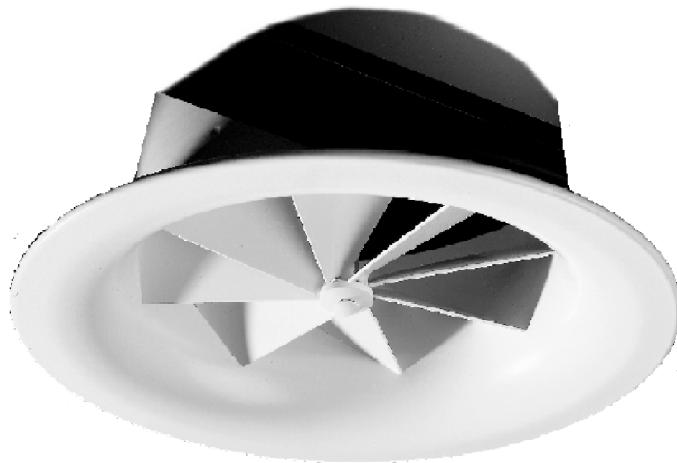


Diffuser DHV



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DHV

Diffuser

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DHV

Diffuser

Description

The ceiling swirl diffuser DHV is suitable for rooms up to 4 m high without causing draughts. A high induction is ensured which means velocity and temperature differentials are reduced rapidly.

Supply air is discharged horizontally. The diffuser was developed especially for cooling mode and isothermal air supply for constant and variable flow rates from 100 - 40 %.

A volume flow regulating device can be fitted to the box spigot at additional cost. The deviation factor of the device is +/- 5% at $L_{wa} = 40$ dB(A) and requires a minimum straight section of 1 x D.

The measurement is taken with a built-in diffuser. The air volumes can easily and quickly be adjusted by using the perforated plate damper

The perforated plate damper, equalising grid and measurement device can easily be removed from the plenum SGK-ROB model for easy cleaning from the room side

Construction

Diffuser	<ul style="list-style-type: none"> - Painted aluminium RAL 9010 (white for DHV-Q/R, size Ø 125 - 315) - From painted plastic RAL 9010 (white, only for DHV-K, size Ø 125 - 250)
Swirl impeller	<ul style="list-style-type: none"> - Painted sheet steel RAL 9010 (white, size ø 100) - Painted aluminium RAL 9010 (white, for DHV-Q/R, size Ø 125 - 315) - From painted plastic RAL 9010 (white, only for DHV-K, size Ø 125 - 250) - Painted sheet steel RAL 9010 (white, size ø 100)

Model

DHV-Q	- With square face plate and funnel neck nozzle
DHV-R	- With round front plate and inlet nozzle
DHV-K	- With round front plate and inlet nozzle

Accessories

Plenum box (-SRK)	<ul style="list-style-type: none"> - Casing from galvanised sheet steel with integrated equalising grid and fixing lugs - VM cross brace of aluminium and plastic
Rubber gasket (-GD)	- Special rubber
Perforated plate damper (-LD)	<ul style="list-style-type: none"> - Galvanised sheet steel damper - Plastic damper fixing
Volume flow measuring device (-VME)	<ul style="list-style-type: none"> - Mounting from galvanised sheet steel - Plastic measurer - Aluminium connections

Fixing

Fixing with clamps (-KB)	- only for flexible duct connection (without plenum)
Screw fixing (-SM)	- only for flexible duct connection (without plenum), number of countersunk screws
DHV-Q with 4 screws, DHV-R/K with 3 screws	
Secret fixing (-VM)	- Traverse fixing, only with plenum box (SRK-Z) possible

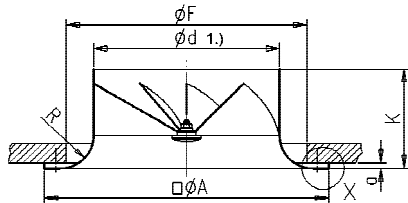
DHV

Diffuser

Models and dimensions

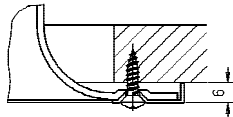
Dimensions

DHV, connection to flexible ducts with screw mounting (SM, without plenum)

