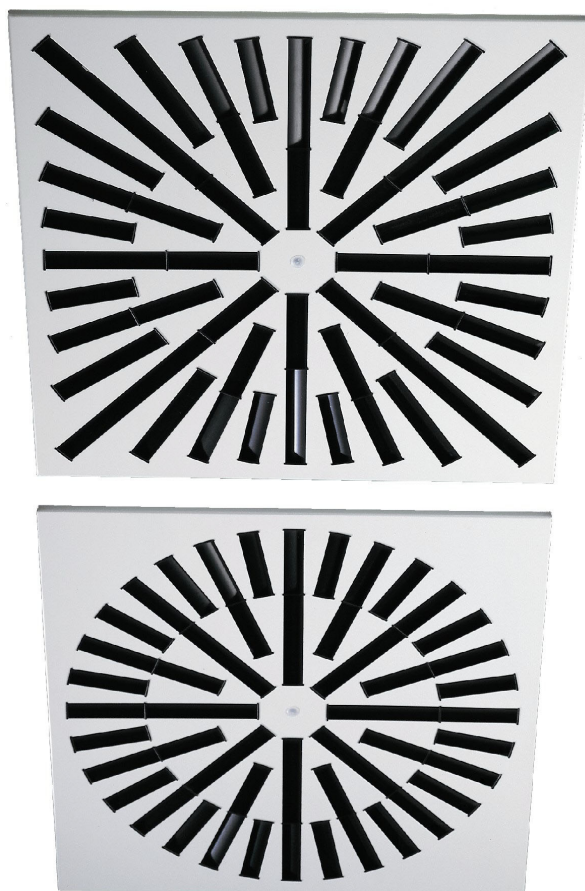




ceiling swirl diffuser DQJ



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Ceiling Swirl Diffuser Model DQj

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Ceiling Swirl Diffuser Model DQJ

Description

The ceiling swirl diffuser type DQJ-Q/S-SR-... / DQJ-Q/S-SQ-... / DQJ-R-... is particularly suitable for installation **in comfort rooms with high air change rates**. Unlike the conventional swirl diffusers, the **air deflection blades can also be adjusted at a later stage**. This can be necessary when obstacles on site obstruct the air flow.

The diagrams clearly show the influence the blade position has on the radial propagation of the jet. **The blades can be adjusted to achieve throw patterns from horizontal to vertical**. This can be important, for example, if the air jet is to be directed toward a specific point where high heat loads are present. In difficult cases, the position of the blades can be determined by carrying out flow tests at the SCHAKO laboratory. Various throw patterns can be set ex works. Unless stated otherwise, air throw pattern "B" will be delivered.

The air diffuser is particularly suitable **for installations with variable volumetric flow**. A **stable jet pattern** is guaranteed by the high exit velocities. Even at a low volumetric flow the jet does not sink abruptly from the ceiling.

If the "critical throw" x_{kr} (m) parameter is smaller than the "horizontal throw" x (m) parameter for your model, then the calculation for the maximum end velocity of jet V_{max} (m/s) is based on the "critical throw" x_{kr} and not on the "horizontal throw" x (m) parameter.

A plenum box with fixing lugs can be fitted to the ceiling swirl diffuser (SK-Q-... for DQJ-Q/S-SR-... / DQJ-Q/S-SQ-..., SK-R-... for DQJ-R/T-SR-...). / DQJ-Q/S-SQ-..., SK-R-... für DQJ-R-SR-...). A perforated straightener is installed in the supply air version and for the return air version, the plenum box is painted on the inside to RAL 9005 (black, standard). In addition, the plenum box can be fitted (at an extra charge) with various components such as damper (-DK...), volumetric flow meter (-VME1), ROB model (-ROB1) (only possible for SK-Q-... plenum box) and rubber lip seal (-GD1). The damper (-DK1) at the connection spigot is for air volume regulation and adjustable from below (only DQJ-Q/S-SR-... / DQJ-Q/S-SQ-...). For plenum boxes SK-Q-..., the damper (-DK1) can be mounted on the room side with mounted diffuser. For plenum boxes SK-R-..., the ceiling diffuser must be removed, before the damper can be adjusted. Alternatively, a cable-operated adjustment (-DK2) can be attached, which allows the damper to be adjusted on the room side even with mounted diffuser.

In the connection spigot of the plenum box, a volumetric flow meter (-VME1) can be integrated. The measurement error of the volumetric flow meter is $\pm 5\%$ at a spigot velocity of 2-5 m/s and a straight flow pattern of at least $1 \times D$. The measurement is carried out with integrated diffuser. By adjusting the throttle damper, the required air volume of each diffuser can be set quickly and correctly.

To allow duct cleaning robots to be inserted from the room side, the distribution sheet in the ROB version (-ROB1) can be removed as well as the damper and the volumetric flow meter (if integrated).

Other accessories (at an extra charge) are hit-and-miss damper (-SS, only DQJ-Q/S-SR-... / DQJ-Q/S-SQ-...) for air volume regulation, ball-impact guard (-BS1, only DQJ-Q/S-SR-... / DQJ-Q/S-SQ-...), motor adjustment (-M1 (for NW 500-625) / -M2 (for NW 800), only DQJ-Q/S-SR / DQJ-Q/S-SR-Z-...-PS-...), 1/4 cover (-AD, only supply air model) and adjustable damper (-DV, only DQJ-R/T-SR-...).

TÜV SÜD has successfully inspected the ceiling swirl diffuser DQJ according to the following rules:

- **VDI 6022, Sheet 1: Hygienic requirements of ventilation and air-conditioning systems**
- **VDI 6022, Sheet 2: Hygienic requirements of ventilation and air-conditioning systems - Measurement methods and investigations during hygienic controls and hygienic inspections.**
- **DIN 1946, Sheet 2: Air-conditioning technology - Health requirements**

For mounting in the ceiling, inspection openings for the electrical connection must be provided on site in sufficient number and size.

Advantages

- Blades are adjustable when the diffusers have already been installed.
- Noise level and pressure loss remain constant in all blade positions.
- High induction ensures very good reduction of the velocity and the temperature difference.
- Stable air jet even at reduced air volumes
- Volumetric flow meter

Ceiling Swirl Diffuser Model DQJ

Blade setting options

Pages 5-8 in the catalogue clearly show the extreme adjustment flexibility of the DQJ-Q/S-SR/SQ type ceiling swirl diffusers. It may become necessary to adjust the position of the blades if, after installation, there are obstacles too close to the diffuser obstructing the air flow, for example columns or cupboards. The "two-way throw" version is ideal for corridors. This avoids any deflection from the wall down to the occupied zones.

The diffuser is preset by the manufacturer to air throw "B" as a standard feature unless specified otherwise when ordering. The air throw patterns can be easily changed at a later stage on site, even with the diffuser installed, without using any special tools. Pressure drops and noise levels remain constant in all blade settings.

Construction

Faceplate

- Galvanised sheet steel (not available for DQJ-S-... model)
- Sheet steel painted to RAL 9010 (white, standard)
- Sheet steel painted to a different RAL colour.
- Stainless steel (V2A) painted in the colour sand silver (not available for DQJ-S-... model)
- Natural colour anodised aluminium (E6/EV1, possible only with concealed mounting) (not available for DQJ-R/S-... model)

Blades

- plastic, similar to RAL colour 9010 (white) or RAL 9005 (black, standard)
- Aluminium painted to the RAL colour of the faceplate (subsequent adjustment of blades not possible)

Blade fixing

- painted sheet steel, faceplate made of stainless steel

Blade holder

- Aluminium ducts

pole brace fastening

- plastic

Pole brace holder

- galvanised sheet steel

concealed mounting pole brace

- Aluminium

Model

- | | |
|-----------------------|--|
| DQJ-Q-SR-... | - with square faceplate, circular blade pattern, standard with screw mounting (-SM). |
| DQJ-Q-SR-Z-...-PS-... | - same as DQJ-Q-SR, but with continuous blades (only for supply air), standard with central mounting (-MM). |
| DQJ-Q-SQ-... | - with square faceplate, square blade pattern, standard with screw mounting (-SM) |
| DQJ-R-SR-... | - with round faceplate, circular blade pattern, standard with concealed mounting (-VM) |
| DQJ-R-SR-Z-...-PS-... | - same as DQJ-R-SR-..., but with continuous blades (only for supply air), standard with central mounting (-MM). If in addition to the supply air swirl diffusers DQJ-Q-SR-Z-...-PS-... also return air diffusers of the DQJ type are to be used in a building project, the concealed mounting (-VM) must be selected for the installation of the return air diffuser to ensure identical optical design. |
| DQJ-S-SR-... | - with square faceplate, circular blade pattern, double-folded edge, especially for use under the ceiling, standard with concealed mounting (-VM). Not possible for NW 800 |
| DQJ-S-SR-Z-...-PS: | - as DQJ-S-SR-..., but with continuous blades (for supply air only), standard with concealed mounting (-VM), double-folded edge, especially for use under the ceiling. Not possible for NW 800. |
| DQJ-S-SQ-... | - with square faceplate, square blade pattern, standard with concealed mounting (-VM), double-folded edge, especially for use under the ceiling. Not possible for NW 800 |
| DQJ-...-...-Z | - for supply air, with air deflection blades |
| DQJ-...-...-A | - for return air, without air deflection blades |

Ceiling Swirl Diffuser Model DQJ

Accessories

Plenum box (SK-Q-01-...)

- for DQJ-Q/S-SR-... / DQJ-Q/S-SR-Z-...-PS-... / DQJ-Q/S-SQ-...
- Galvanised sheet steel housing
- concealed mounting pole brace made of aluminium
- concealed mounting made of plastic

Plenum box (SK-R-01-...)

- for DQJ-R-SR-... / DQJ-R-SR-Z-...-PS-...
- Galvanised sheet steel housing
- concealed mounting pole brace made of aluminium
- concealed mounting made of plastic

Damper (-DK1)

- in the plenum box SK-Q-... / SK-R-...
- Throttle damper made of galvanised sheet steel
- Damper fastening made of plastic

Damper (-DK2)

- same as DK1, but with cable-operated adjustment (at an extra charge)

Volumetric flow meter (-VME1)

- in the plenum box SK-Q-.../SK-R-... at the connection spigot
- Holder made of galvanised sheet steel
- Measuring sensor made of plastic
- Aluminium connections

ROB version (-ROB1)

- only possible for SK-Q-... plenum box
- Removable diffuser plate, damper and volumetric flow meter

Rubber lip seal (-GD1)

- in the plenum box SK-Q-.../SK-R-... at the connection spigot.
- Special rubber

Hit-and-miss damper (-SS)

- only possible for DQJ-Q/S-SR-... / DQJ-Q/S-SQ-...
- Electrolytically galvanised sheet steel frame
- Electrolytically galvanised sheet steel damper
- Galvanised spring steel damper fixing

Ball-impact guard (-BS)

- only possible for DQJ-Q-SR-... / DQJ-Q-SQ-... with SM mounting and for NW 800 only possible with -VS
- Steel painted to RAL 9010 (white), other RAL colours possible at an extra charge.

Motor adjustment (-M1 / -M2)

- only possible DQJ-Q-SR-Z-...-PS-... for NW 500-800 with SM mounting (-SM)
- Galvanised sheet steel ring
- Plastic blade adjuster
- Brass adjustment

1/4 cover plate (-AD)

- only supply air version possible
- galvanised sheet steel

Damper (-DV)

- only possible DQJ-R-SR-... with SM mounting (-SM)
- Galvanised sheet steel damper plate
- Aluminium damper fixing
- Galvanised sheet steel setting screw
- Galvanised sheet steel casing

Internal insulation (-li)

- thermal insulation at the inside of the plenum box

External insulation (-la)

- thermal insulation at the outside of the plenum box

Fastening

Screw mounting (-SM)

- with 4 raised countersunk head tapping screws (on site), standard for model DQJ-Q-... (not possible for NW 800, without motor adjustment), standard for DQJ-Q-SR-Z-800-...-PS-...-M2 (with motor adjustment, not possible for DQJ-S-...)

Concealed mounting (-VM)

- Pole brace fastening (at an extra charge) only possible in conjunction with SK-Q-.../SK-R-...; without SK-Q-.../SK-R-..., the counter pole brace must be provided on site (standard for DQJ-R-... , standard for NW 800 with DQJ-Q/S-...).

Central mounting (-MM)

- Central mounting only possible in connection with plenum box, standard for DQJ-Q-SR-Z-...-PS-... and DQJ-R-SR-Z-...-PS-... models up to NW 625 (not possible for exhaust air)

Screw mounting with concealed mounting (-VS)

- Screw mounting (-SM) in combination with concealed mounting (-VM)
- only possible for NW 800 in conjunction with ball-impact guard (-BS)

Attention!

We would like to point out that for cleaning stainless steel models, only suitable cleaning materials may be used!

Ceiling Swirl Diffuser Model DQJ

Models and dimensions

Air throw pattern

Air throw pattern "A" : all blades in position 2

Air throw pattern "B" : blades in positions 1+2, preset by manufacturer

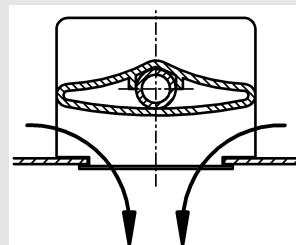
Air throw pattern "C" : without blades (only possible for return air)

Air throw pattern "V" : all blades in position 1 (heating mode only)

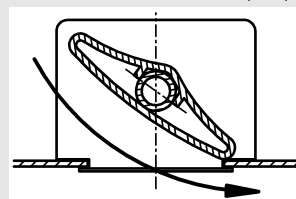
- The ceiling swirl diffuser with NW 310 is not available with air throw pattern "B".

Air throw pattern "B"

Blade position 1 (-L1)

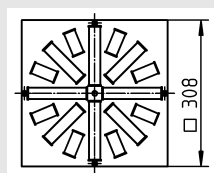


Blade position 2 (-L2)

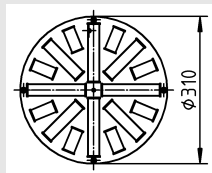


NW 310

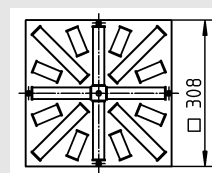
DQJ-Q/S-SR-Z-310-...-PS-...



DQJ-R-SR-Z-310-...-PS-...

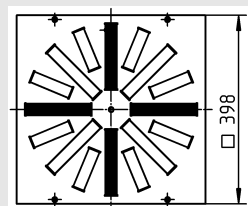


DQJ-Q/S-SQ-Z 310-...-PS-...

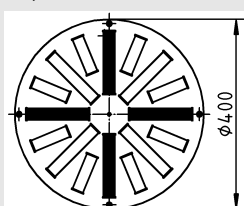


NW 400

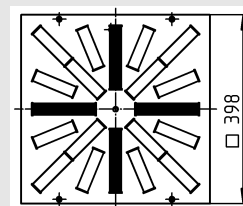
DQJ-Q/S-SR-Z-400-...-PS-...



DQJ-R-SR-Z-400-...-PS-...



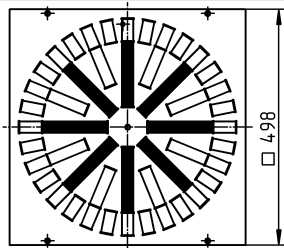
DQJ-Q/S-SQ-Z-400-...



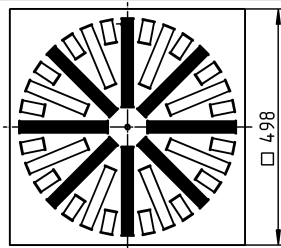
Ceiling Swirl Diffuser Model DQJ

NW 500

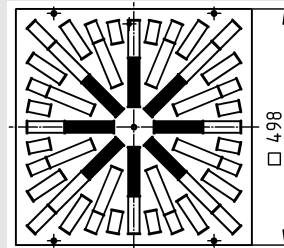
DQJ-Q/S-SR-Z-500-...



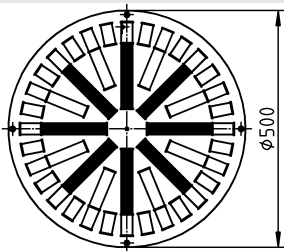
DQJ-Q/S-SR-Z-500-...-PS-...



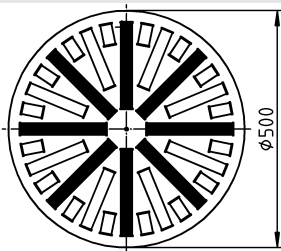
DQJ-Q/S-SQ-Z-500-...



DQJ-R-SR-Z-500-...

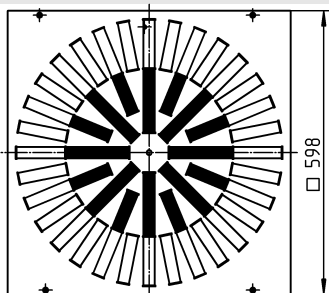


DQJ-R-SR-Z-500-...-PS-...

