



A.04

Ceiling diffusers and grilles

VWR-N

Swirl diffusers Square

Steel

White, RAL 9010

Accessories

Volume dampers **RER** Plenum boxes **FGN** Crossbars for RWR-N, VWR-N, RWR-2 en PRN

Square swirl diffusers type VWR-N

Square swirl ceiling diffusers with fixed blades

Application

For air supply and exhaust in ventilation and air conditioning systems.

Material

Steel

Mounting

Fixing with central screw into the crossbar of the plenum box

Accessories

- Plenum box type RER-LB
- Insulated plenum box type RER-LB ISO Plenumbox connection valve type CRC
- Mounting crossbar for direct duct mounting type FGN
- Mounting crossbar for direct ceiling mounting type FHN
- Butterfly damper for mounting ont the neck of the diffuser, type DR

Text for tender

- The square air supply diffusers are of the swirl type with fixed blades. They are made of steel with white powder coating RAL 9010 and supplied with a volume control damper in the plenum box.
- ATC Type VWR-N+RER-L

Order example

VWR-N, 315 + RER-LB 315 + CRC 250

Explanation

VWR-N = Diffuser type **315** = Diffuser size (Ø diffuser neck connection)

Accessories

RER-LB = Plenum box

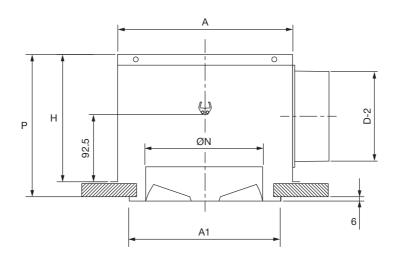
CRC = Plenumbox connection valve

250 = Plenumbox connection diameter 250





Ceiling diffusers and grilles



Dimensions

Модел	AxA [mm]	ØN1 [mm]	ØN [mm]						
125	171x171	123	125						
160	213x213	158	160						
200	264x264	198	200						
250	326x326	248	250						
315	405x405	313	315						
355	455x455	353	355						
400	510x510	398	400						
500	594x594	498	500						



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Selection

Selection									
	VWR-N	125	160	200	250	315	355	400	500
Qv	Aeff	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.06
	Lth	0.40	0.01	0.02	0.02	0.00	0.04	0.00	0.00
	Ps	7							
Į.	Veff	1.10							
40	Lw	<20							
=	Lth	0.60	0.50						
	Ps	16	7						
	Veff	1.70	1.40						
60	Lw	22	<20						
	Lth	0.80	0.70						
	Ps	29	12						
	Veff	2.20	1.80						
80	Lw	30	21						
	Lth	1	0.9	0.80					
	Ps	45	18	6					
	Veff	2.80	2.30	1.60					
100	Lw	36	27	<20					
100		1.20		0.90				-	
	Lth		1.10						
	Ps	64	26	9					
	Veff	3.40	2.70	1.90					
120	Lw	41	33	<20					
	Lth	1.50	1.80	1.10	1				
	Ps	101	73	14	5				
	Veff	4.20	4.55	2.40	1.80				
150	Lw	4.20	4.55	25	<20				
150									
	Lth	2	2.30	1.50	1.30				
	Ps	179	113	24	9				
	Veff	5.60	5.60	3.20	2.50				
200	Lw	55	53	33	23				
	Lth		•	1.90	1.70	1.40			
	Ps			38	14	4			
	Veff			3.90	3.10	2.10			
250									
250	Lw			39	30	<20	4.00	1	
	Lth			2.30	2	1.70	1.80		
	Ps			55	20	6	4	4	
	Veff			4.70	3.70	2.50	2.30		
300	Lw			44	35	<20	<20	4	
<u> </u>	Lth			3	2.70	2.20	2.40	1	
	Ps			98	36	11	8		
t t	Veff			6.30	4.90	3.40	3.10		
400				52		28	25		
400	Lw			52	43				1
	Lth				3.30	2.80	3	2.50	
	Ps				56	18	12	6	
	Veff				6.10	4.20	3.90	2.80	
500	Lw				49	34	31	<20	
	Lth				4	3.30	3.60	3	
	Ps				80	26	18	9	
	Veff				7.40	5.10	4.60	3.30	
600	Lw				54	39	35	23	
	Lth				U-1	3.90	4.20	3.50	2.70
	Ps Ps					35	24	13	8
	Veff					5.90	5.40	3.90	3.10
700	Lw					44	40	28	<20
_	Lth					4.70	5	4.30	3.30
	Ps					52	36	19	12
	Veff					7.20	6.60	4.70	3.80
850	Lw					49	46	33	25
030						5.50	5.90	5	3.90
	Lth								
	Ps					72	50	26	17
	Veff					8.40	7.70	5.60	4.50
1000	Lw					54	50	38	29
.000	Lth							6	4.70
	Ps							37	24
	Veff							6.70	5.40
1000									
1200	Lw							43	34

Symbols and specifications

- Values at ceiling height of 2.7m
 Temperature difference Dt = -10K
- Lth 0.25 = Horizontal throw in m at vt = 0.25m/s
 Ps = Static pressure loss in Pa
- Lw = Acoustic power in dB(A)
 Qv = Air Volume in m³/h
- 125 to 500 = neck size diffuser in mm
- Aeff = Effective area in m²
- veff = Effective velocity between the blades of the diffuser in m/s