

JPK

Circular radial diffuser for large air flows



QUICK FACTS

- Radial diffuser with adjustable control cone for a horizontal or vertical distribution pattern
- Control cone can be adjusted manually or via electric motor
- Ensures draught-free ventilation in large areas, especially in cooling mode even with large air flows and temperature differences
- Larger sizes are available on request (400–1420 mm)

Size	Horizontal							
	$L_{PA} = 30$ dB		$L_{PA} = 35$ dB		$L_{PA} = 40$ dB		$L_{PA} = 45$ dB	
	V (m ³ /h)	Δp (Pa)	V (m ³ /h)	Δp (Pa)	V (m ³ /h)	Δp (Pa)	V (m ³ /h)	Δp (Pa)
25	592	17	798	30	1080	54	1440	95
31	1420	16	1790	25	2250	37	2830	55
35	1470	13	1840	19	2330	30	2940	46
40	1790	11	2220	16	2740	24	3400	36

Size	Vertical							
	$L_{PA} = 30$ dB		$L_{PA} = 35$ dB		$L_{PA} = 40$ dB		$L_{PA} = 45$ dB	
	V (m ³ /h)	Δp (Pa)	V (m ³ /h)	Δp (Pa)	V (m ³ /h)	Δp (Pa)	V (m ³ /h)	Δp (Pa)
25	485	16	599	24	739	37	913	58
31	1070	15	1390	26	1810	43	2370	71
35	1420	15	1720	23	2100	34	2550	51
40	1950	18	2260	24	2630	31	3060	40

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Technical description

Design

The JPK circular radial diffuser features a perforated sheet cylinder including a spigot, a closed base plate, and an internal height-adjustable control cone.

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 flows and temperature differences.

The distribution pattern is adjusted by moving the control cone manually, by bowden cable or by electric motor.



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.