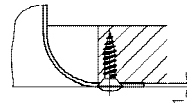


Detail X

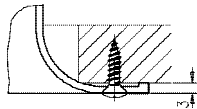
DHV-Q 100-315



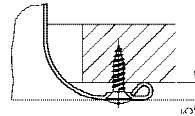
DHV-R 100



DHV-K 125-250



DHV-R 125-315



Available sizes

NW	$\varnothing d$	$\square / \varnothing A$	$\varnothing F$	K	R	a		
						DHV-Q	DHV-R	DHV-K
100	98	155	128	50	15	6	1	3
125	123	185	144	63	17		5	
160	158	240	184	80	20			
200	198	300	254	105	35			
250	248	380	324	130	45			
315	313	490	419	170	60			

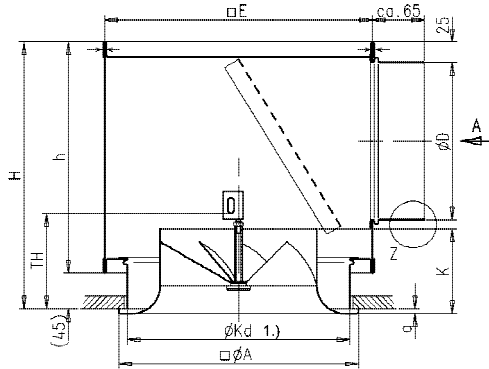
DHV

Diffuser

Accessories - dimensions

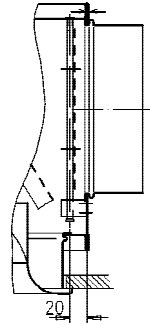
(at additional cost)

Plenum box type SRK-Z (supply air)

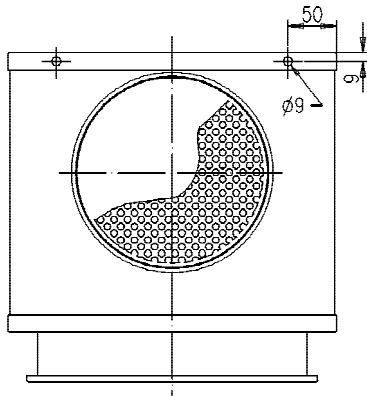


1.) external

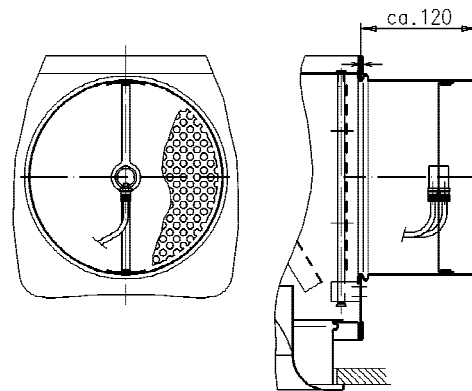
Perforated plate damper (-LD)



View A

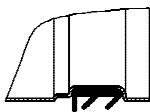


Volume flow measuring device (-VME)



Rubber gasket (-GD)

Detail Z



Available sizes

NW	□/øA	K	øKd	□E	øD	H	h	TH	a		
									DHV-Q	DHV-R	DHV-K
100	155	50	138	245	98	230	185	90	6	1	3
125	185	63	170	245	123	260	215	90		5	
160	240	80	222	290	15	295	250	100			
200	300	105	278	335	198	335	290	120			
250	380	130	353	405	248	385	340	150			
315	490	170	440	545	248	385	340	190			

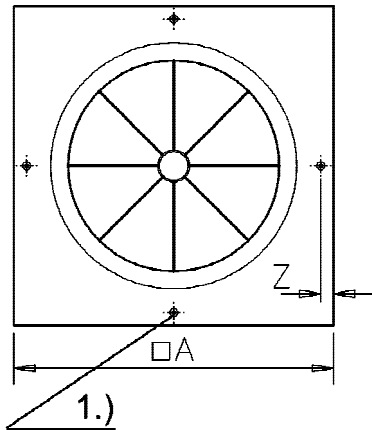
DHV

Diffuser

Fixing possibilities

Screw mounting (-SM)