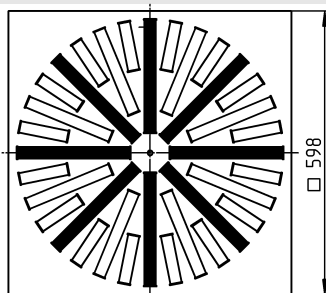


NW 600

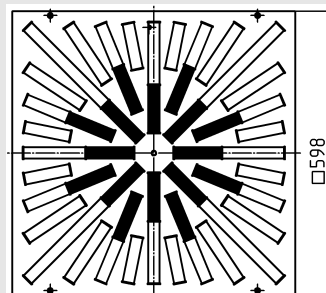
DQJ-Q/S-SR-Z-600-...



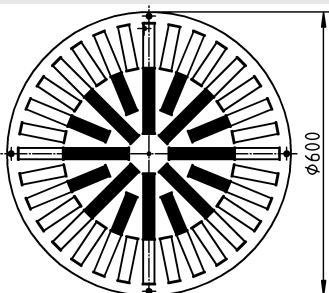
DQJ-Q/S-SR-Z-600-...-PS-...



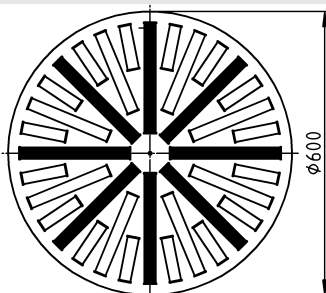
DQJ-Q/S-SQ-Z-600-...



DQJ-R-SR-Z-600-...



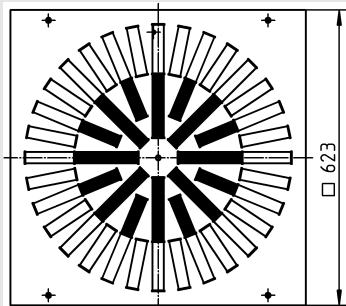
DQJ-R-SR-Z-600-...-PS-...



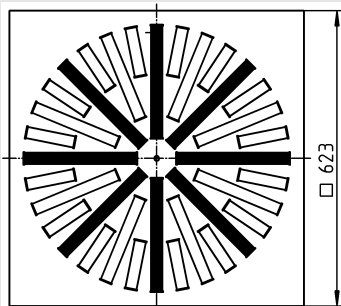
Ceiling Swirl Diffuser Model DQJ

NW 625

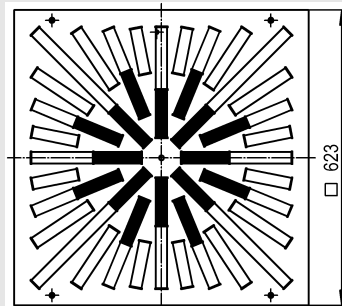
DQJ-Q/S-SR-Z-625-...



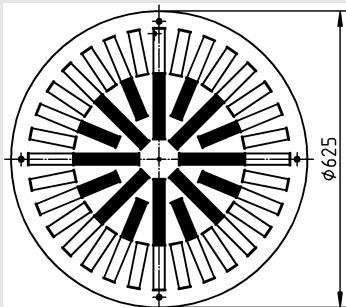
DQJ-Q/S-SR-Z-625-...-PS-...



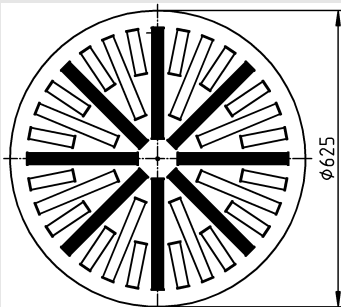
DQJ-Q/S-SQ-Z-625-...



DQJ-R-SR-Z-625-...



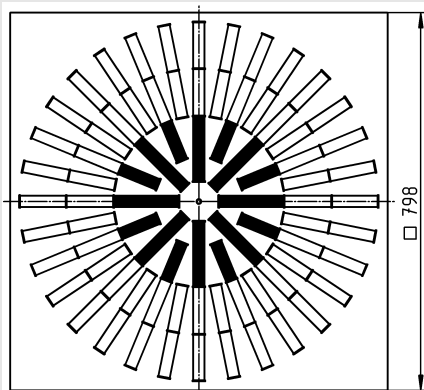
DQJ-R-SR-Z-625-...-PS-...



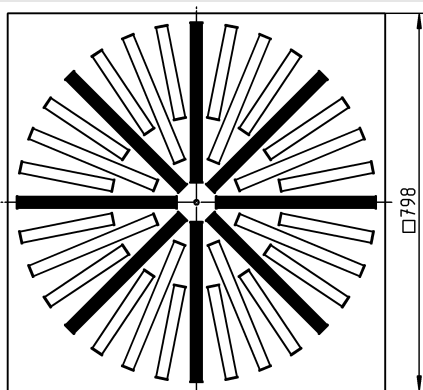
NW 800

(without motor adjustment only available with concealed mounting, DQJ-Q-SR-Z-800-...PS-...-M2-... (with motor adjustment) only possible with SM)

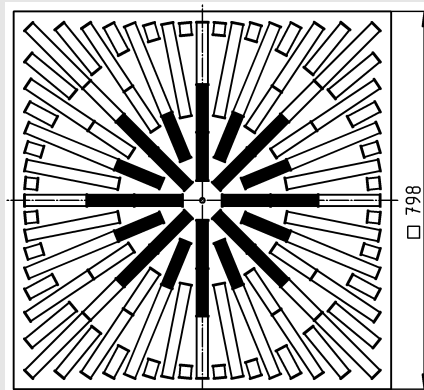
DQJ-Q-SR-Z-800-...



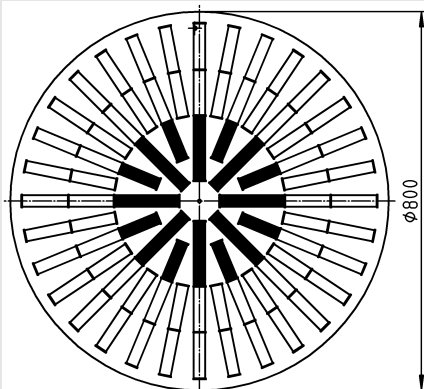
DQJ-Q-SR-Z-800-...-PS-...



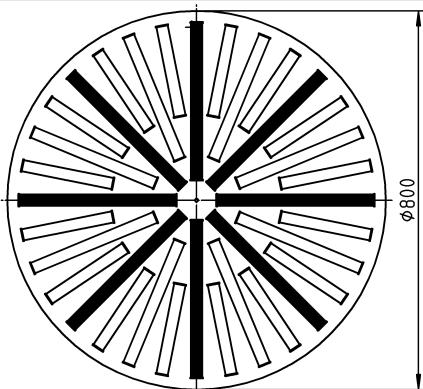
DQJ-Q-SQ-Z-800-...



DQJ-R-SR-Z-800-...



DQJ-R-SR-Z-800-...-PS-...

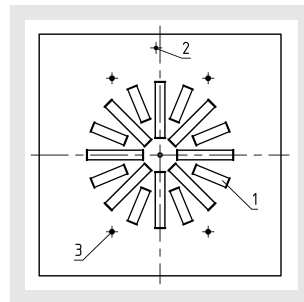


Ceiling Swirl Diffuser Model DQJ

Special model

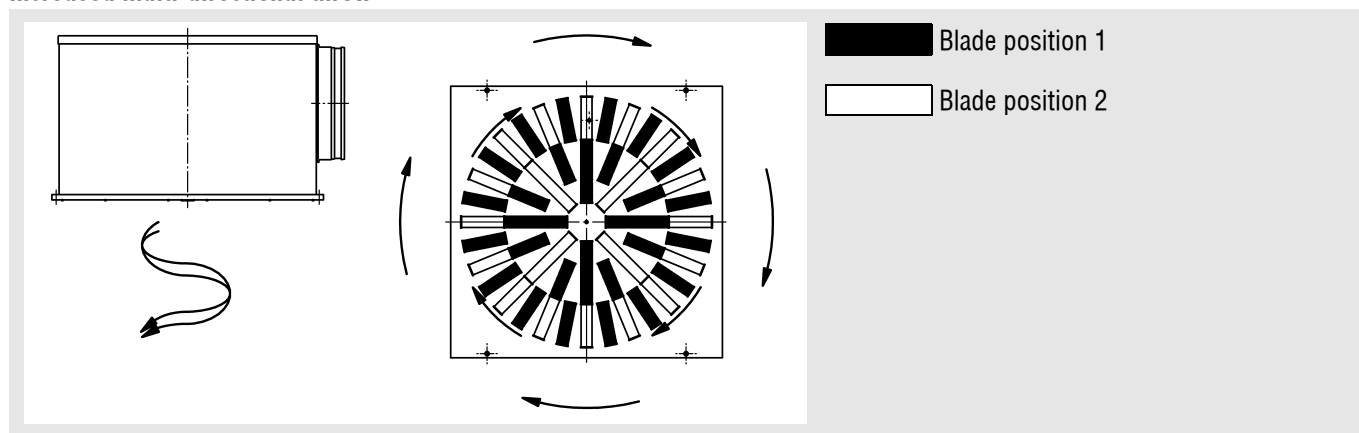
If, for constructional reasons (e.g. ceiling grid), a particular faceplate size has been defined, it is possible to punch a smaller swirl diffuser (1) into the faceplate. If a plenum box is required, it will be delivered, as a standard feature, in the same size as the punch and not in the size of the faceplate. However, if the plenum box is larger, on customer's special request, the standard hole (2) in the blade can be placed in the faceplate, to allow damper adjustment.

In case of a screw mounting, the screw holes (3) are adjusted to the plenum box.

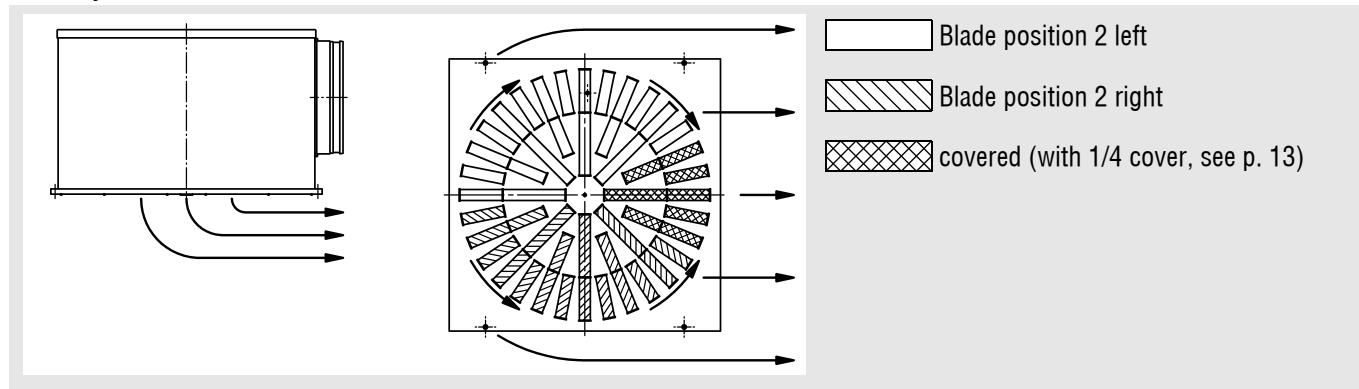


Special blade settings

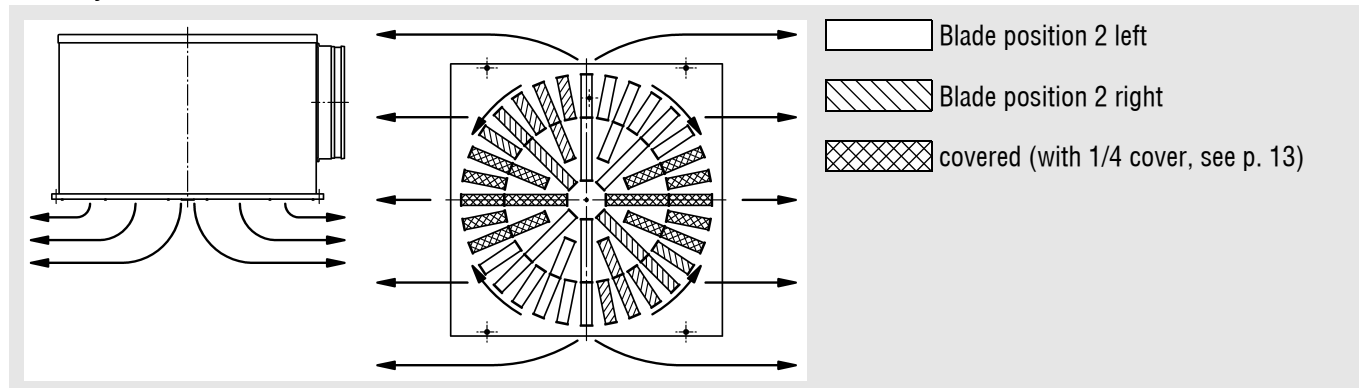
Increased multi-directional throw



One-way throw



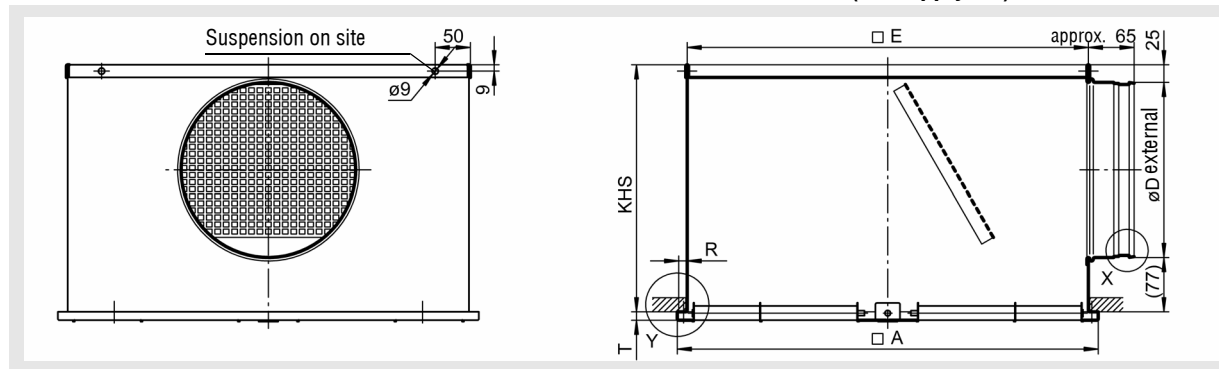
Two-way throw



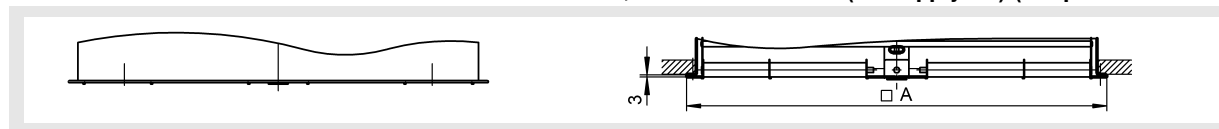
Ceiling Swirl Diffuser Model DQJ

Dimensions

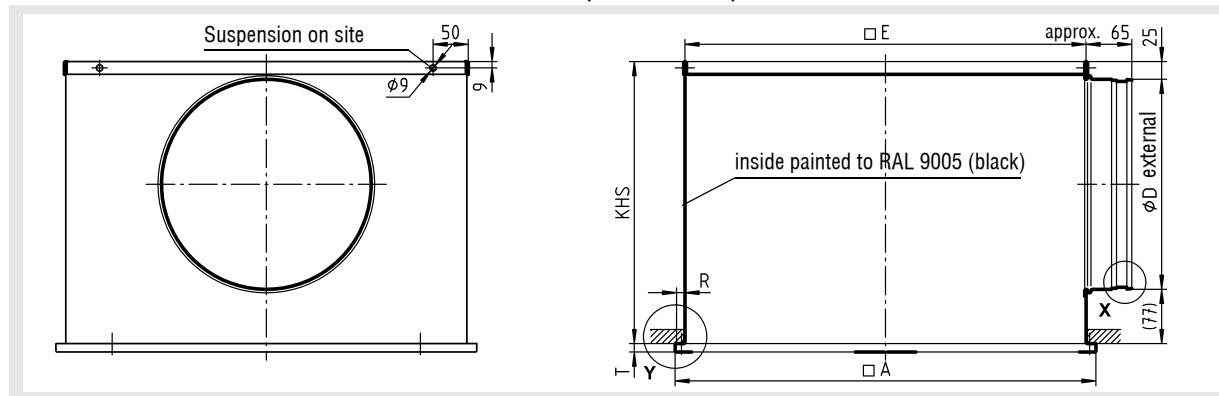
DQJ-Q-SR-Z-... / DQJ-Q-SR-Z-...-PS-... / DQJ-Q-SQ-Z-..., with SK-Q-01-Z-... (for supply air)



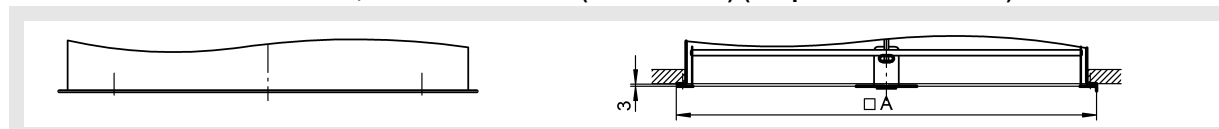
DQJ-S-SR-Z-... / DQJ-S-SR-Z-...-PS-... / DQJ-S-SQ-Z-..., with SK-Q-01-Z-... (for supply air) (not possible for NW800)