Material and surface treatment

- Made of galvanised 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

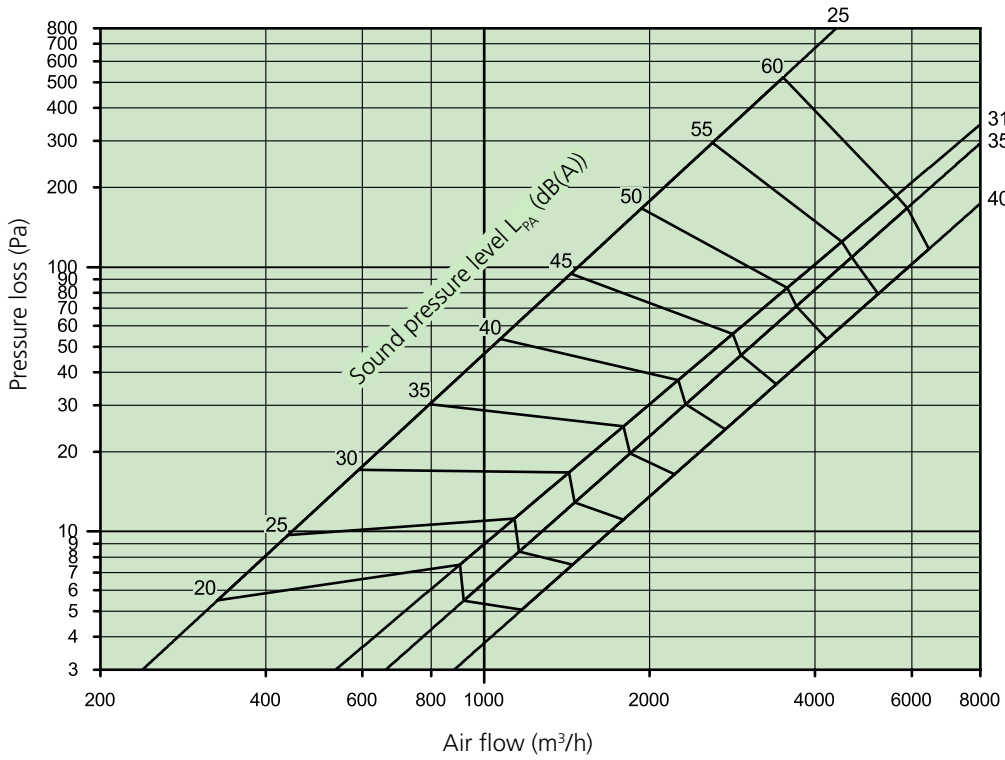
Adaptation

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

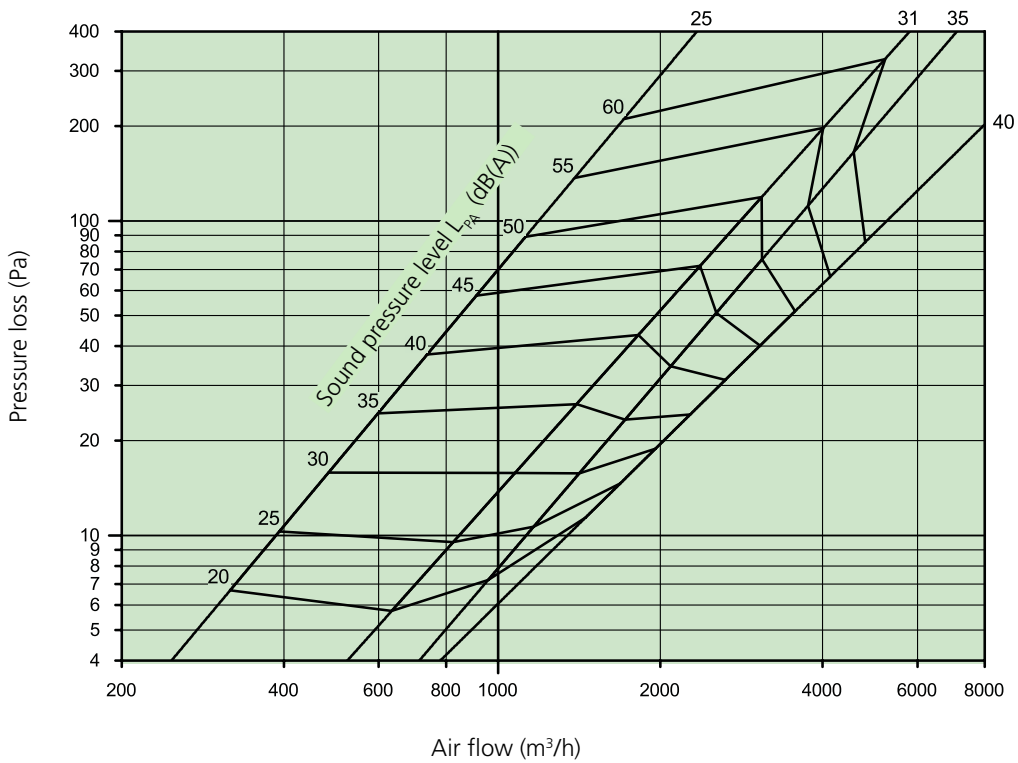
Technical data

Sizing diagram

Horizontal distribution pattern



Vertical distribution pattern



Dimensions

Size	Dimensions					Air flow	
	ø D (mm)	ø A (mm)	H (mm)	B (mm)	B* (mm)	V _{min} (m ³ /h)	V _{max} (m ³ /h)
20	200	400	240	100	250	250	1000
25	250	500	300	100	250	450	1550
31	315	625	375	100	250	700	2500
35	355	710	425	100	250	900	3200
40	400	800	480	100	250	1100	4000
45	450	900	540	100	250	1400	5200
50	500	1000	600	100	250	1750	6350
56	560	1120	670	100	250	2200	8000
63	630	1260	755	100	250	2800	10000
71	710	1420	850	100	250	3500	12500

The specified air flow ranges are benchmarks. The lower value is the minimum air flow required to produce an adequate impulse and thus the functionality of the diffuser.

The specified maximum air flow is selected for acoustic reasons and may well be exceeded in individual cases.

The specified values can be adjusted depending on the specific application.

*Values for JPK with motor.

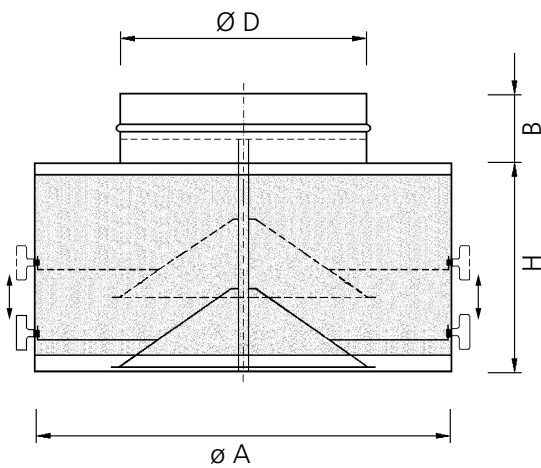


Figure 1. Manual adjustment using locking device on the diffuser.

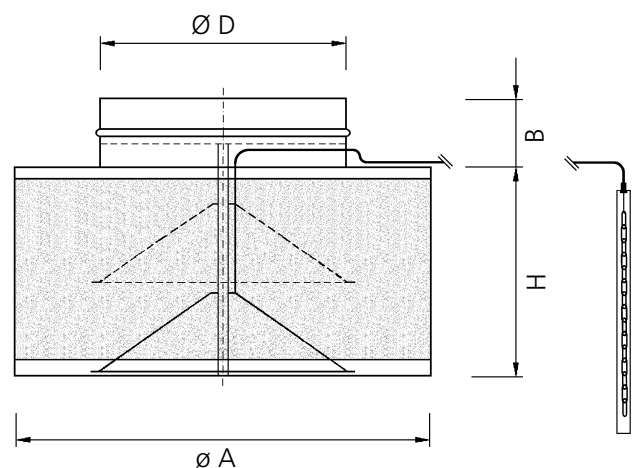


Figure 2. Manual adjustment using bowden cable and locking chain.

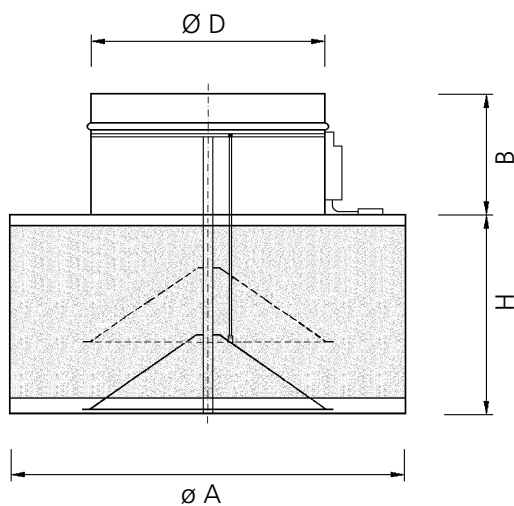


Figure 3. Adjustment by electric motor.

Specification

For ordering, contact your local Swegon sales office.

Specification text

Circular radial diffuser JPK 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
 - Manually by bowden cable
 - Electric motor
- Made of galvanised steel.
- Special colours available on request.