DHV-Q



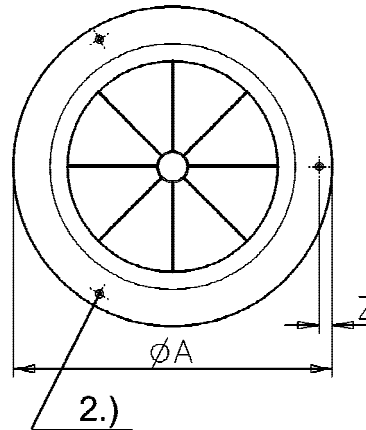
with square faceplate

1.) countersunk screw

B 3,9 DIN 7983

only for flexible duct connection

DHV-R / DHV-K



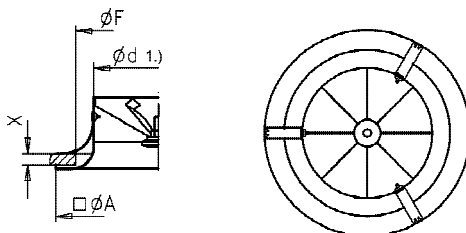
with round faceplate

2.) 3x countersunk screw

B 3,9 DIN 7983

only for flexible duct connection

Fixing with clamps (-KB)



1.) external

only for flexible duct connection

Available sizes

NW	$\varnothing d$	$\square / \varnothing A$	$\varnothing F$	Z	X
100	98	155	128	10	10
125	123	185	144	10	
160	158	240	184	15	25
200	198	300	254	110	
250	248	380	324	15	
315	313	490	419	22,5	