DQJ-Q-SR-A-... / DQJ-Q-SQ-A-..., with SK-Q-01-A-... (for return air)



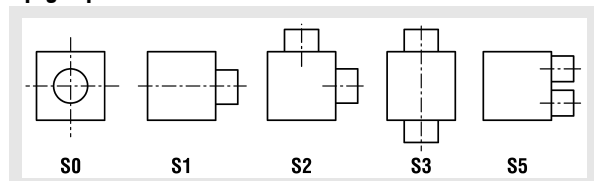
DQJ-S-SR-A-... / DQJ-S-SQ-A-..., with SK-Q-01-A-... (for return air) (not possible for NW800)



Available sizes

NW	□ A	□ E	R	T	SK-Q-01-Z-...		SK-Q-01-A-...		øD _{max} for ...-S5
					KHS	øD	KHS	øD	
310	308	290	8	7	260	158	300	198	98
400	398	370	12	12	260	158	300	198	138
500	498	470			300	198	350	248	198
600	598	570			350	248	400	298	248
625	623	570	24		350	248	400	298	248
800	798	770	12		455	353	455	353	353

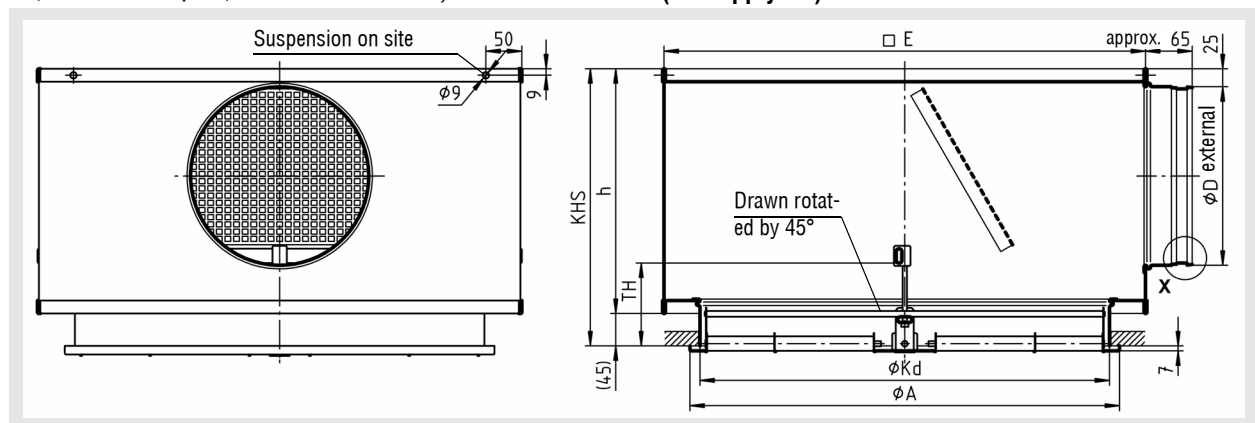
Spigot position



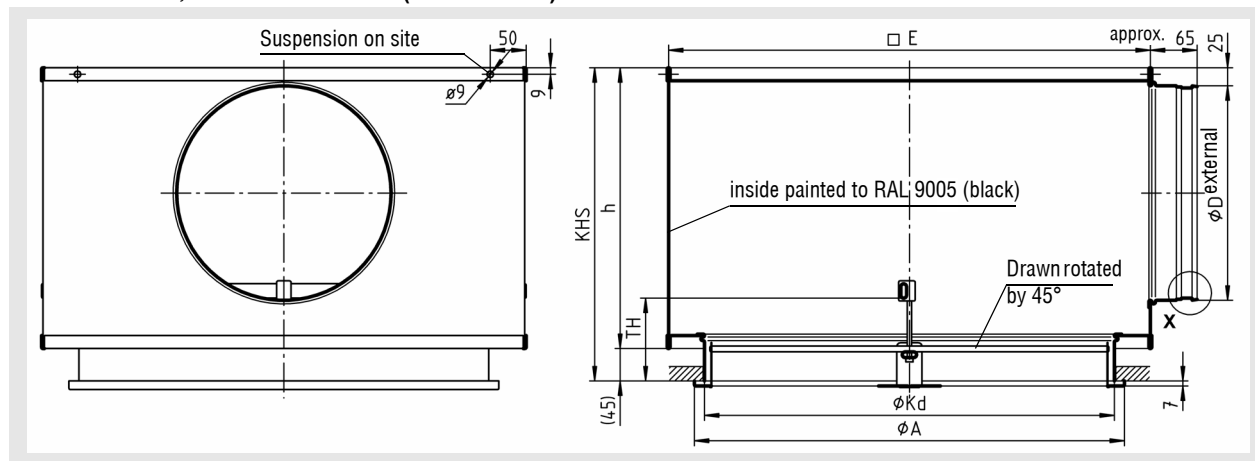
KHS= standard height of plenum box
 Special height of plenum box øD + 102mm,
 but at least 200mm
 Note: For SK-Q-01-Z-...-DK1 / -DK2-...-S0,
 the height of plenum box changes to
 KHS=280 mm for NW310 and NW400 (see p.
 12).

Ceiling Swirl Diffuser Model DQJ

DQJ-R-SR-Z-... / DQJ-R-SR-Z-...-PS-..., with SK-R-01-Z-... (for supply air)



DQJ-R-SR-A-..., with SK-R-01-A-... (for return air)



Available sizes

NW	ØA	□E	ØKd	TH	SK-R-01-Z-...			SK-R-01-A-...			ØD _{max} for ...-S5
					KHS	h	ØD	KHS	h	ØD	
310	310	405	298	115	295	250	158	335	290	198	158
400	400	445	370		295	250	158	335	290	198	178
500	500	545	470		335	290	198	385	340	248	198
600	600	670	570		385	340	248	435	390	298	298
625	625	670	570		385	340	248	435	390	298	298
800	800	845	770		490	445	353	490	445	353	353

KHS= standard height of plenum box

Special height of plenum box $\phi D + 137$ mm, but at least 235 mm

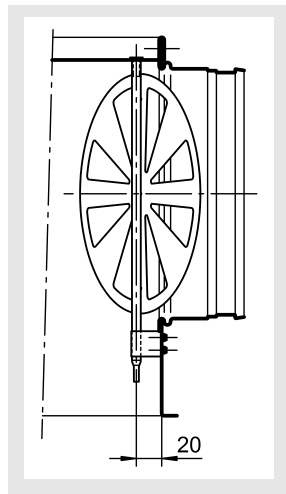
Note: For SK-R-01-Z-...-DK1 / -DK2-...-S0, the height of plenum box changes to $h=280$ mm for NW310 and NW400 and to $h=300$

For the spigot position, see

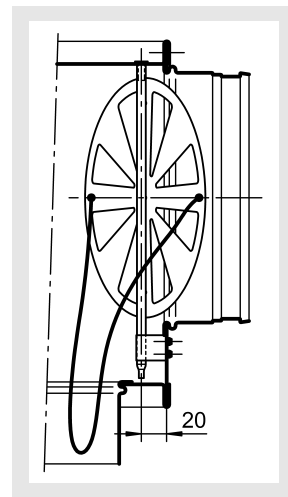
Ceiling Swirl Diffuser Model DQj

Dimensions of accessories

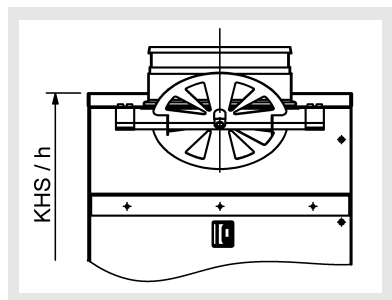
Damper (-DK1)



Damper (-DK2) with cable-operated adjust- ment



Height of plenum box with spigot from above (-S0)

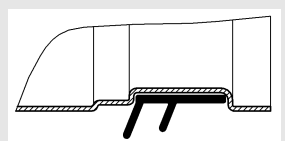


For the model with spigot from above (-S0) in combination with damper (-DK1 / -DK2), the height of plenum box KHS (for SK-Q-01-Z-...) and height of plenum box h (for SK-R-01-Z-...) change for the following NW as fol-

NW	SK-Q-01-Z-...		SK-R-01-Z-...		
	KHS	øD	KHS	h	øD
310	280	158	325	280	158
400	280	158	325	280	158
500	-	-	345	300	198

Rubber lip seal (-GD1)

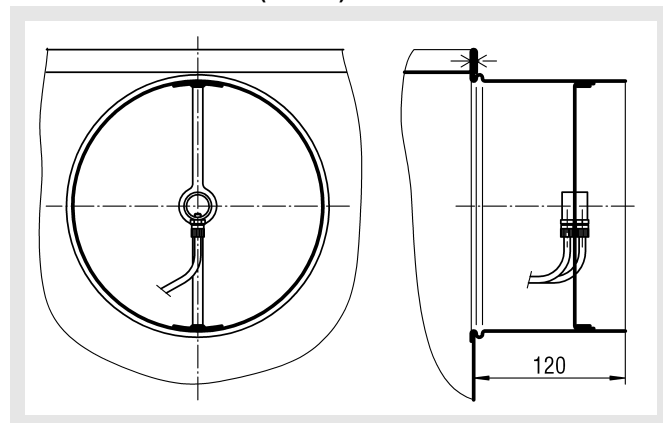
Detail X



ROB version (-ROB1) (only possible for SK-Q-01-... plenum box)

Removable diffuser plate,
damper and volumetric flow
meter.

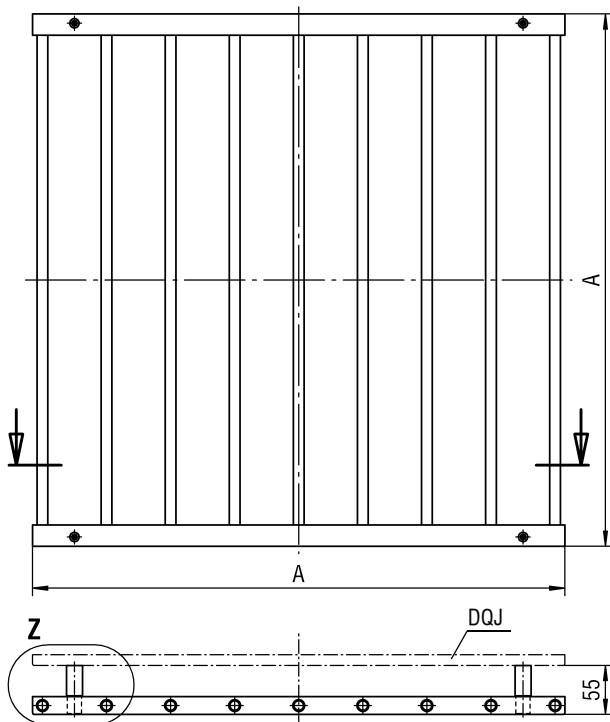
Volumetric flow meter (-VME1)



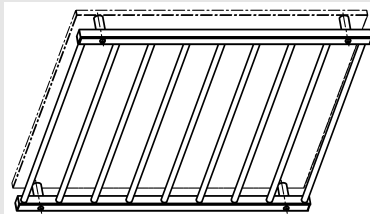
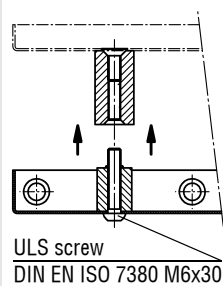
Ceiling Swirl Diffuser Model DQJ

Ball-impact guard (-BS)

(only possible for DQJ-Q-SR-... / DQJ-Q-SQ-... with SM mounting and for NW 800 with VS mounting)



Detail Z



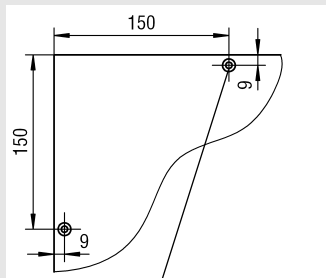
Available sizes

NW	□ A
310	308
400	398
500	498
600	598
625	623
800*	798

* NW 800:
with VS mounting

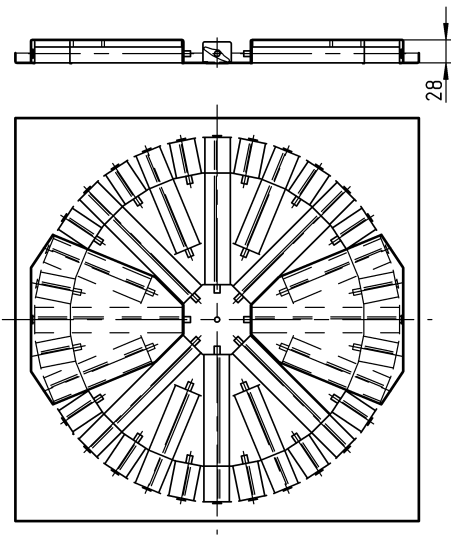
Dimensions VS mounting (for NW 800 only)

SM mounting for NW 310-625,
see p. 6 ff



Indentation for slotted shallow-raised
countersunk-head tapping screw DIN

1/4 cover (-AD) (only possible for supply air model)
for 1- or 2-sided shielding



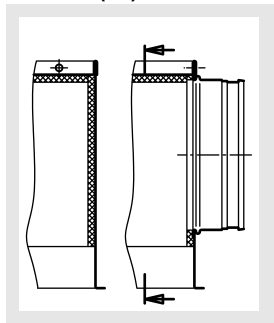
Number of covered blades

NW	DQJ-Q/S-SR-Z-... DQJ-Q/S-SR-Z-...-PS-... DQJ-R-SR-Z-... DQJ-R-SR-Z-...-PS-...	DQJ-Q/S-SQ-Z-...
310	3	3
400	3	3
500	5	5
600	5	5
625	5	5
800	5	9

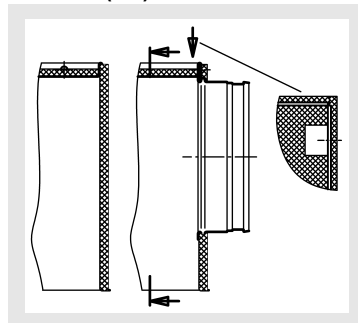
Number of covered blades (x2) for two-sided shielding

Ceiling Swirl Diffuser Model DQJ

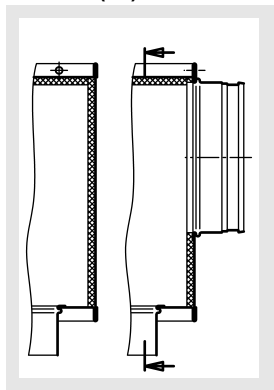
Insulation for SK-Q-01-...
internal (-li)



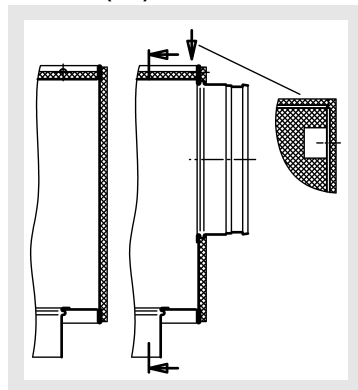
external (-la)



Insulation for SK-R-01-...
internal (-li)

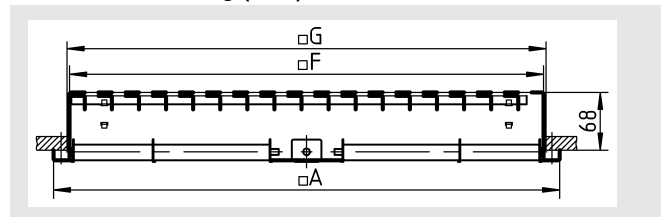


external (-la)

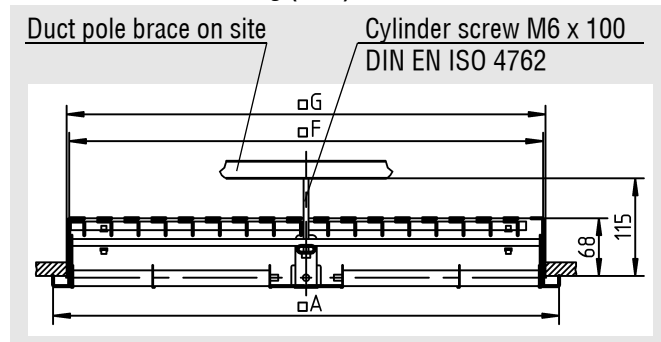


Hit-and-miss damper (-SS)
(only DQJ-Q-SR-... / DQJ-Q-SQ-...)

with screw mounting (-SM)



with concealed mounting (-VM)



Available sizes (-SS)

NW	A	F	G
310	308	290	295
400	398	365	370
500	498	465	470
600	598	565	570
625	623	565	570
800	798	765	770

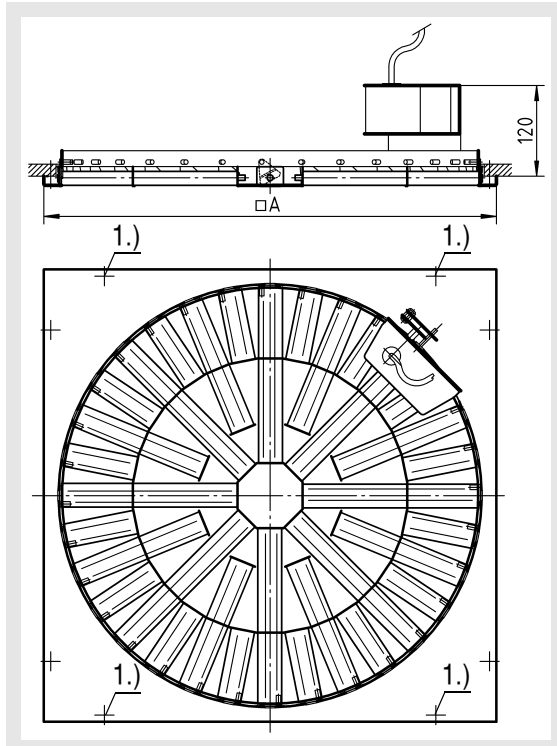
A hit-and-miss damper is only available for a sheet steel or aluminium faceplate together with SM mounting.

