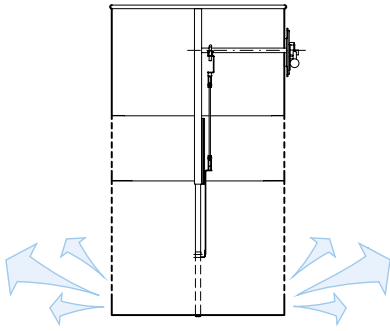


Figure 5. Horizontal, cooling mode.

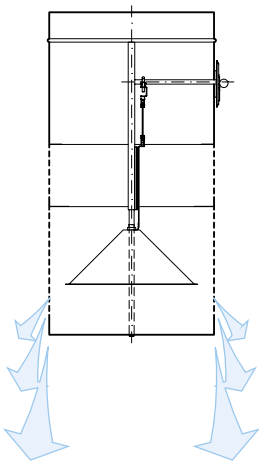


Figure 6. Vertical, heating mode.

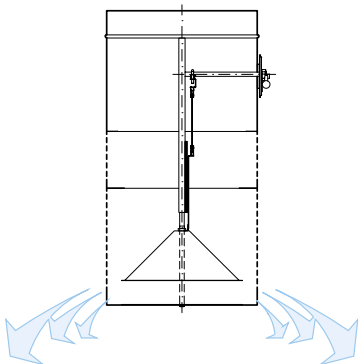


Figure 7. "Bell-shaped/slanted", isothermal.

Specification

For ordering, contact your local Swegon sales office.

Specification text

Circular radial diffuser JPK-RBW for large air flows with the following features:

- Perforated sheet cylinder including a spigot, closed base plate and an internal height-adjustable control cone.
- Horizontal or vertical distribution pattern.
- Control cone can be adjusted manually or by motor:
 - Manually by locking device
 - Electric motor
 - Thermal element, no auxiliary power
 - Manually by bowden cable
- Made of galvanised steel.
- Special materials available on request.
- Special colours available on request.