DHV

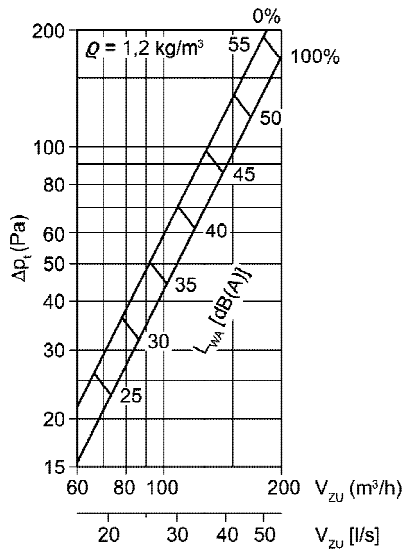
Diffuser

Technical data

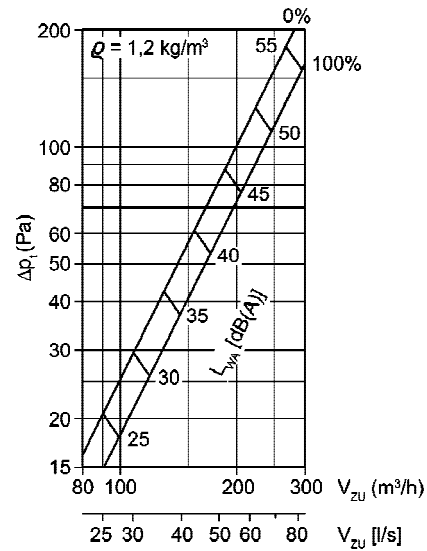
Pressure loss and noise level

with plenum

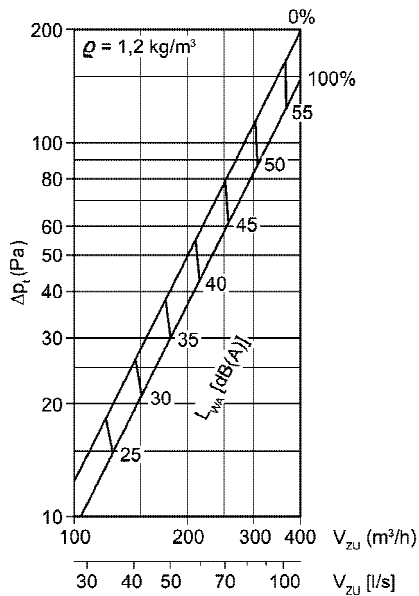
DHV-Q/R 100



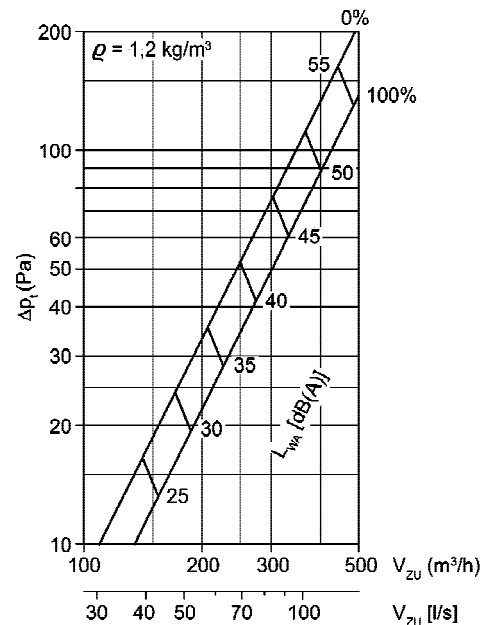
DHV-Q/R 125



DHV-Q/R 160



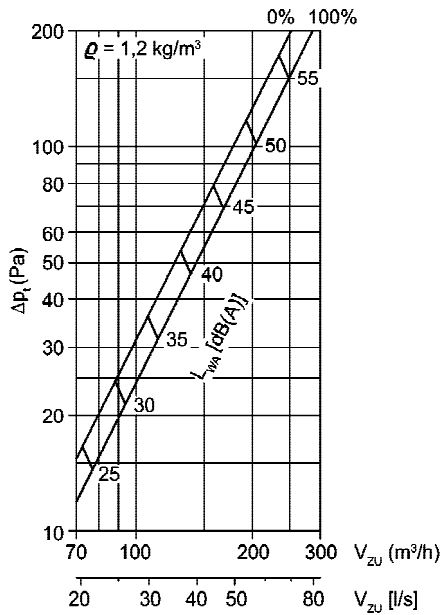
DHV-Q/R 200



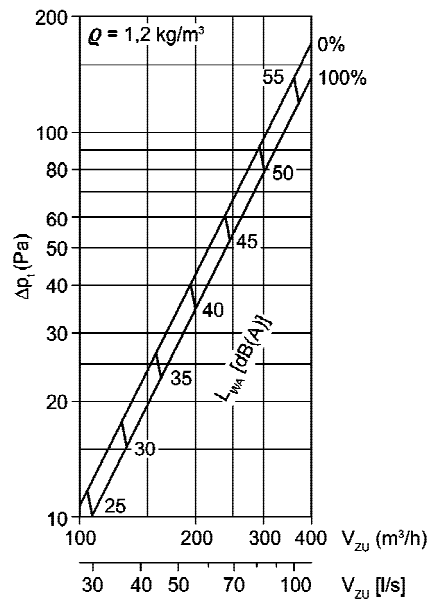
DHV

Diffuser

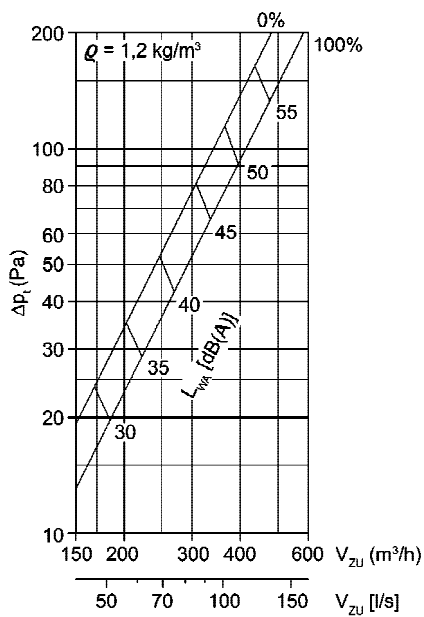
DHV-K 125



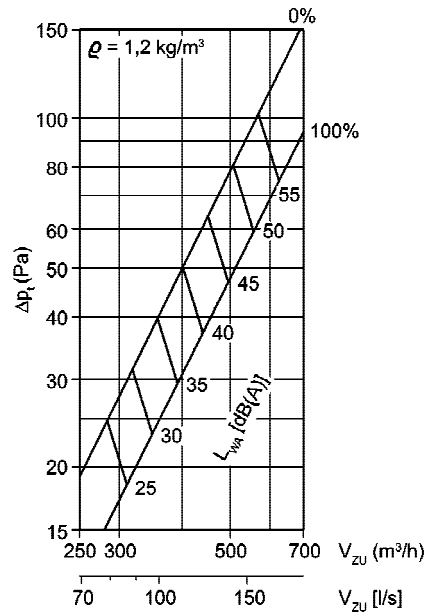
DHV-K 160



DHV-K 200



DHV-K 250



Damper position:

OPEN = 100%

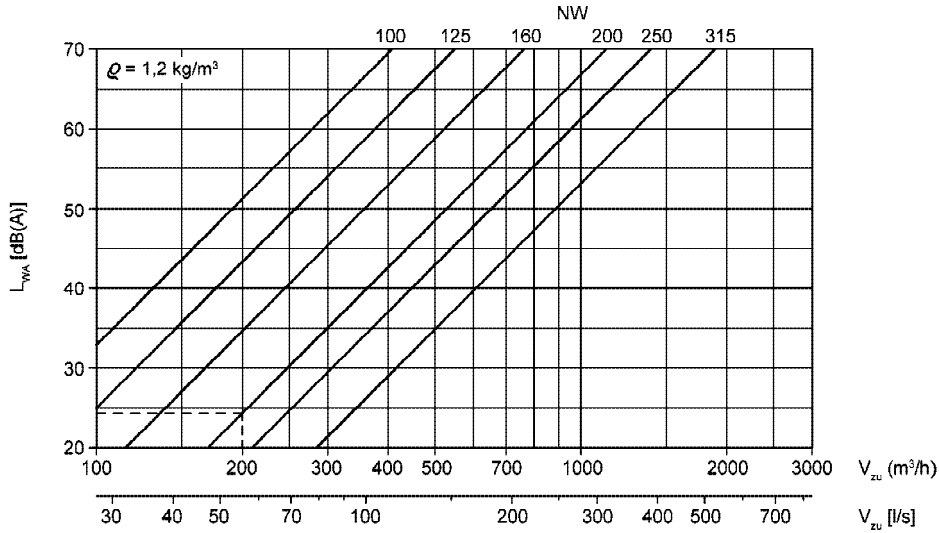
CLOSED = 0%

DHV

Diffuser

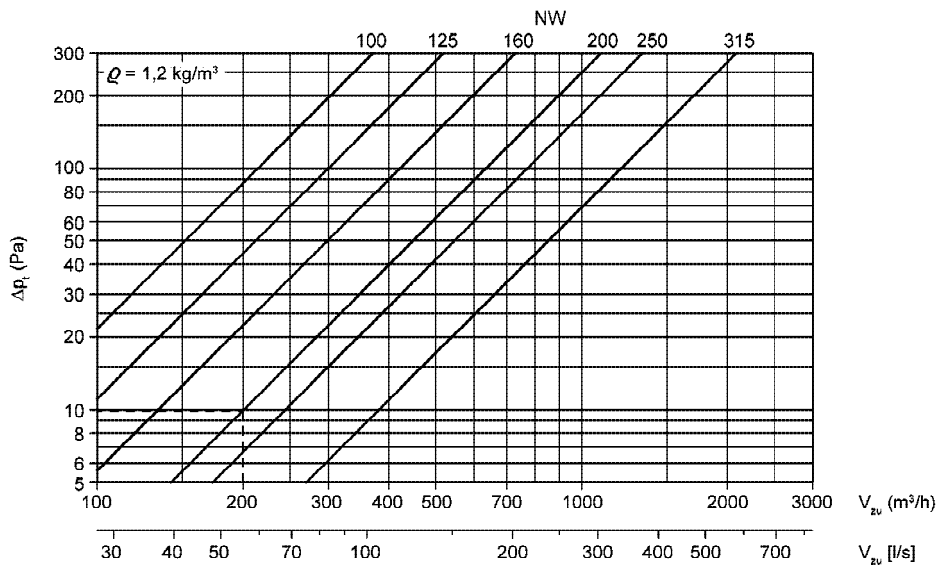
Noise level

Ceiling swirl diffuser type DHV-..F (for flexible duct connection), with SM fixing



Pressure loss

Ceiling swirl diffuser type DHV-...F (for flexible duct connection), with SM fixing