Ceiling Swirl Diffuser Model DQJ

Motor adjustment (-M1 / -M2)

24 V AC, 2-point activation

(only possible for DQJ-Q-SR-Z-...-PS-... with screw mounting).



1.) for NW 800, 4 additional mounting holes for screw mounting (-SM).

The plenum box type SK-Q-01-Z-... is without a hole for the cable. Cable routing should be done on site. The motorised model increases the noise level by 3 dB(A).

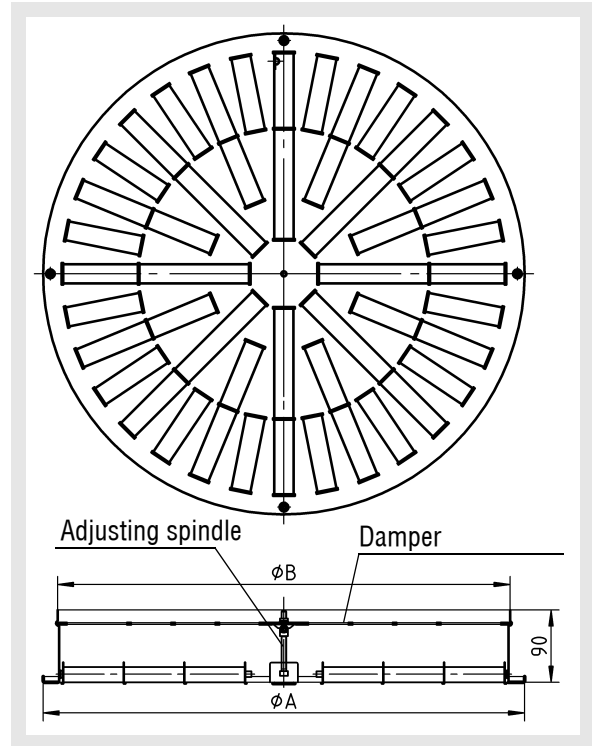
If the plenum box has a damper, the installation of the damper is displaced by 90°, and for its adjustment the faceplate must be removed.

Available sizes (-M1 / -M2)

NW	□ A	Controller
500	498	E044 (Belimo LM24A-F)
600	598	E044 (Belimo LM24A-F)
625	623	E044 (Belimo LM24A-F)
800	798	E047 (Belimo NM24A-F)

Adjustable damper (-DV)

only possible DQJ-R-SR-... with screw mounting (-SM)



The noise level increases by 4 dB (A) with an adjustable damper (-DV) compared with the diagram values with a plenum box.

Available sizes (-DV)

NW	øA	øB
310	310	290
400	400	370
500	500	460
600	600	560
625	625	560
800	800	760

Technical data

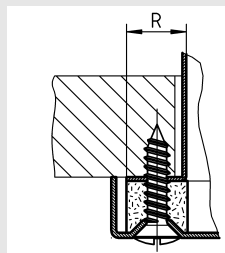
	E044 (-M1)	E047 (-M2)
Supply voltage	24 V AC $\pm 10\%$ 50...60 Hz	24 V AC $\pm 10\%$ 50...60 Hz
Power consumption	1 W @ rated torque	1.5 W @ rated torque
Dimensioning	1.5 VA	3.5 VA
Protection type	IP54	IP54
Protection class	III (safety extra low voltage)	III (safety extra low voltage)
Ambient temperature	-30°C ... +50 °C	-30°C ... +50 °C
Maintenance	maintenance-free	maintenance-free

Ceiling Swirl Diffuser Model DQJ

Fastening methods

Screw mounting (-SM)

Detail Y



NW	R
310	8
400	12
500	12
600	12
625	24

DQJ-Q-SR-... / DQJ-Q-SQ-...:

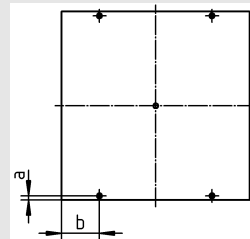
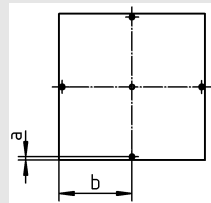
In case of screw mounting, the ceiling swirl diffuser is fastened to the plenum box with 4 on site countersunk screws (not available for NW 800).

DQJ-R-SR-...:

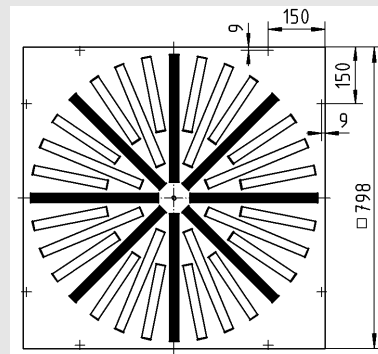
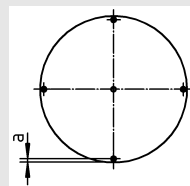
In case of screw mounting (SM), the ceiling swirl diffuser will be mounted to the ceiling with 4 on site countersunk screws, but this is only possible without a plenum box.

Indentation for slotted shallow-raised countersunk-head tapping screw

(shown without perforation)



DQJ-Q/S-SR-...-800-...-PS-...-M2-...



DQJ-Q-SR-... / DQJ-Q-SQ-... / DQJ-R-SR-...

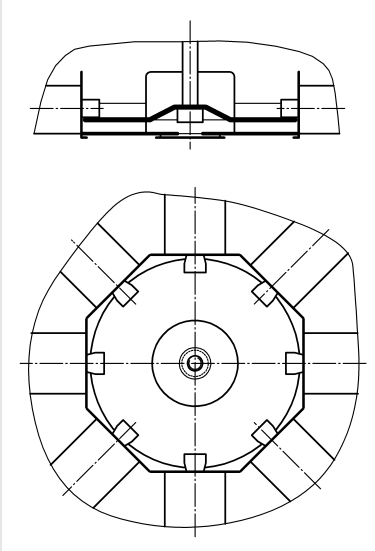
NW	a	b
310	7	154
400	9	80
500		
600		
625	21,5	

- **DQJ-R-SR-...** with screw mounting (-SM) only available without plenum box, as a standard feature, this model is with concealed mounting (-VM).
- **NW 310** with indentation for slotted shallow-raised countersunk-head tapping screw DIN ISO 7051 pitch 3.9 (on site)
- **NW 400-625** with indentation for slotted shallow-raised countersunk-head tapping screw DIN ISO 7051 pitch 4.8 (on site)
- **NW 800** is only available in concealed mounting (exception: DQJ-Q-SR-Z-800-...-PS-...-M2-...)!)

Ceiling Swirl Diffuser Model DQJ

Central mounting (-MM)

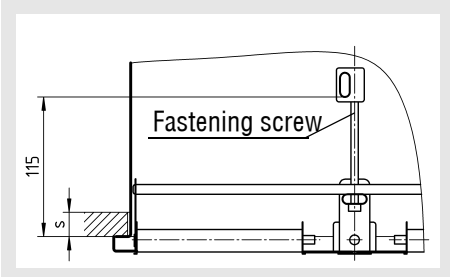
DQJ-Q-SR-Z-...-PS-... / DQJ-R-SR-Z-...-PS-... / DQJ-S-SR-Z-...-PS-... up to NW 625 (not possible for exhaust air)



In case of a central mounting, the ceiling swirl diffuser is fastened to the plenum box with a retaining plate and an Allen screw DIN EN ISO 4762 M6.

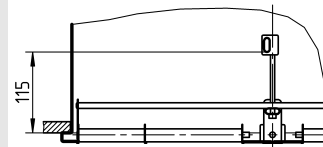
Installation

Plenum box below the ceiling (standard)



Concealed mounting (-VM)

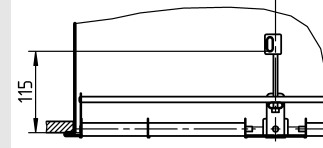
DQJ-Q-SR-Z-... / DQJ-Q-SQ-Z-... / DQJ-R-SR-Z-...



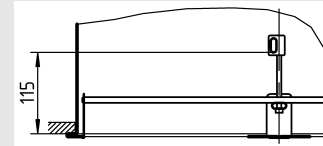
DQJ-Q-SR-A-... / DQJ-Q-SQ-A-... / DQJ-R-SR-A-...



DQJ-S-SR-Z-... / DQJ-S-SQ-Z-...



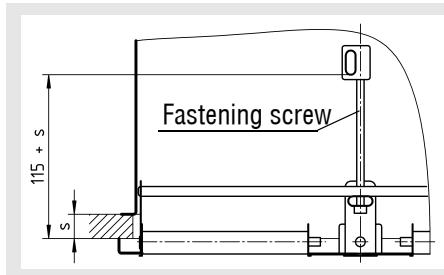
DQJ-S-SR-A-... / DQJ-S-SQ-A-...



In concealed mounting, the swirl diffuser is fastened to the plenum box with a pole brace and an Allen screw DIN EN ISO 4762 M6 (standard for NW 800 with DQJ-Q-...).

Attention: The max. torque of the fastening screw is 0.4 Nm

Plenum box above the ceiling



Attention:

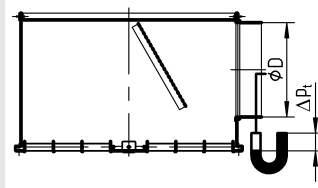
In case of an installation above the ceiling you have to specify the thickness of the ceiling "s".
Screw length = 120 + s.

Ceiling Swirl Diffuser Model DQJ

Technical data

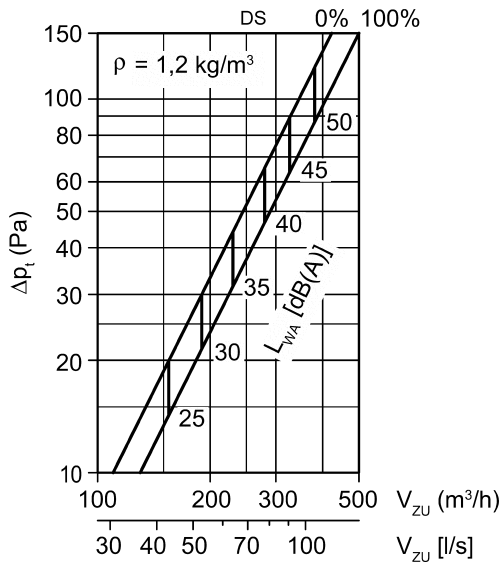
Pressure loss and noise level

DQJ-...-SR-Z-... / DQJ-...-SR-Z-...-PS-...
for supply air, with plenum box

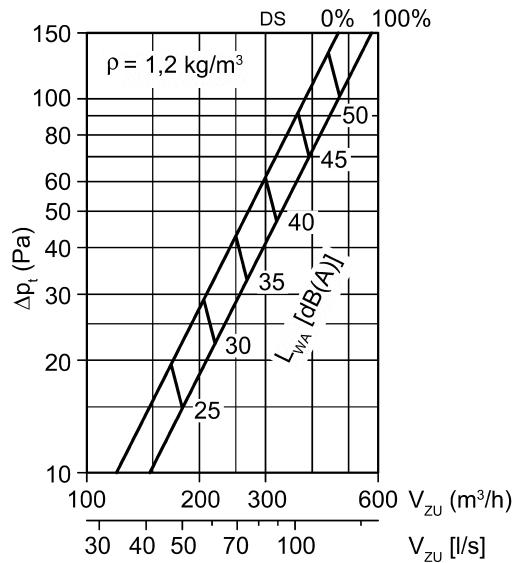


Damper position (DS):
0% = CLOSED / 100% =
OPEN

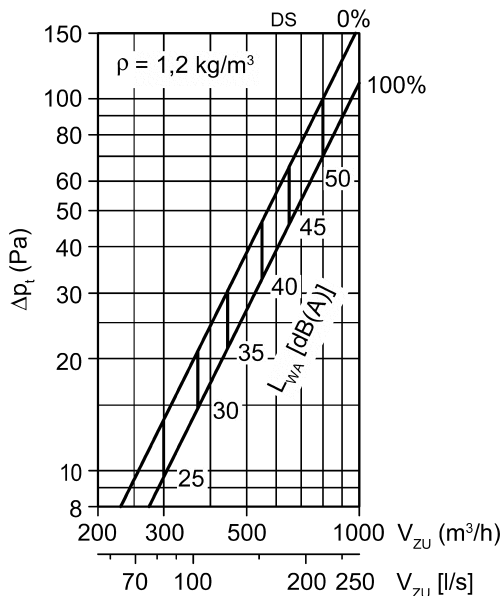
DQJ-...-SR-Z-310-...-PS-...



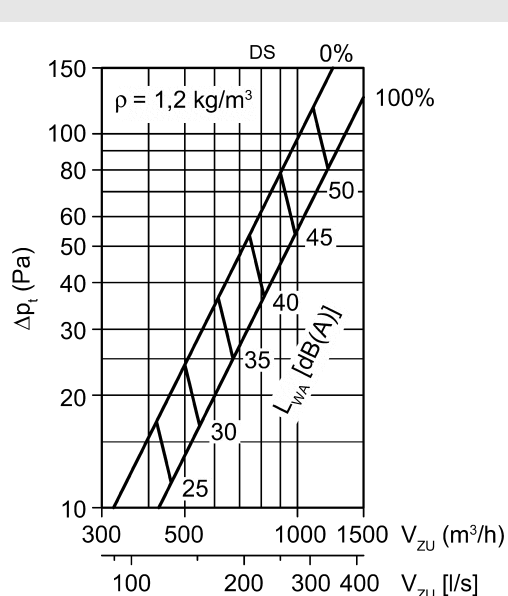
DQJ-...-SR-Z-400-...-PS-...



DQJ-...-SR-Z-500-... / DQJ-...-SR-Z-500-...-PS-...

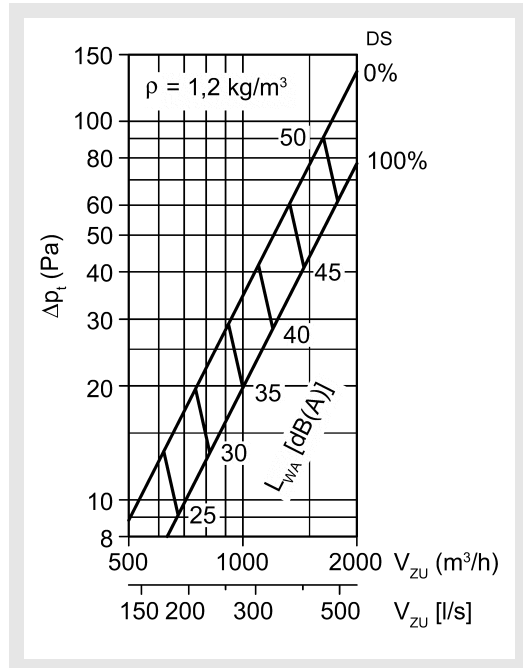


DQJ-...-SR-Z-600/625-... / DQJ-...-SR-Z-600/625-...-PS-...



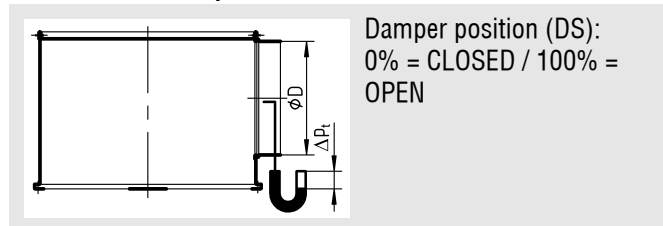
Ceiling Swirl Diffuser Model DQJ

DQJ-Q/R-SR-Z-800-... / DQJ-Q/R-SR-Z-800-...-PS-...

