

Introduction

The Waterloo circular plain faced diffuser type RWV has a solid circular face providing a 360° air pattern with excellent air induction characteristics. This all aluminium diffuser is fully adjustable allowing horizontal and vertical discharge patterns.

With their high induction ratios these diffusers ensure rapid primary and secondary air mixing with low noise levels.

The diffusers are available with zinc steel plenums with the option of thermal insulation lining on supply plenums.

Product Description

- RWV** Circular supply diffuser with plain faceplate
- RWV-R** Circular return diffuser with plain faceplate
- UKDV** Supply air plenum
- UKDVI** Insulated supply air plenum
- UKRV** Return air plenum
- UKRVI** Insulated return air plenum

Features

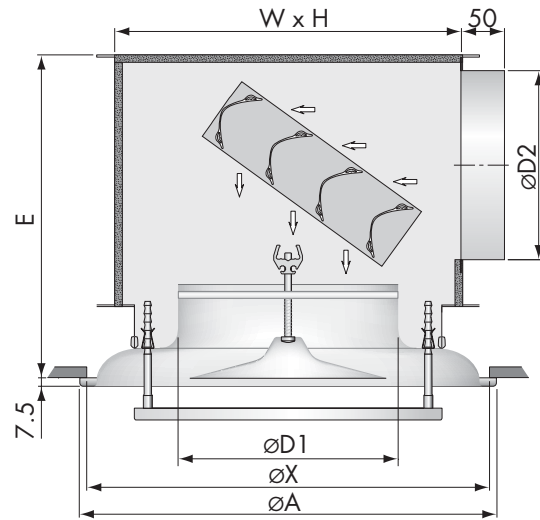
- Supply and exhaust applications for heating, cooling and isothermal conditions
- Excellent induction characteristics
- Variety of air patterns
- Suitable for modular ceiling systems

Finishes

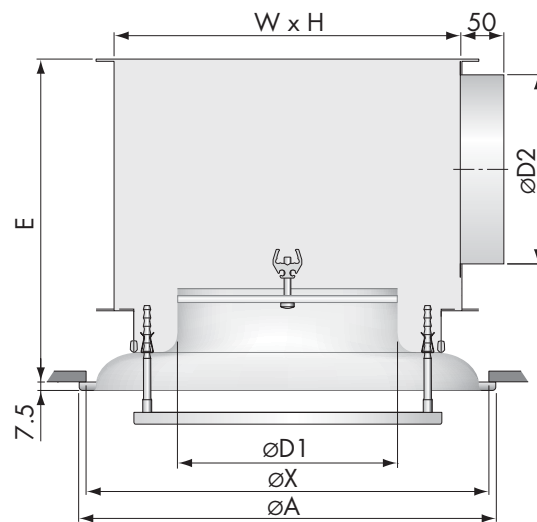
PPM9010 (RAL 9010 20% Gloss White)
Other colours are available on request

Advantages

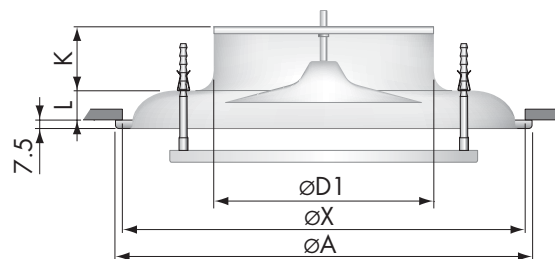
- Excellent aerodynamic performance
- No ceiling effect required
- Short throw



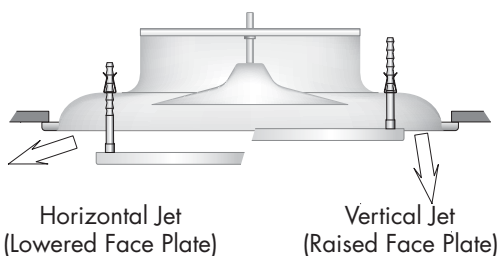
RWV + UKDVI



RWV-R + UKRV



RWV



Order Example

RWV-160/UKDV-160

Type _____
 Diameter _____
 Plenum Type _____
 Plenum Spigot Diameter _____

Nom Size øD1	WxH	øD2	øA overall	øX aperture	E	K	L
100	210x210	100	190	175	205	55	12.5
125	210x210	125	230	215	215	60	20.0
160	310x310	160	270	255	295	65	27.5
200	310x310	200	370	345	295	70	27.5
250	410x410	250	470	440	365	75	35.0
315	510x510	315	570	535	435	90	35.0



Selection Criteria

Ceiling Height 2.7m
 Temperature Differential -11K
 Average room velocity V_r 0.15m/s
 NC is sound pressure level/Noise Criteria
 Curve based on a room absorption of 8dB
All selections include the plenum

Selection Example RWV-200

(Horizontal throw)

Air Volume 139 l/s

Throw 3.6m

Pressure Drop 28 Pa

Noise Level NR 30

Performance Table

RWV		Horizontal						
m ³ /h	l/s		100 Dia	125 Dia	160 Dia	200 Dia	250 Dia	315 Dia
50	14	T	0.7					
		Ps	6					
		Lw	-					
75	21	T	1.2					
		Ps	12					
		Lw	-					
100	28	T	1.6	1.3				
		Ps	20	7				
		Lw	21	-				
125	35	T	2.1	1.5	1.4			
		Ps	31	11	4			
		Lw	27	-	-			
150	42	T	2.5	1.7	1.6			
		Ps	42	16	6			
		Lw	32	20	-			
200	56	T		2.1	2.0	1.4		
		Ps		28	11	5		
		Lw		27	-	-		
250	69	T			2.3	1.8		
		Ps			16	8		
		Lw			-	-		
300	83	T			2.7	2.2	1.8	
		Ps			23	11	8	
		Lw			25	-	-	
400	111	T				2.9	2.2	
		Ps				18	14	
		Lw				22	-	
500	139	T				3.6	2.5	2.2
		Ps				28	21	8
		Lw				30	20	-
600	167	T				4.3	2.9	2.7
		Ps				40	30	18
		Lw				33	26	-
750	208	T					3.5	3.3
		Ps					45	26
		Lw					34	25
1000	278	T						4.0
		Ps						47
		Lw						34
1250	346	T						4.7
		Ps						70
		Lw						40

Vertical					
100 Dia	125 Dia	160 Dia	200 Dia	250 Dia	315 Dia
1.2					
20					
-					
1.8					
44					
20					
2.7	2.0				
80	40				
26	-				
3.8	3.0	2.0			
125	60	16			
32	22	-			
	3.9	2.6			
	90	24			
	26	-			
	5.2	3.7	2.9		
	150	42	20		
	32	22	-		
		5.0	4.0		
		65	32		
		26	20		
		6.4	5.2	4.6	
		90	46	22	
		31	23	-	
			7.8	6.7	
			81	39	
			28	22	
			10.0	9.5	7.6
			127	61	24
			34	27	-
				12.0	10.0
				87	35
				32	22
				14.0	12.0
				136	54
				36	27
					14.0
					96
					33

Exhaust					
100 Dia	125 Dia	160 Dia	200 Dia	250 Dia	315 Dia
4					
-					
10					
-					
17	5				
-	-				
26	9				
24	-				
33	13	4			
30	-	-			
	23	9			
	25	-			
	39	14	7		
	40	-	-		
	52	20	10		
	37	22	-		
		33	16	11	
		34	21	-	
			24	18	6
			27	-	-
			34	26	14
			32	28	-
				40	21
				34	25
					31
					32