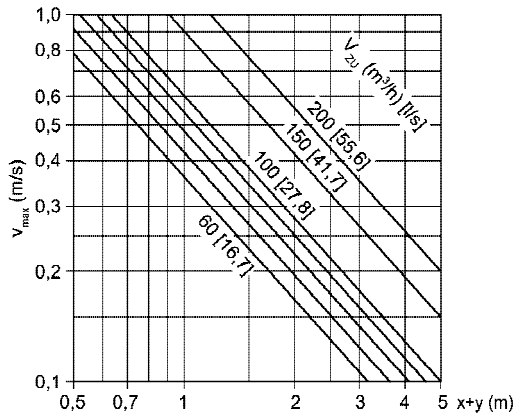


DHV

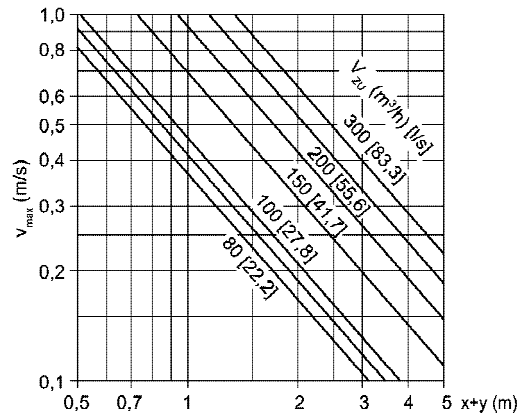
Diffuser

Maximum end velocity

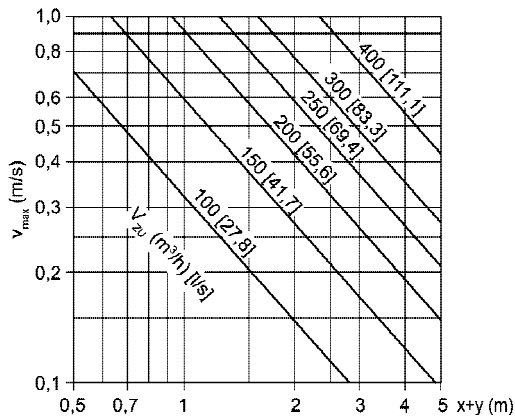
DHV 100



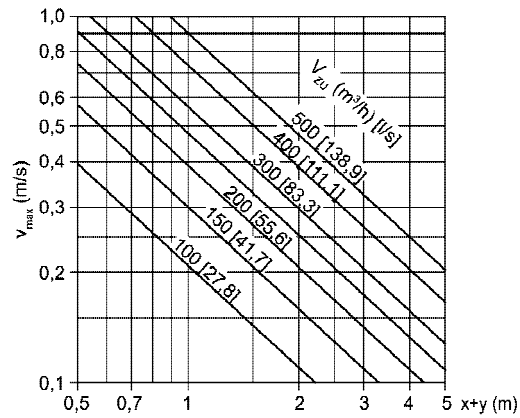
DHV 125



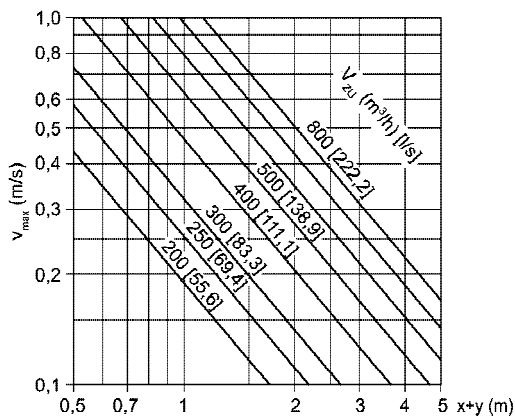
DHV 160



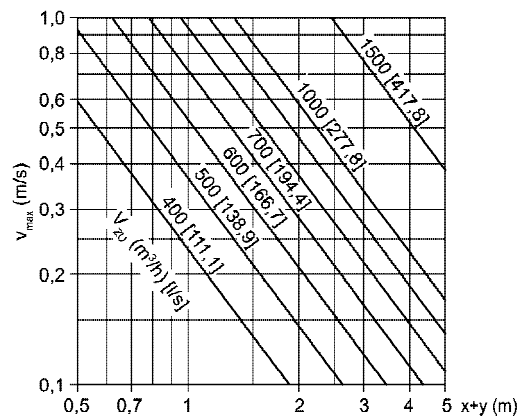
DHV 200



DHV 250



DHV 315

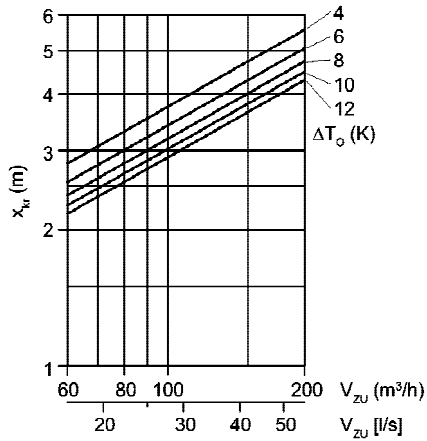


DHV

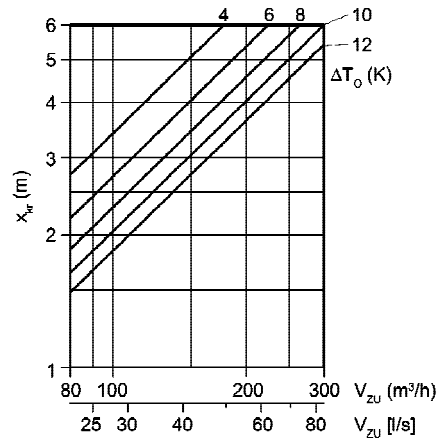
Diffuser

Critical throw

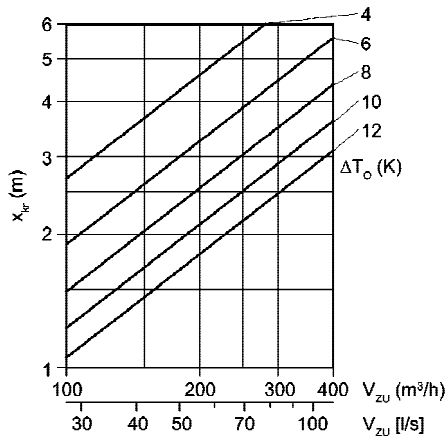
DHV 100



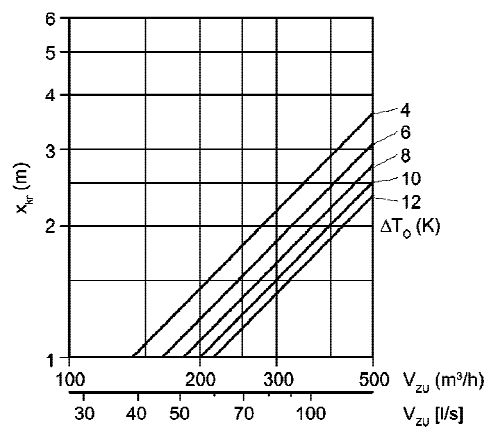
DHV 125



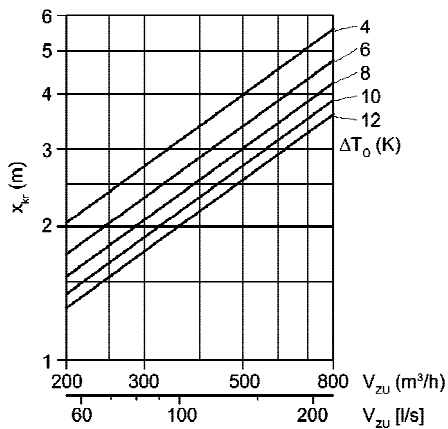
DHV 160



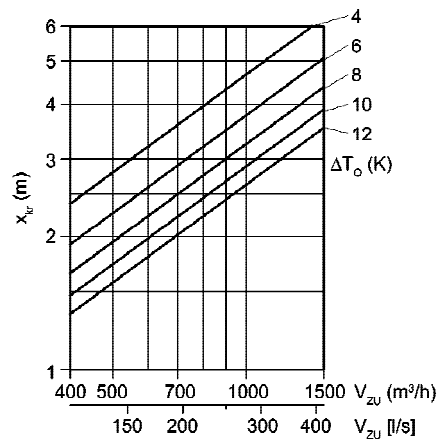
DHV 200



DHV 250



DHV 315



DHV

Diffuser

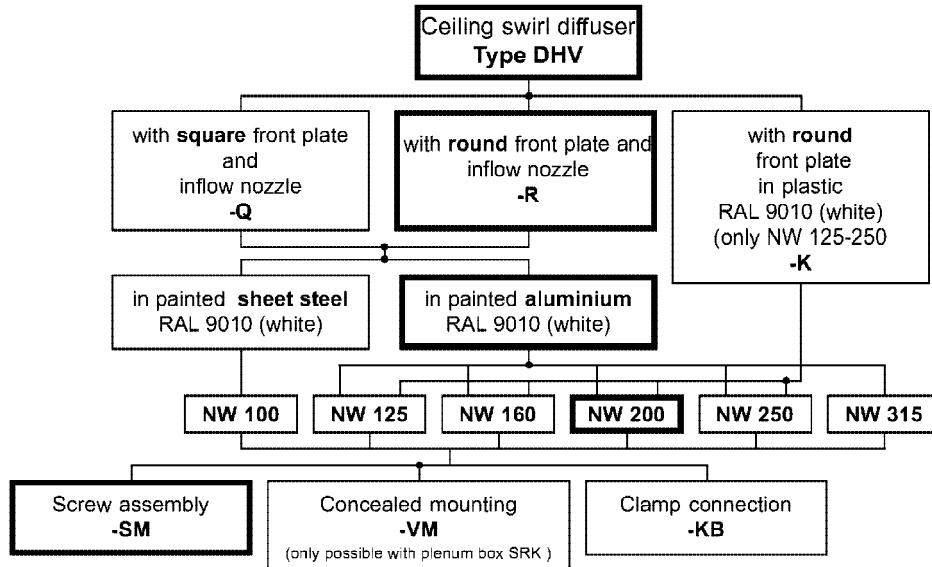
Legend

V_{supp} (m ³ /h)	=	supply air volume
V_{supp} (l/s)	=	supply air volume
L_{WA} [dB(A)]	=	a weighted sound power level