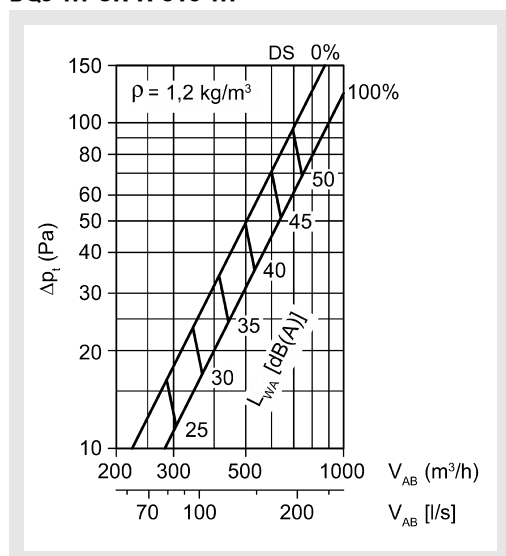


DQJ-...-SR-A

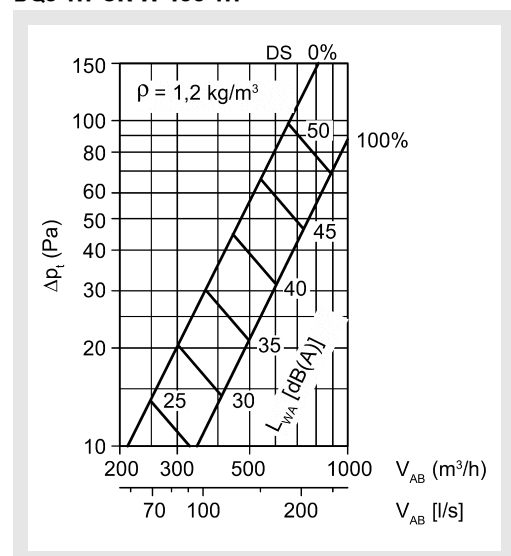
for return air, with plenum box



DQJ-...-SR-A-310-...

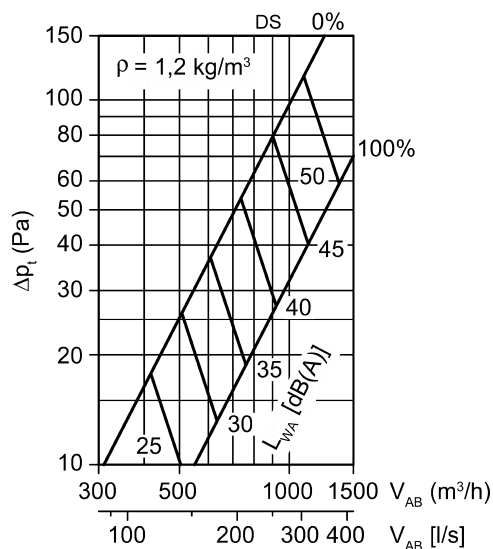


DQJ-...-SR-A-400-...

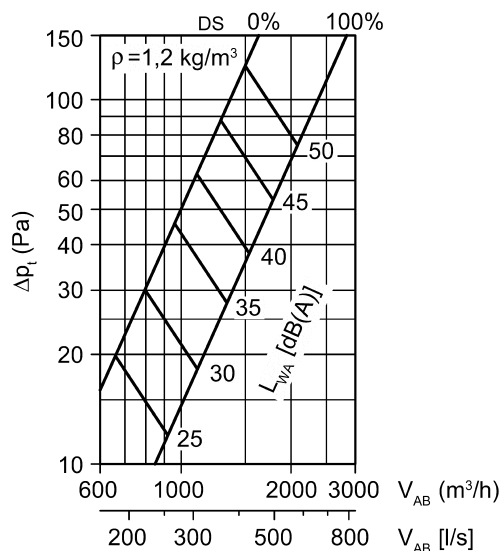


Ceiling Swirl Diffuser Model DQJ

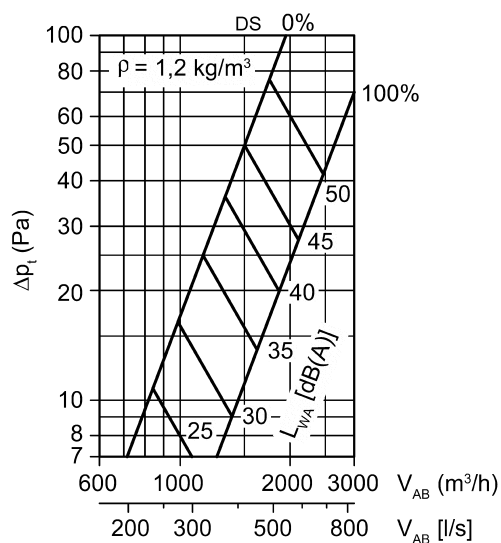
DQJ-...-SR-A-500-...



DQJ-...-SR-A-600/625-...

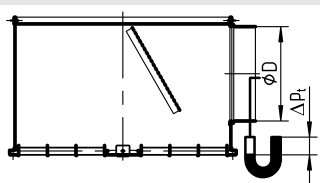


DQJ-Q/R-SR-A-800-...



DQJ-...-SQ-Z-...

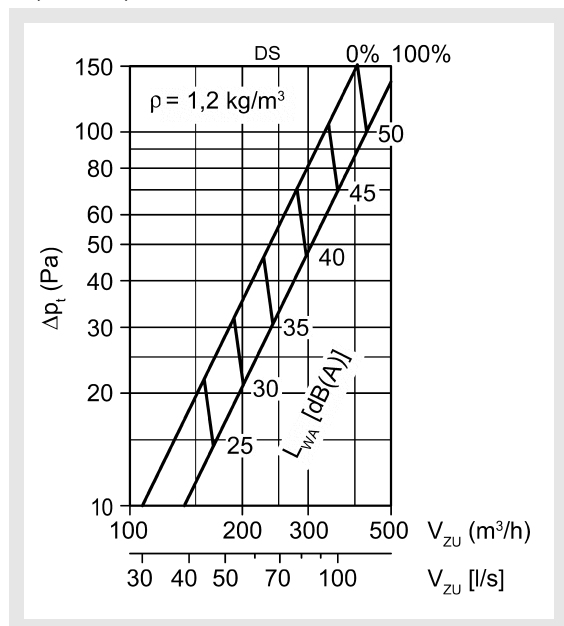
for supply air, with plenum box



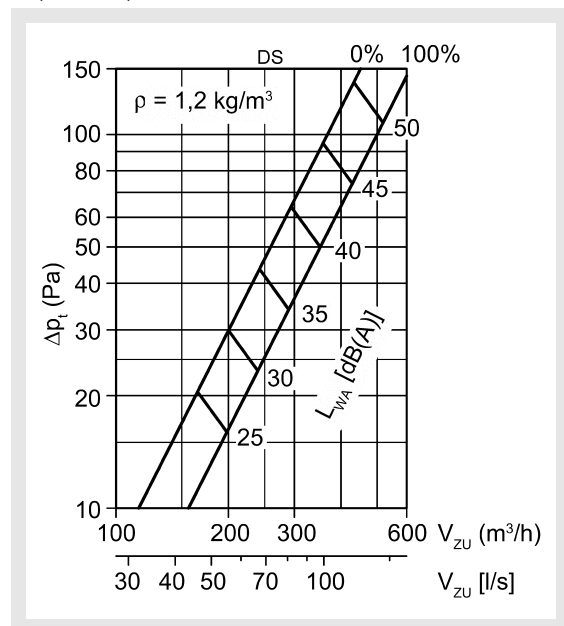
Damper position (DS):
0% = CLOSED / 100% = OPEN

Ceiling Swirl Diffuser Model DQJ

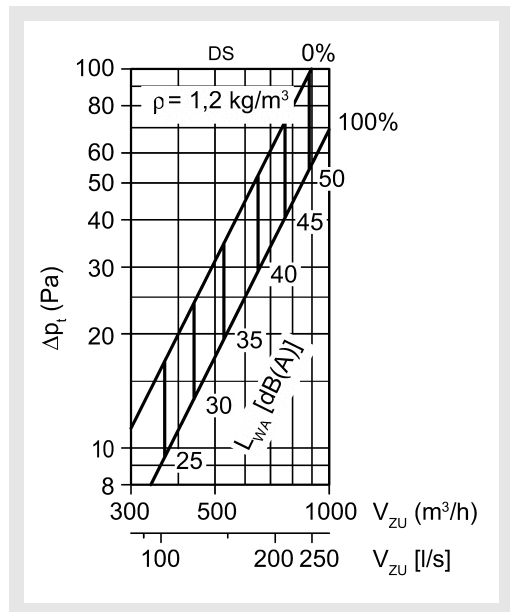
DQJ-...-SQ-Z-310-...-PS-...



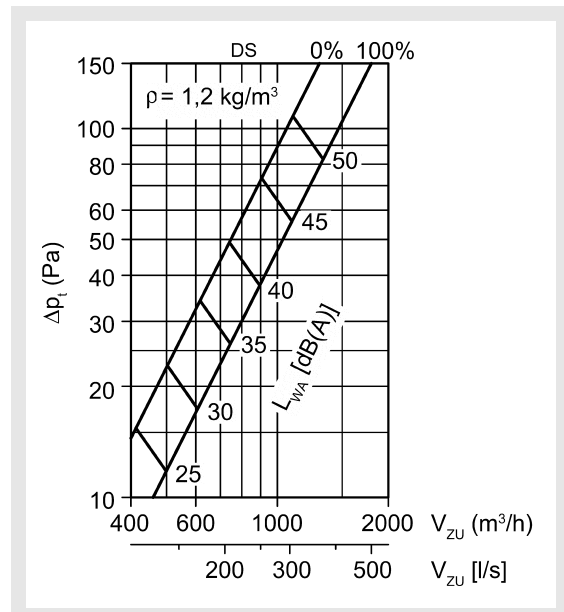
DQJ-...-SQ-Z-400-...



DQJ-...-SQ-Z-500-...

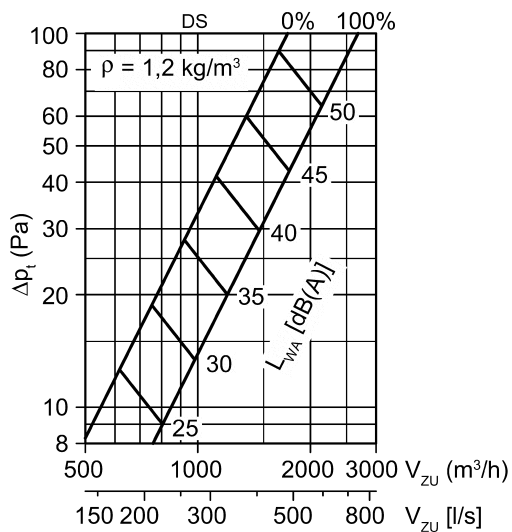


DQJ-...-SQ-Z-600/625-...



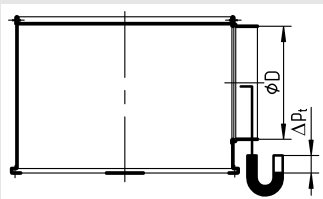
Ceiling Swirl Diffuser Model DQJ

DQJ-Q-SQ-Z-800-...



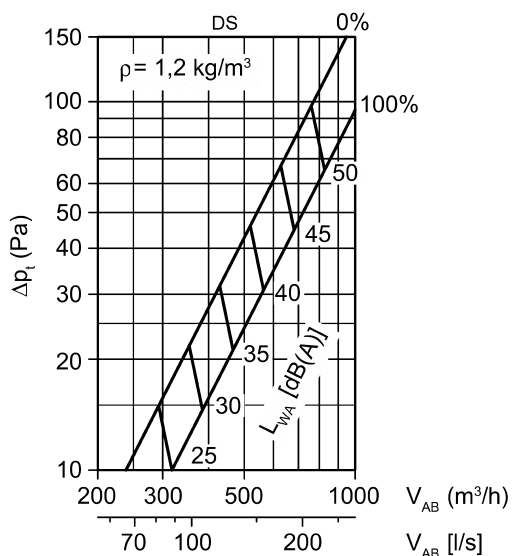
DQJ-...-SQ-A-...

for return air, with plenum box

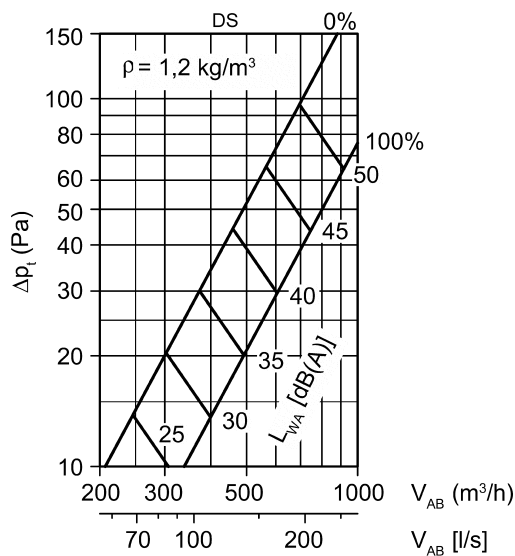


Damper position (DS):
0% = CLOSED / 100% = OPEN

DQJ-...-SQ-A-310-...

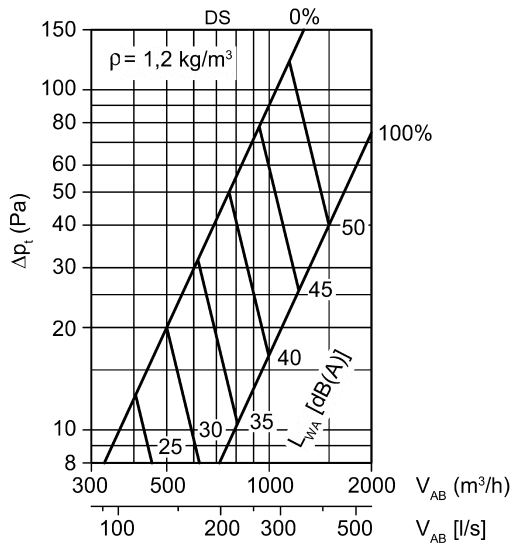


DQJ-...-SQ-A-400-...

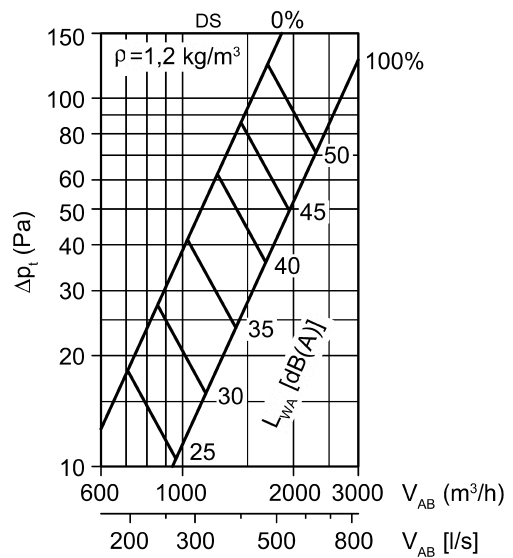


Ceiling Swirl Diffuser Model DQJ

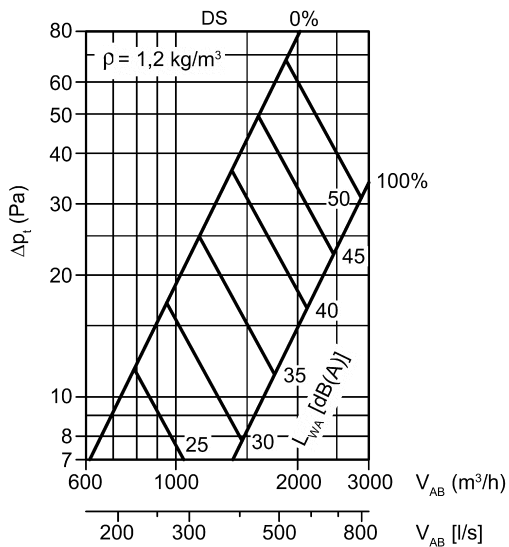
DQJ-...-SQ-A-500-...



DQJ-...-SQ-A-600/625-...



DQJ-Q-SQ-A-800-...

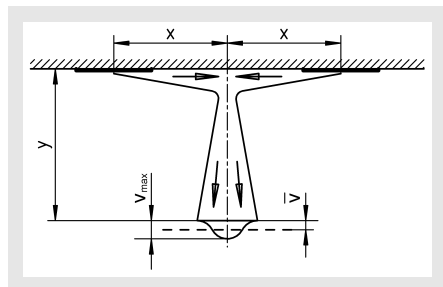


Ceiling Swirl Diffuser Model DQJ

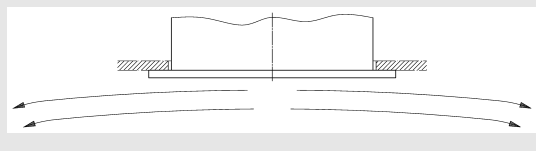
Maximum end velocity of jet

DQJ-...-SR-Z-... / DQJ-...-SR-Z-...-PS-...

