



# RTWO / RTWC

- ▶ Swirl diffuser conic
- ▶ Supply, round, adjustable
- ▶ Industrial

## Design:

**Swirl diffuser:**  
 round metal  
 nozzle body: aluminium  
 swirl blades: steel  
 finish: epoxy  
 colour: white RAL 9010

**Plenum box:**  
 material: galvanised sheet  
 steel  
 interior lining: 12 mm  
 finish: none

## Available types:

- RTW - H -**
- R** round diffuser
  - T** supply
  - W** Swirl type
- **frame**
- O** none
  - C** extended rim for industrial application (max model 500)
  - Q** tee bar mountable, square 595 mm (max. model 400)
- **operation**
- H** manually adjustable blades, separate
- **designed with**
- O** round top connection
  - U** unlined plenum box (delivered separately)
  - R** lined plenum box (delivered separately)

## Application:

The round, conic Swirl diffuser type RTWC is suitable for the supply of cooled or heated air with a big temperature difference and is intended for industrial application.

The diffuser can be applied without ceiling influence because of the extended rim. The housing consists of a round metal nozzle body with six swirl blades that can be manually adjusted. Any desired supply direction from horizontal to vertical can be set.

The diffuser is highly suitable for air heating installations in high rooms. The large penetration depth makes it possible to work with a lower air capacity.

## Features:

Max. exchange rate: up to 15 x  
 Under temperature: up to 10 K  
 Over temperature: up to 15 K

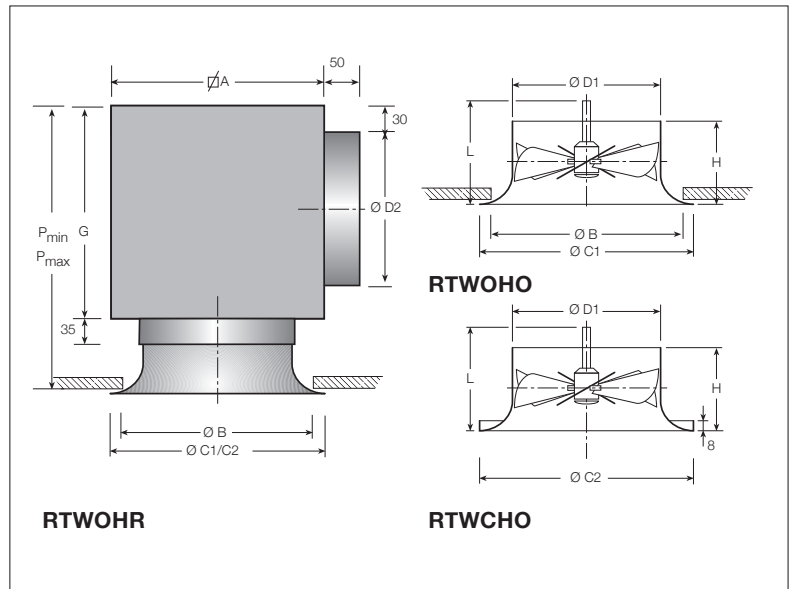
## Remark:

The stated dimensions are in mm.

For motorised version see type RTWS page 272

Connection "D" is actual O.D.

## Dimensions:



model	A	B	C1	C2	D1	D2	G	H	Pmin	Pmax
250	310	310	330	480	253	249	310	140	390	450
315	375	395	415	580	318	314	375	175	490	550
400	460	505	525	750	403	399	460	223	625	685
500	560	640	660	925	503	499	560	280	780	840
630	700	810	830	-	633	629	700	355	995	1055

1) in case an electric servo motor is installed: Pmin = 420 mm.

## Performance data RTWC:

air volume		model 250			315			400			500			630		
m <sup>3</sup> /s	m <sup>3</sup> /h	Vh	Ps	Lp	Vh	Ps	Lp	Vh	Ps	Lp	Vh	Ps	Lp	Vh	Ps	Lp
0.060	216	1.2	4	-												
0.070	252	1.4	5	14												
0.080	288	1.6	7	17	1.0	3	-									
0.100	360	2.0	10	22	1.3	4	-									
0.125	450	2.5	16	28	1.6	6	15									
0.150	540	3.1	24	32	1.9	9	19	1.2	3	-						
0.200	720	4.1	42	39	2.6	16	27	1.6	5	18						
0.250	900				3.2	25	33	2.0	8	24	1.3	3	-			
0.300	1080				3.9	36	37	2.4	11	28	1.5	5	-			
0.400	1440				5.1	63	45	3.2	20	35	2.0	9	19	1.3	4	-
0.500	1800							4.0	31	41	2.5	13	25	1.6	6	17
0.600	2160							4.8	44	45	3.1	19	31	1.9	8	22
0.800	2880										4.1	34	39	2.6	15	29
1.000	3600										5.1	53	45	3.2	24	35
1.250	4500													4.0	37	40
1.500	5400													4.8	53	45
2.000	7200													6.4	94	52

## Selection method:

The model size is determined by the table. Interpolation of intermediate values is acceptable. For the recommended mounting height (bottom side of diffuser towards the floor) see figure. The recommended minimal distance among the swirl diffusers mutually is determined by the diagram. The distance up to a wall must be minimum half the mutual distance.

For an exchange rate of more than 15, consult our technicians.

## General:

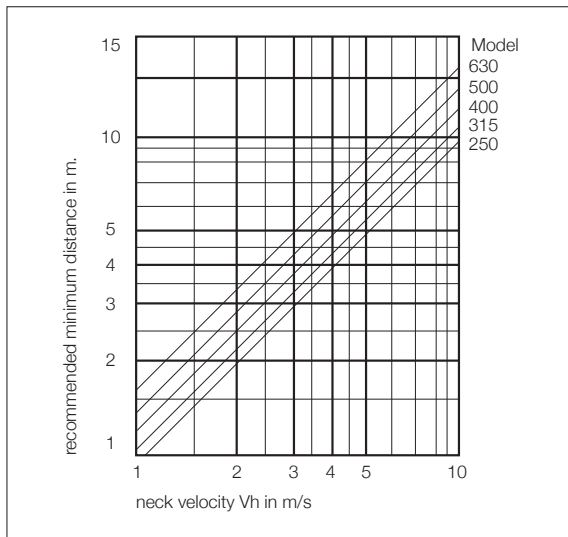
The pressure drop is stated without volume damper or plenum box.

- static pressure drop in Pa. The adopted room absorption is 10 dB. The sound pressure level is stated at a blade angle of 45 degrees.
- sound pressure in dB(A).
- neck velocity in m/s.

## Remark:

For a full selection including blade angle settings see page 40 up to 53.

## Minimum distance A:



## Mounting height M:

model	Mounting height M
250	3,1 to 4,8 m
315	3,5 to 5,8 m
400	4,5 to 7,0 m
500	5,8 to 14,0 m
630	8,0 to 25,0 m