Δp_1 (Pa)	=	pressure loss
δ (kg/m ³)	=	density
V_{max} (m/s)	=	maximum end velocity
x+y (m)	=	horizontal and vertical throw
x_{cr} (m)	=	critical throw
ΔT_o (K)	=	temperature difference between supply and room air temperature ($\Delta T_o = t_{\text{supp}} - t_{\text{room}}$)
t_{supp} (°C)	=	supply air temperature
t_{room} (°C)	=	room temperature
NW (mm)	=	nominal value

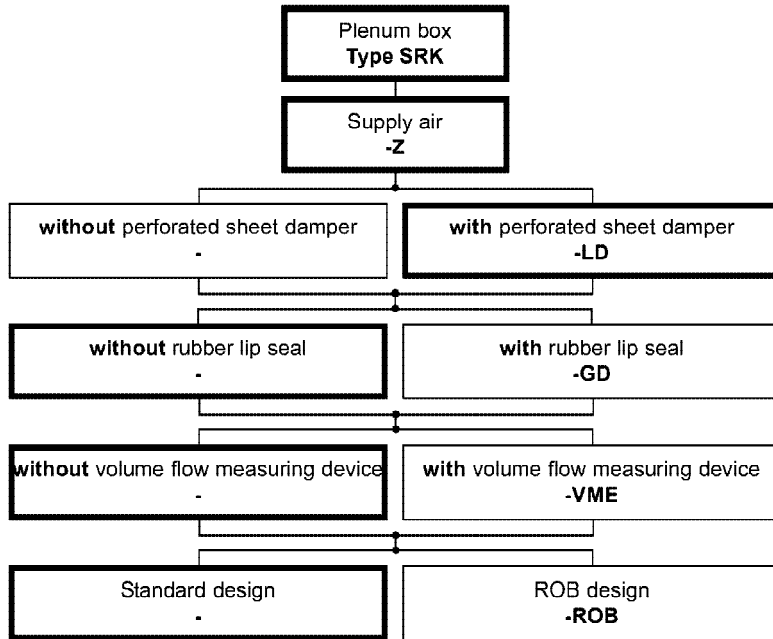
DHV

Diffuser

Order details



Accessories:



Order example:

DHV-Q-200-VM-SRK-Z-L

At non-specified order the thick framed design will be delivered!

DHV

Diffuser

Specification texts

Ceiling swirl diffuser **type DHV-Q** for flexible duct connection, with square faceplate and nozzle, size 100 from painted sheet steel RAL 9010(white), size 125 - 315 from painted aluminium RAL 9010 (white) diffuser with fixed blades.

Screw mounting (SM, only without plenum)

Manufacturer: SCHAKO **type DHV-Q**

- with round faceplate and nozzle , size 100 from painted sheet steel RAL 9010 (white)
size 125 - 315 from painted aluminium RAL 9010 (white)

Manufacturer : SCHAKO **type DHV-R**

- with round faceplate from painted plastic RAL 9010 (white, only available sizes 125 - 250)

Manufacturer: SCHAKO **type DHV-K**

- with secret mounting (VM), traverse fixing only with plenum box (SRK-Z) available

- with clamp fixing (-KB) only for flexible duct connection (without plenum)

Accessories:

- with plenum box type SRK-Z from galvanised sheet steel and fixing lugs, with side entry spigot
 - with a perforated plate damper (-LD) adjustable from the front side integrated in the plenum box
 - with volume flow regulating device (-VME) in spigot
 - ROB model with removable equalising grid, damper and volume flow device (-VME)
 - with rubber gasket(-GD)