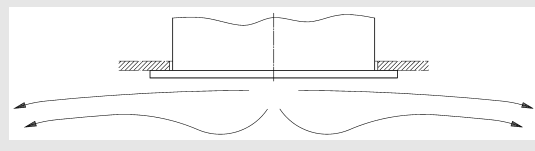
for supply air, with coanda effect



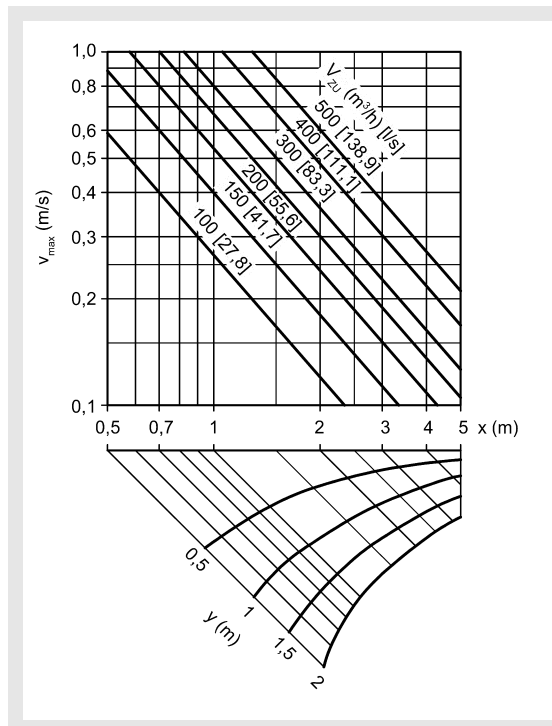
Air throw pattern "A"



Air throw pattern "B"

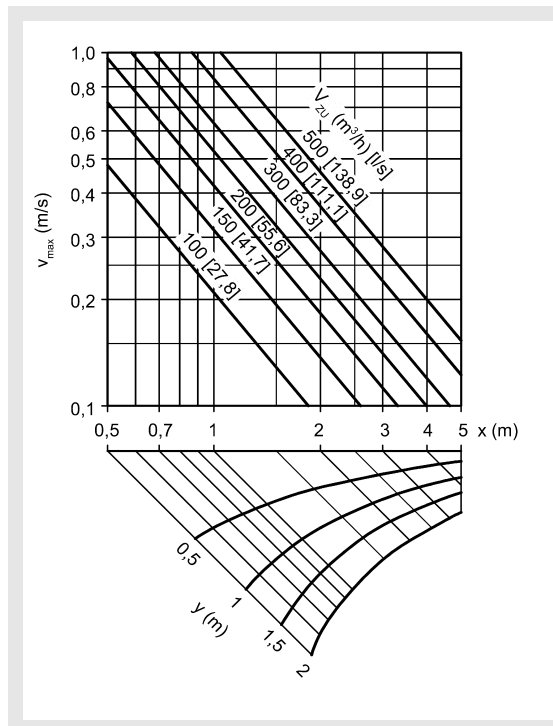


DQJ-...-SR-Z-310-...-PS-...



Type DQJ-...-SR-Z 310 only available with air throw "A".
Free jet = diagram value x 0.7

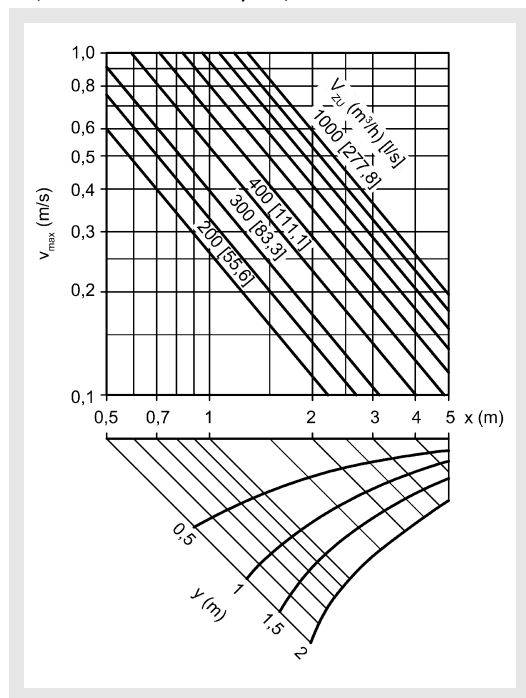
DQJ-...-SR-Z-400-...-PS-...



Air throw pattern "A" = diagram value x 1.31
Free jet = diagram value x 0.7

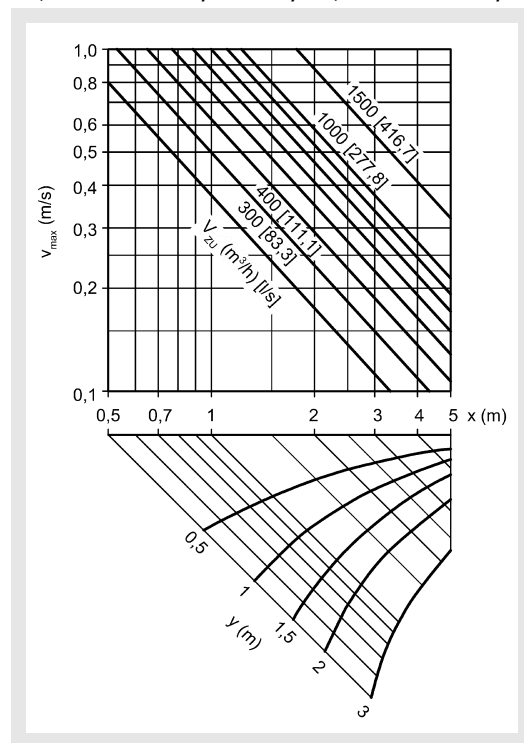
Ceiling Swirl Diffuser Model DQJ

DQJ-...-SR-Z-500-... / DQJ-...-SR-Z-500-...-PS-...



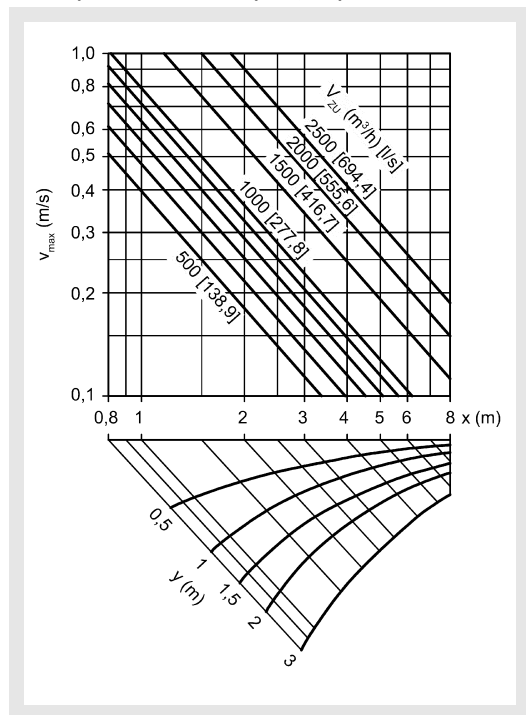
Air throw pattern "A" = diagram value x 1.25
Free jet = diagram value x 0.7

DQJ-...-SR-Z-600/625-... / DQJ-...-SR-Z-600/625-...-PS-...



Air throw pattern "A" = diagram value x 1.4
Free jet = diagram value x 0.7

DQJ-Q/R-SR-Z-800-... / DQJ-Q/R-SR-Z-800-...-PS-...



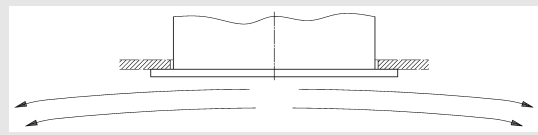
Air throw pattern "A" = diagram value x 1.4
Free jet = diagram value x 0.7

Ceiling Swirl Diffuser Model DQJ

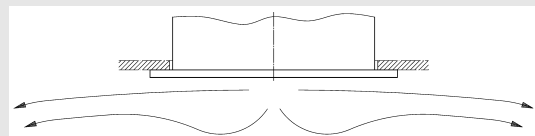
DQJ-...-SQ-Z-...

for supply air, with coanda effect

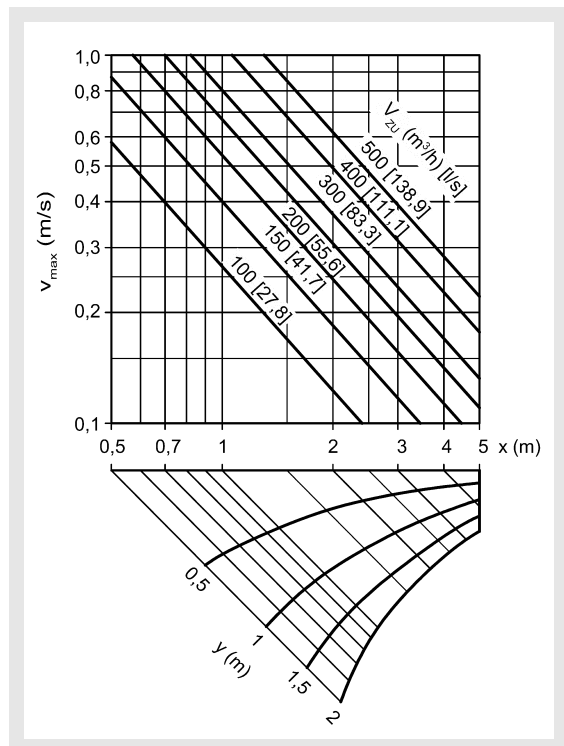
Air throw pattern "A"



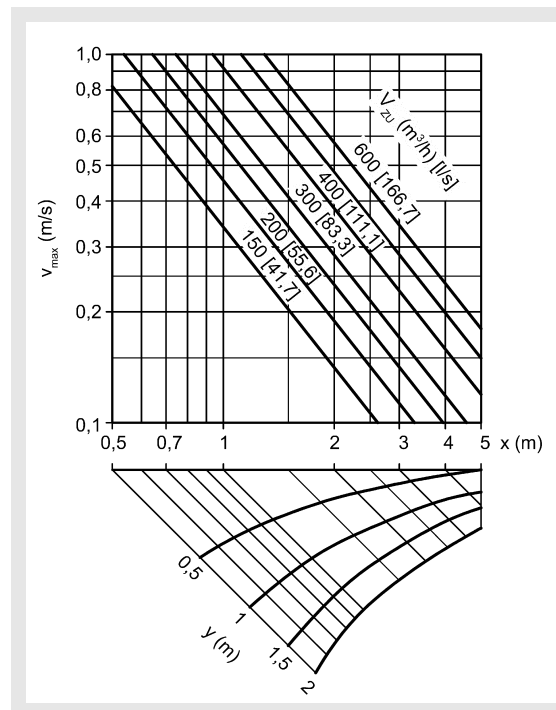
Air throw pattern "B"



DQJ-...-SQ-Z-310-...-PS-...



DQJ-...-SQ-Z-400-...

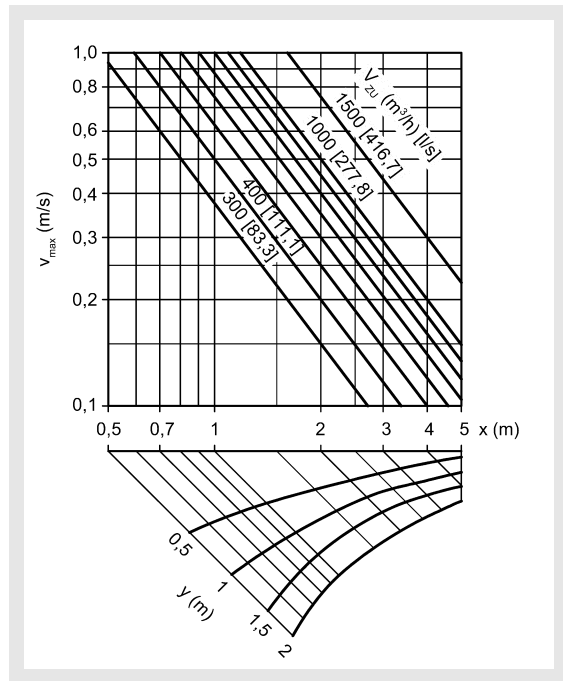


Air throw pattern "A" = diagram value x 1.18

Type DQJ-...-SQ-Z-310-... only available with air throw "A".

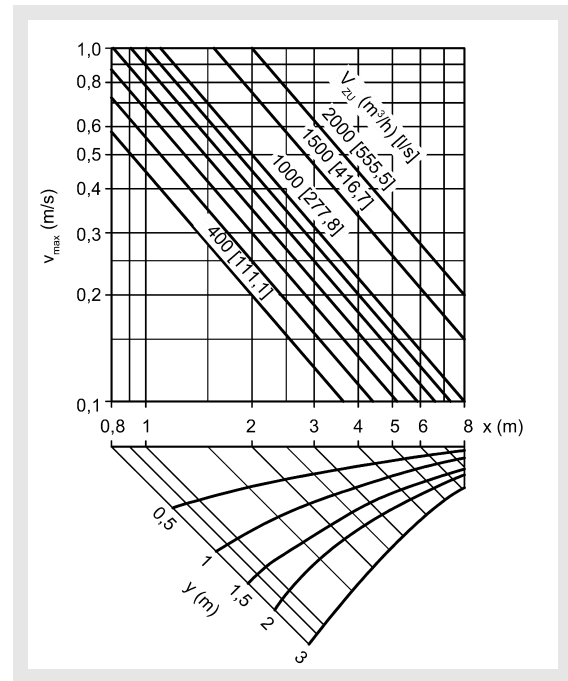
Ceiling Swirl Diffuser Model DQJ

DQJ-...-SQ-Z-500-...



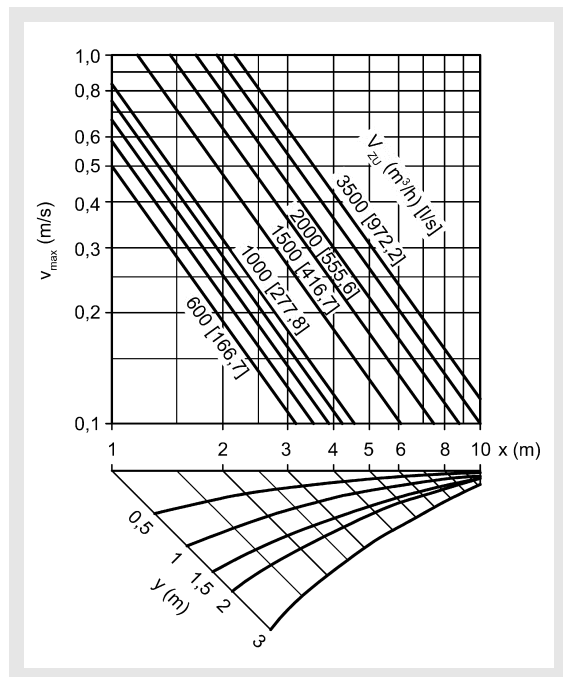
Air throw pattern "A" = diagram value x 1.22

DQJ-...-SQ-Z-600/625-...



Air throw pattern "A" = diagram value x 1.4

DQJ-Q-SQ-Z-800-...



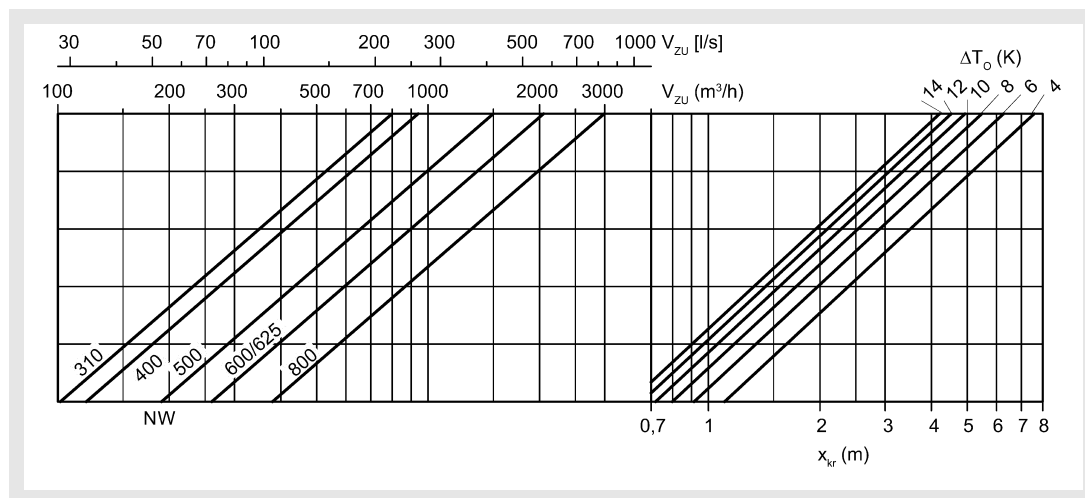
Air throw pattern "A" = diagram value x 1.4

Ceiling Swirl Diffuser Model DQJ

Critical throw

DQJ-...-SR-Z-... / DQJ-...-SR-Z-...-PS-...

for supply air, with coanda effect

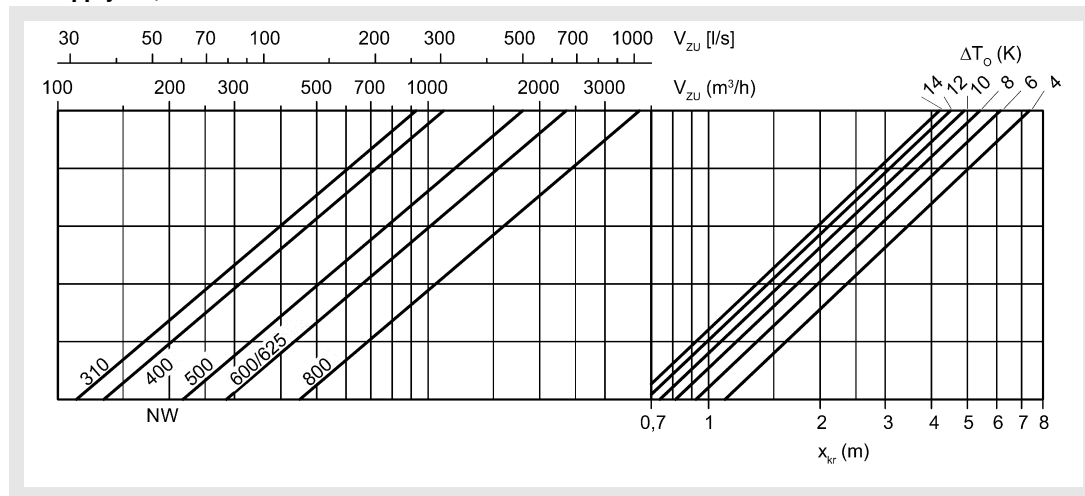


Air throw pattern "B"

Air throw "A" = $x_{kr} \times 1.12$

DQJ-...-SQ-Z-...

for supply air, with coanda effect



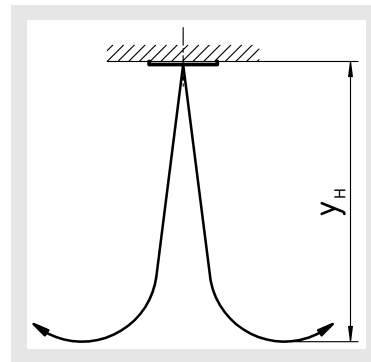
Air throw pattern "B"

Air throw "A" = $x_{kr} \times 1.12$

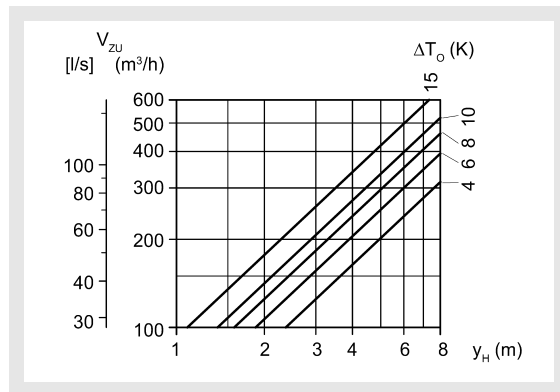
Ceiling Swirl Diffuser Model DQJ

Maximum penetration

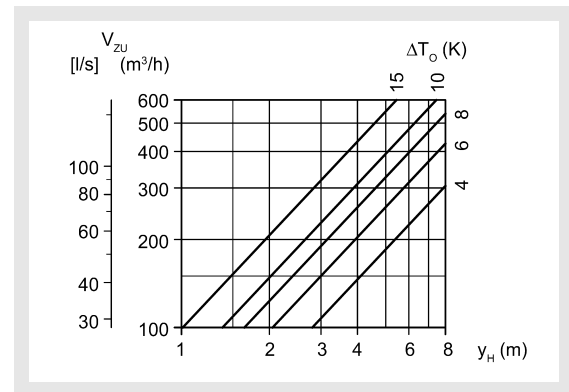
DQJ-...-SR-... / DQJ-...-SR-Z-...-PS-...
in heating mode, blade position 1



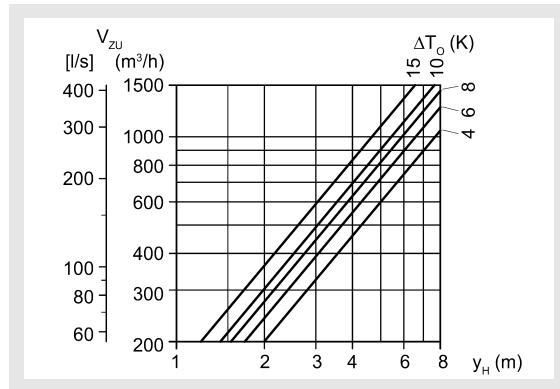
DQJ-...-SR-310-...-PS-...



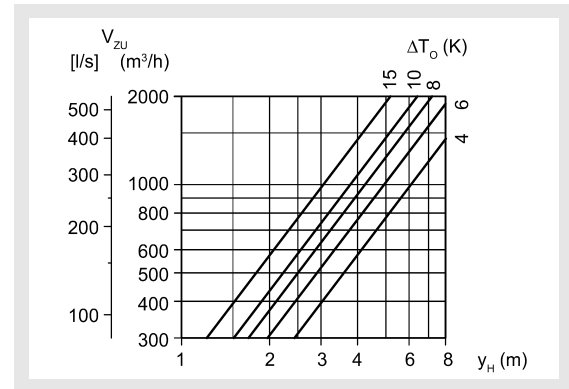
DQJ-...-SR-Z-400-...-PS-...



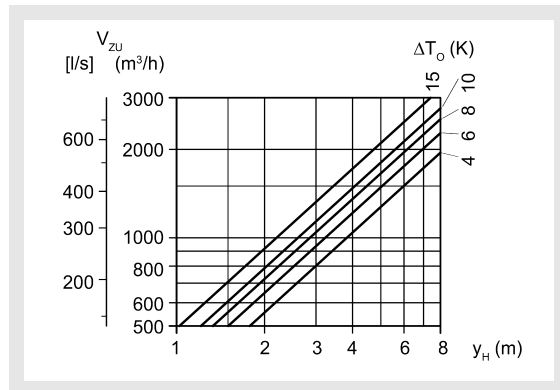
DQJ-...-SR-500-... / DQJ-...-SR-Z-500-...-PS-...



DQJ-...-SR-600/625-... / DQJ-...-SR-Z-600/625-...-PS-...

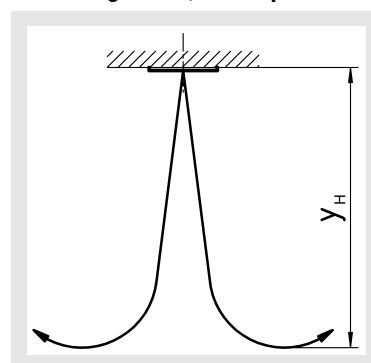


DQJ-Q/R-SR-800-... / DQJ-Q/R-SR-Z-800-...-PS-...



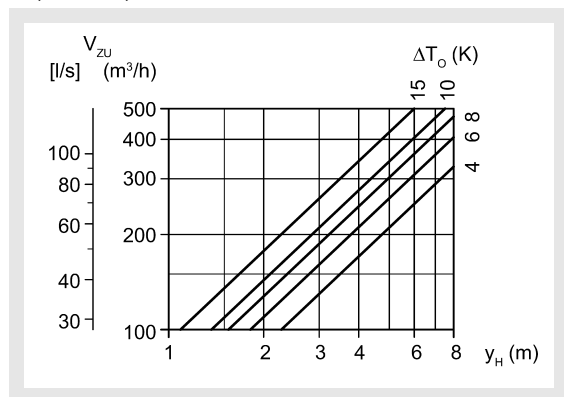
DQJ-...-SQ-...

in heating mode, blade position 1

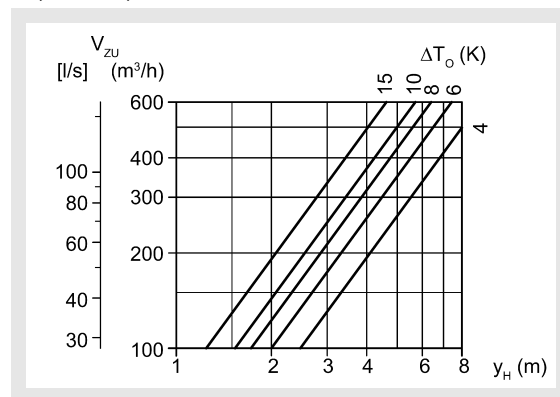


Ceiling Swirl Diffuser Model DQJ

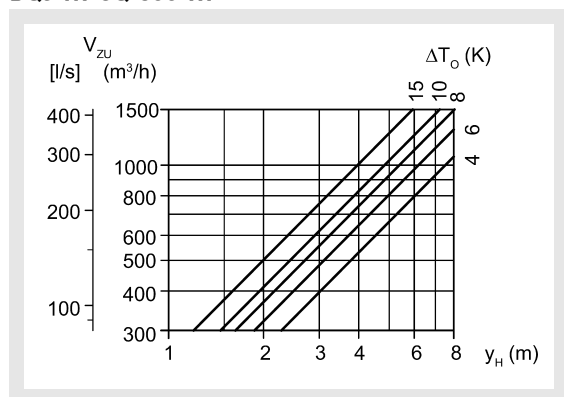
DQJ-...-SQ-310-...-PS-...



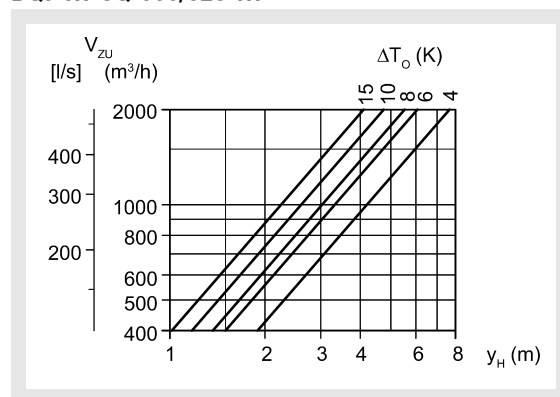
DQJ-...-SQ-400-...



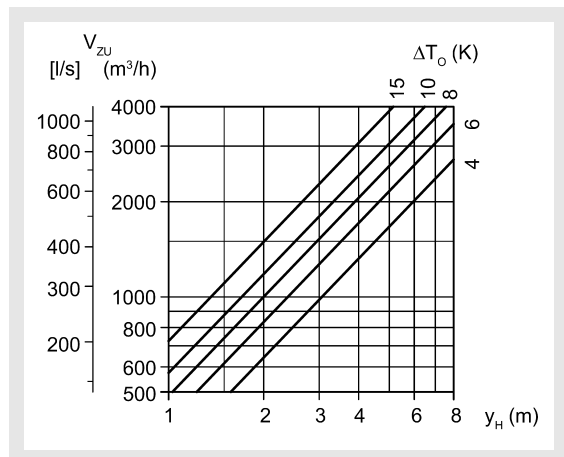
DQJ-...-SQ-500-...



DQJ-...-SQ-600/625-...



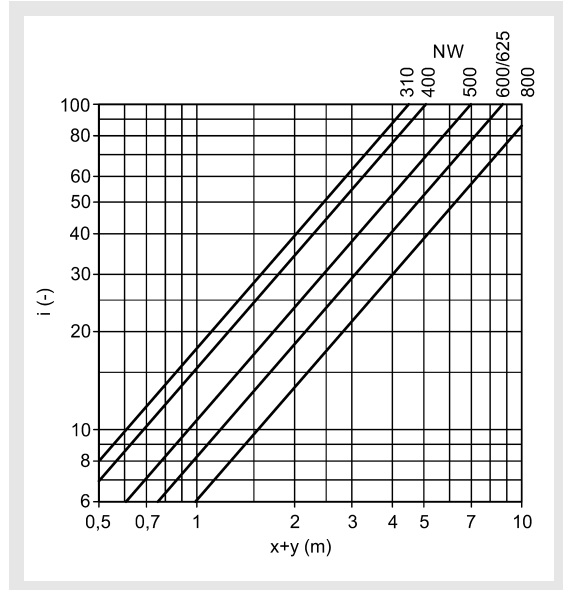
DQJ-Q-SQ-800-...



Ceiling Swirl Diffuser Model DQJ

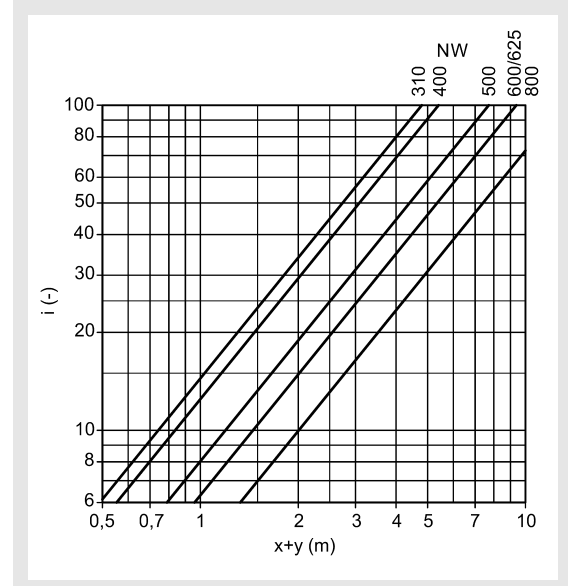
Induction ratio

DQJ-...-SR-Z-... / DQJ-...-SR-Z-...-PS-..., with coanda effect



Air throw pattern "A" = diagram value x 0.8
Free jet = diagram value x 1.4

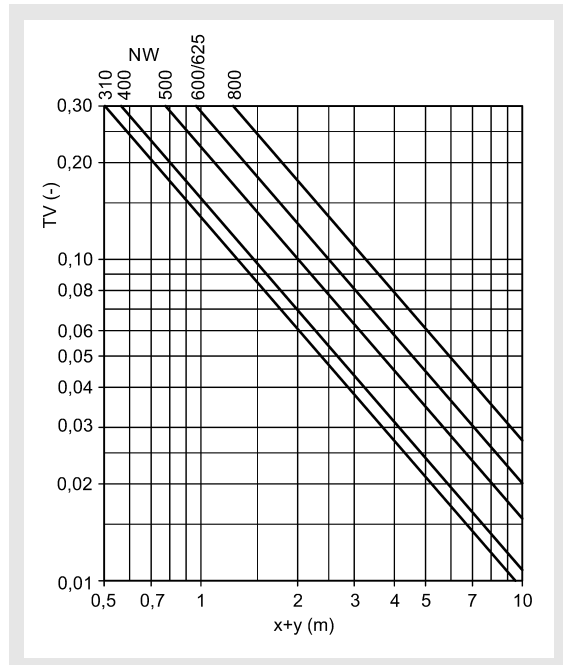
DQJ-...-SQ-Z-..., with coanda effect



Air throw pattern "A" = diagram value x 0.84

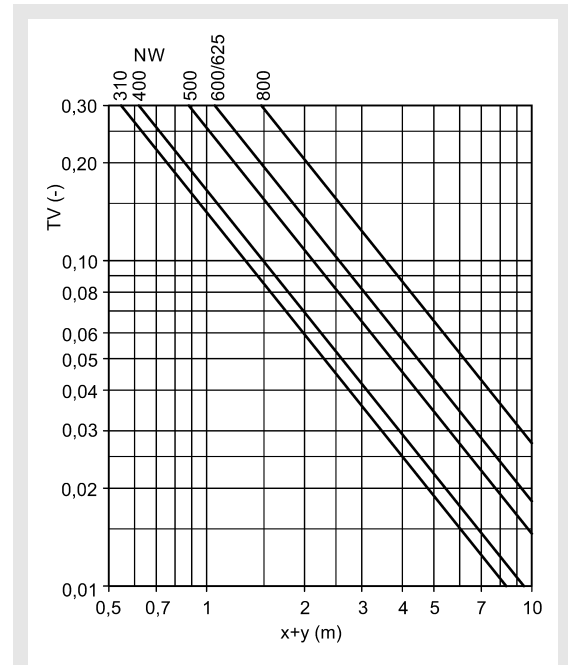
Temperature ratio

DQJ-...-SR-Z-... / DQJ-...-SR-Z-...-PS-..., with coanda effect



Air throw pattern "A" = diagram value x 1.3
Free jet = diagram value x 0.7

DQJ-...-SQ-Z-..., with coanda effect



Air throw pattern "A" = diagram value x 1.18

Ceiling Swirl Diffuser Model DQj

Legend

V_{ZU}	(m³/h) [l/s]	= Supply air volume
V_{AB}	(m³/h) [l/s]	= Return air volume
V_X	(m³/h) [l/s]	= total air jet volume at point x
v_{max}	(m/s)	= Maximum end velocity of jet
v_{mit}	(m/s)	= Average end velocity of jet ($v_{mit} = v_{max} \times 0.5$)
x	(m)	= horizontal throw
y	(m)	= vertical throw
x+y	(m)	= Horizontal + vertical throw
x_{kr}	(m)	= Critical throw
y_H	(m)	= Maximum penetration in heating mode
ΔT_0	(K)	= Temperature difference between supply air temperature and room temperature ($\Delta T_0 = t_{ZU} - t_R$)
ΔT_X	(K)	= Temperature difference at point x
t_{zu}	(°C)	= Supply air temperature
t_R	(°C)	= Room temperature
Δp_t	(Pa)	= Pressure loss
L_{WA}	[dB(A)]	= A-weighted sound power level
ρ	(kg/m³)	= Density
i	(-)	= Induction ratio ($i = V_X / V_{ZU}$)
TV	(-)	= Temperature ratio ($TV = \Delta T_X / \Delta T_0$)
NW	(mm)	= Nominal value
DS	(%)	= Damper position (0% = CLOSED / 100% = OPEN)

Ceiling Swirl Diffuser Model DQJ

Order code DQJ

01	02	03	04	05	06	07	08	09
Type	Model	Blade pattern	Air throw	Nominal size	Material	Paint	Drill pattern reduced	Blades
Example								
DQJ	-Q	-SR	-Z	-500	-SB	-9010	-000	-PT

10	11	12	13	14	15	16	17
Blade colour	Air throw pattern	Mounting	Motor adjustment	Hit-and-miss damper	Damper	Cover	Ball-impact guard
-L9005	-B	-VM	-MO	-SN	-DO	-AO	-BO

Sample

DQJ-Q-SR-Z-500-SB-9010-000-PT-L9005-B-VM-MO-SN-DO-AO-BO

Ceiling swirl diffuser type DQJ | square faceplate | circular blade pattern | supply air | NW500 | faceplate made of sheet steel | faceplate painted to RAL9010 | drill pattern not reduced | blades divided | blade colour similar to RAL9005 black | air throw pattern B | concealed mounting | without motor adjustment | without hit-and-miss damper | without damper | without cover | without ball-impact guard

Order details

01 - Type

DQJ = ceiling swirl diffuser

02 - Model

Q = Square faceplate

R = round faceplate (only concealed mounting VM possible)

S = square faceplate, double-folded edge (not possible for NW 800)

03 - Blade pattern

SR = circular

SQ = square (not possible for round faceplate)

04 - Air throw

Z = Supply air

A = Return air

05 - Nominal size

310 = NW310

400 = NW400

500 = NW500

600 = NW600

625 = NW625

800 = NW800

06 - Material

SB = Sheet steel (standard)

V2 = Stainless steel (V2A) (not available for DQJ-S... model)

AL = Aluminium (only possible with VM) (not available for DQJ-S... model)

SV = Galvanised sheet steel (not available for DQJ-S... model)

07 - Paint

0000 = without paint (galvanised sheet steel)

9010 = RAL colour white (standard)

xxxx = RAL colour can be freely selected

ELOX = Natural colour anodised (only for AL)

SAND = Sand silver (only for V2A)

08 - Drill pattern reduced

000 = Drill pattern not reduced (standard)

310 = reduced drill pattern 310

400 = reduced drill pattern 400

500 = reduced drill pattern 500

600 = reduced drill pattern 600

Note: Is only available in conjunction with concealed mounting.
The selected pattern must be smaller than the nominal size selected.

Ceiling Swirl Diffuser Model DQJ

09 - Blades

- PT = Divided blades (starting from NW500, for model - SQ, starting from NW400) - (for supply air only)
- PS = Continuous blades (only for supply air)
- PO = without blades (only possible for return air)

10 - Bladescolour

- L9005 = Blades made of plastic similar to RAL 9005 (black)
- L9006 = Blades made of plastic similar to RAL9006 (grey)
- L9010 = Blades made of plastic similar to RAL9010 (white)
- Axxxx = Blades made of aluminium, RAL colour can be freely selected
- 00000 = without blades (only possible for return air)

11 - Air throw pattern

- A = All blades in position 2 (standard for NW310)
- B = Blades in positions 1+2, set ex works (only available from NW 400)
- C = without blades (only possible for return air)
- V = all blades in position 1 (heating mode only)

12 - Mounting

- VM = concealed mounting (standard for DQJ-R-... , DQJ-S-... and DQJ-Q/S-...-800-..., only possible in conjunction with SK-Q-.../SK-R-...); without SK-Q-.../SK-R-..., the counter pole brace must be provided on site
- SM = screw mounting (standard for DQJ-Q-... and DQJ-Q-SR-Z-800-...-PS-...-M2 (with motor adjustment), not possible for DQJ-S-... and NW800)
- MM = Central mounting (available only with SK-Q-.../SK-R-..., standard for DQJ-...-SR-Z-...-PS-... up to size 625, not possible for exhaust air)
- VS = Screw mounting with concealed mounting (available only for NW800 in conjunction with ball-impact guard)

13 - Motor adjustment

- M0 = Without motor adjustment (standard)
- M1 = With actuator (only DQJ-Q-SR-Z-...-PS-..., size 500-625, possible only with SM mounting)
- M2 = With actuator (only DQJ-Q-SR-Z-...-PS-..., size 800, possible only with SM mounting)

14 - Hit-and-miss damper

- SN = Without hit-and-miss damper (standard)
- SS = With hit-and-miss damper (only DQJ-Q/S-SR-... DQJ-Q/S-SQ-..., without plenum box)

15 - Damper

- DO = Without damper (standard)
- DV = With damper (only DQJ-R-SR-... with SM mounting possible)

16 - Cover

- AO = without cover (standard)
- AD = With 1/4 cover (only possible for supply air model)

17 - Ball-impact guard

- BO = without ball-impact guard (standard)
- BS = With ball-impact guard, painted same as faceplate

Ceiling Swirl Diffuser Model DQJ

Order code SK

01	02	03	04	05	06	07
Plenum box	Model	Air diffuser	Type of air	Nominal size	Fastening	Material
Example						
SK	-Q	-01	-Z	-500	-VM	-SV

08	09	10	11	12	13	14	15
Damper	Rubber lip seal	Volumetric flow meter	ROB Model	Insulation	Height of plenum box	Spigot diameter	Spigot position
-DK1	-GD1	-VME1	-ROB0	-I0	-KHS	-SDS	-S1

Sample

SK-Q-01-Z-500-VM-SV-DK1-GD1-VME1-ROB0-I0-KHS-SDS-S1

Plenum box, square design I for square air diffusers I air diffuser DQJ I supply air I NW500 I with concealed mounting I galvanised sheet steel I with damper I with rubber lip seal I with volumetric flow meter I without ROB model I without box insulation I standard height of plenum box I standard spigot diameter I 1 lateral spigot

Order details

01 - Plenum box

SK = Plenum box, square design

02 – Model

Q = for square air diffusers

R = for round air diffusers with round diffuser support

03 - Air diffuser (must be ordered separately)

01 = suitable for DQJ-...

04 - Type of air

Z = Supply air

A = Return air

05 – Nominal size

310 = NW310

400 = NW400

500 = NW500

600 = NW600

625 = NW625

800 = NW800

06 - Fastening

VM = concealed mounting (standard for DQJ-R-..., DQJ-S-... and DQJ-Q/S-...-800-...)

SM = screw mounting (standard for DQJ-Q-... and DQJ-Q-SR-Z-800-...-PS-...-M2 (with motor adjustment), not possible for DQJ-S-... and NW800)

MM = Central mounting (not possible for exhaust air)

VS = Screw mounting with concealed mounting (only for NW800 for the version with ball-impact guard)

07 - Material

SV = Galvanised sheet steel (standard)

V2 = stainless steel (V2A)

08 - Damper

DK0 = without damper (standard)

DK1 = with damper

DK2 = with damper + cable

09 - Rubber lip seal

GD0 = without rubber lip seal (standard)

GD1 = with rubber lip seal

10 – Volumetric flow meter

VME0 = without volumetric flow meter (standard)

VME1 = With volumetric flow meter

11 – ROB model

ROB0 = Without ROB version (standard)

ROB1 = With ROB version (not possible for SK-R-...)

Ceiling Swirl Diffuser Model DQj

12 - Insulation

- l0 = without insulation (standard)
- li = with box insulation inside
- la = With box insulation outside

13 – Height of plenum box

- KHS = Height of plenum box standard
- xxx = Height of plenum box in mm (height_{min} = spigot diameter + 102 mm for SK-Q..., but at least 200 mm / spigot diameter + 137 mm for SK-R..., but at least 235 mm) (For models SK-Q-01-Z-310 / -400-...-DK1 / -DK2-...-S0 and SK-R-01-Z-310 / -400 / -500-...-DK1 / -DK2-...-S0, observe special height of plenum box (see p. 12))

14 – Spigot diameter

- SDS = Standard spigot diameter
- xxx = Spigot diameter in mm

15 – Spigot position

- S0 = Spigot from above
- S1 = 1 lateral spigot on the box (standard)
- S2 = 2 spigots offset by 90°
- S3 = 2 spigots offset by 180°
- S5 = 2 spigots arranged next to each other

Ceiling Swirl Diffuser Model DQJ

Specification texts

Ceiling swirl diffuser **type DQJ-Q-SR-Z-...**, with square faceplate, circular blade pattern. Particularly suitable for installation in comfort rooms with high number of air changes, for clean rooms (in connection with particle filter boxes) and for VAV installations with variable volumetric flows (between 40-100%). Cooling and heating modes are possible. With faceplate made of sheet steel with high-quality powder coating, painted sheet steel RAL 9010 (white). With central pivoting, aerodynamic radially arranged air deflection blades in support blade profile sections made of plastic in a colour similar to RAL 9010 (white), RAL 9005 (black, standard) or aluminium painted to the RAL colour of the faceplate (subsequent adjustment of blades not possible). Each blade is adjustable from the diffuser faceplate without using any special device, without dismounting the diffuser. The blades are divided lengthwise, allowing an air throw with an even higher induction to be set (air throw "B"). Free cross-section, resistance and sound power level constant in all blade positions. With visible screw mounting (-SM). For NW 800 with concealed mounting (-VM), with motor adjustment only possible with SM mounting. TÜV inspected according to **VDI 6022 Sheets 1+2**, as well as **DIN 1946 Sheet 2**.

Volumetric flows in m³/h at:	35 dB(A)	40 dB(A)
- NW 310	229	278
- NW 400	275	335
- NW 500	450	575
- NW 600/625	680	820
- NW 800	1000	1220

Product: SCHAKO **type DQJ-Q-SR-Z-...**

- for supply air, with continuous air deflection blades, square faceplate and circular blade pattern Standard with central mounting (-MM), only possible in connection with plenum box. For NW 800 with concealed mounting (-VM). TÜV inspected according to **VDI 6022 Sheets 1+2**, as well as **DIN 1946 Sheet 2**.

Product: SCHAKO **type DQJ-Q-SR-Z-...-PS-...**

- for return air, without air deflection blades, with square faceplate, circular perforation. TÜV inspected according to **VDI 6022 Sheets 1+2**, as well as **DIN 1946 Sheet 2**.

Volumetric flows in m³/h at:	35 dB(A)	40 dB(A)
- NW 310	443	533
- NW 400	498	604
- NW 500	760	921
- NW 600/625	1336	1536
- NW 800	1625	1868

Product: SCHAKO **type DQJ-Q-SR-A-...**

- for supply air, with air deflection blades, with square faceplate, square blade pattern, less noise and pressure loss at the same volumetric flow. TÜV inspected according to **VDI 6022 Sheets 1+2**, as well as **DIN 1946 Sheet 2**.

Volumetric flows in m³/h at:	35 dB(A)	40 dB(A)
- NW 310	250	300
- NW 400	295	350
- NW 500	550	660
- NW 600/625	740	900
- NW 800	1260	1500

Product: SCHAKO **type DQJ-Q-SQ-Z-...**

- for return air, without air deflection blades, with square faceplate, square perforation, less noise and pressure loss at the same volumetric flow. TÜV inspected according to **VDI 6022 Sheets 1+2**, as well as **DIN 1946 Sheet 2**.

Volumetric flows in m³/h at:	35 dB(A)	40 dB(A)
- NW 310	475	570
- NW 400	495	605
- NW 500	810	1000
- NW 600/625	1380	1700
- NW 800	1770	2130

Product: SCHAKO **type DQJ-Q-SQ-A-...**

- for supply air, with air deflection blades, with radial faceplate, circular blade pattern. Standard with concealed mounting (-VM). TÜV inspected according to **VDI 6022 Sheets 1+2**, as well as **DIN 1946 Sheet 2**.

Product: SCHAKO **type DQJ-R-SR-Z-...**

- for supply air, with continuous air deflection blades, with round faceplate, circular blade pattern. Standard with central mounting (-MM), only possible in connection with plenum box. For NW 800 with concealed mounting (-VM). TÜV inspected according to **VDI 6022 Sheets 1+2**, as well as **DIN 1946 Sheet 2**.

Product: SCHAKO **type DQJ-R-SR-Z-...-PS-...**

- for return air, without air deflection blades, with round faceplate, circular perforation. Standard with concealed mounting (-VM). TÜV inspected according to **VDI 6022 Sheets 1+2**, as well as **DIN 1946 Sheet 2**.

Product: SCHAKO **type DQJ-R-SR-A-...**

- for supply air, with air deflection blades, with square faceplate and circular blade pattern. With concealed mounting (-VM, screw mounting SM not possible), double-folded edge, especially for use under the ceiling. TÜV inspected according to **VDI 6022 Sheets 1+2**, as well as **DIN 1946 Sheet 2**.

Product: SCHAKO **type DQJ-S-SR-Z-...**

Ceiling Swirl Diffuser Model DQJ

- for return air, with square faceplate, radial blade pattern. With concealed mounting (-VM, screw mounting -SM not possible), double-folded edge, especially for use under the ceiling. TÜV inspected according to **VDI 6022 Sheets 1+2**, as well as **DIN 1946 Sheet 2**.

Product: SCHAKO type **DQJ-S-SR-A-...**

- for supply air, with continuous air deflection blades, square faceplate and circular blade pattern With concealed mounting (-VM, screw mounting -SM not possible), double-folded edge, especially for use under the ceiling. TÜV inspected according to **VDI 6022 Sheets 1+2**, as well as **DIN 1946 Sheet 2**.

Product: SCHAKO type **DQJ-S-SR-Z-...-PS-...**

- for supply air, with air deflection blades, with square faceplate and circular blade pattern. With concealed mounting (-VM, screw mounting -SM not possible), double-folded edge, especially for use under the ceiling. TÜV inspected according to **VDI 6022 Sheets 1+2**, as well as **DIN 1946 Sheet 2**.

Product: SCHAKO type **DQJ-S-SQ-Z-...**

- for return air, without air deflection blades, with square faceplate and square blade pattern. With concealed mounting (-VM, screw mounting -SM not possible), double-folded edge, especially for use under the ceiling. TÜV inspected according to **VDI 6022 Sheets 1+2**, as well as **DIN 1946 Sheet 2**.

Product: SCHAKO type **DQJ-S-SQ-A-...**

- with air throw pattern "A": for longer horizontal throw distance.
- with air throw pattern "B": blades in blade positions 1+2
- with air throw pattern "C": without blades (only possible for return air)
- with air throw pattern "V": all blades in blade position 1 (heating mode only)
- Faceplate made of:
 - Sheet steel painted to a different RAL colour
 - Natural colour anodised aluminium (E6/EV1) (not available for DQJ-R-... and DQJ-S-... models).
 - Stainless steel painted in the colour sand silver (not available for DQJ-S-... model)
 - Galvanised sheet steel (not available for DQJ-S-...)
- with concealed mounting (-VM), made of aerodynamic aluminium profile with 2-point (NW 310), 4-point (up to NW 500) or 6-point suspension (from NW 600), only possible in conjunction with SK-Q-.../SK-R-..., without SK-Q-.../SK-R-...; the counter pole brace must be provided on site)
- with screw mounting with concealed mounting (-VS), for mounting with ball-impact guard (-BS) (only for NW 800, not possible for DQJ-S-...).

Accessories:

- Plenum box (SK-Q-01-... and SK-R-01-...) made of galvanised sheet steel, with fixing lugs.
 - Supply air model with integrated perforated straightener.
 - Return air model inside painted to RAL 9005 (black)
 - with damper (-DK1) in plenum box, adjustable from below, for simple air volume regulation without dismantling the faceplate.
 - adjustable from below with cable (-DK2)
 - with volumetric flow meter (-VME1).
 - with ROB model (-ROB1), removable diffuser plate, damper and volumetric flow meter (only SK-Q-01-...)
 - with rubber lip seal (-GD1), at the connection spigot made of special rubber.
 - with thermal insulation
 - internal (-li)
 - external (-la)
 - Height of plenum box can be freely selected, xxx in mm (minimum height = spigot diameter + 102 mm for SK-Q-01-... and spigot diameter +137 mm for SK-R-01-..., but at least 235 mm) (For models SK-Q-01-Z-310 / -400-...-DK1 / -DK2-...-S0 and SK-R-01-Z-310 / -400 / -500-...-DK1 / -DK2-...-S0, observe special height of plenum box (see p. 12))
 - Spigot diameter can be freely selected, xxx in mm
 - Spigot position:
 - S0= spigot from above
 - S1= 1 lateral spigot on the box (standard)
 - S2= 2 spigots offset by 90°
 - S3= 2 spigots offset by 180°
 - S5= 2 spigots arranged next to each other
- Motor adjustment (-M1 / -M2), with electric actuators (only DQJ-Q-SR-Z-...-PS-... NW 500-800 only with screw mounting) for optimum and simple change of the air throw pattern when requirements change. A damper that may have been built in has been built in offset by 90° and must be adjusted by dismantling the faceplate.
- Galvanised sheet steel hit-and-miss damper (-SS) for air volume regulation (only for DQJ-Q/S-SR-... / DQJ-Q/S-SQ-...), particularly suitable in low-lying ducts for optimum air inflow.
- Adjustable damper (-DV) made of galvanised sheet steel (only possible for DQJ-R-SR-... with screw mounting (-SM)).
- 1/4 cover plate (-AD), made of galvanised sheet steel for individual adaptation of the air flow to room conditions (only possible for supply air version)
- Ball-impact guard (-BS), made of steel with high-quality powder coating in RAL 9010 (white), other RAL colours possible at an extra charge (possible only for DQJ-Q/R-SR-... / DQJ-Q-SQ-... with SM mounting and for NW 800 only with VS mounting).