

# Perforated Face Diffusers

## MWVP MWVPD

### Introduction

The MWVP(D) is a high induction multidirectional (through blanking plate arrangement) ceiling diffuser with a perforated frontplate. The diffuser is suitable for both supply and extract applications, with chilled, warm or isothermal air. It is delivered with an acoustically lined plenum attached as standard. The plenum also has a sound attenuation blade specially designed to have a minimal effect on pressure, helping to reduce noise levels even further.

Extract diffusers can have an optional EU2 filter fitted, which conform to the Eurovent norm.

### Product Description

- MWVPD-4** Side-Entry, 4-Way Perforated Plate Supply Diffuser
- MWVPD-3** Side-Entry, 3-Way Perforated Plate Supply Diffuser
- MWVPD-2** Side-Entry, 2-Way Perforated Plate Supply Diffuser
- MWVP-4** Top-Entry, 4-Way Perforated Plate Supply Diffuser
- MWVP-3** Top-Entry, 3-Way Perforated Plate Supply Diffuser
- MWVP-2** Top-Entry, 2-Way Perforated Plate Supply Diffuser
- MWVPD-R** Side-Entry Perforated Plate Extract Diffuser
- MWVPD-RF** Side-Entry Perforated Plate Extract Diffuser With Filter
- MWVP-R** Top-Entry Perforated Plate Extract Diffuser
- MWVP-RF** Top-Entry Perforated Plate Extract Diffuser With Filter

### Features

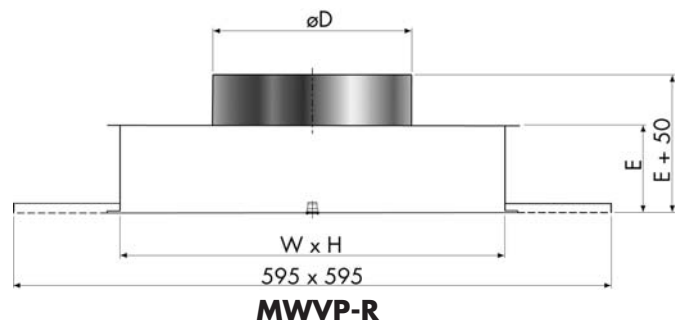
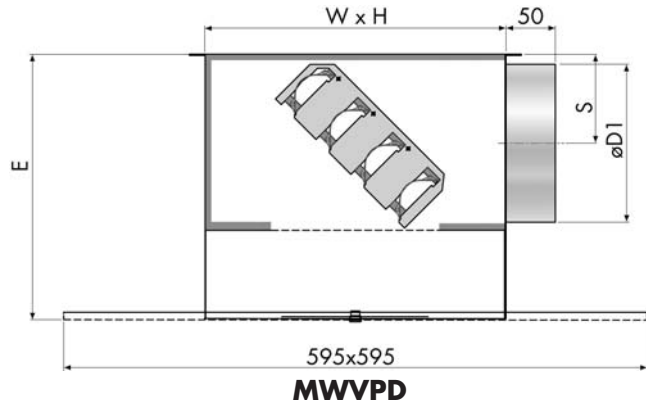
- Supply and extract functionality
- Suitable for chilled, isothermal or warmed air.
- Ideal for modular ceiling tile replacement
- High entrainment and mixing of surrounding air.
- Short throw

### Finishing

Front plate is PPM 9010 (20% gloss white) as standard  
Other colours are available on request

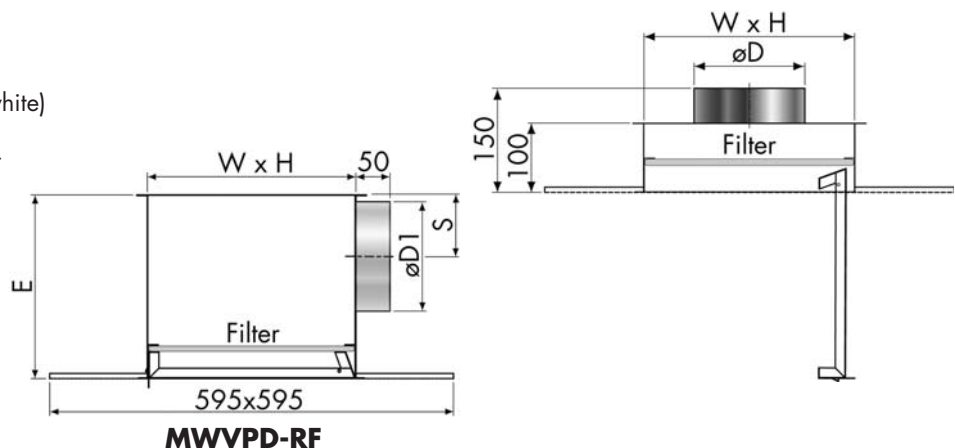
### Sizes

See Table



	MWVPD			MWVP	
W x H	øD1	E	S	øD	E
240x240	125	235	72	125	87
300x300	160	270	90	160	92
380x380	200	300	110	200	92
480x480	250 oval*	295	102	250	97
560x560	315 oval*	295	99	315	107

\*The perimeter of the oval is equivalent to the circumference of a circle of the stated diameter



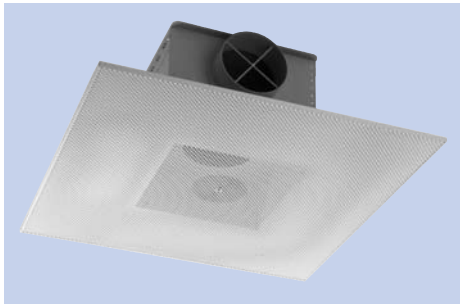
### Order Example

**MWVPD-3-200/PPM9010**

Type \_\_\_\_\_  
Number of Directions \_\_\_\_\_  
Inlet Spigot Diameter \_\_\_\_\_  
Finish \_\_\_\_\_

W x H	øD	E MWVP	E MWVPD	Filter Size	S
340x340	200	100	296	335x335	110
440x440	250 oval*	100	296	435x435	117

\*The perimeter of the oval is equivalent to the circumference of a circle of the stated diameter



### Selection Criteria

Ceiling Height 2.7 m  
 Temperature Differential (Room/Supply air) -10K  
 Air Velocity In The Comfort Zone 0.15 m/s  
 $L_p$  dB(A) =  $L_w$  less 8 dB Room Damping

### Selection Example

#### MWVP(D)-4-250

Air Volume 111 l/s or 400 m<sup>3</sup>/h  
 Throw 1.1 m  
 Pressure Drop 9 Pa  
 Sound Level < NR 20

### Performance Table

MWVP(D)		4-Way Supply					3-Way Supply					2-Way Supply					Extract					Extract With Filter			
m <sup>3</sup> /h	l/s		125	160	200	250	315	125	160	200	250	315	125	160	200	250	315	125	160	200	250	315	200	250	
100	28	T	0.5	0.4				0.5	0.4				0.6												
		Ps	8	3				11	5				17					5					3		
		lp	-	-				-	-				16					-					-		
150	42	T	0.8	0.6			0.8	0.7				1.3	0.9												
		Ps	16	7			24	10				40	16					14					6		
		lp	22	-			24	-				29	-					-					-		
200	56	T	1.0	0.8	0.7		1.1	0.9	0.8			2.0	1.1	0.8											
		Ps	33	12	5		24	18	8			68	30	12				25	11				9		
		lp	30	16	-		33	20	-			40	24	-				17	-				-		
250	69	T	1.3	1.0	0.8	0.5		1.1	0.8	0.5			1.6	1.0	0.7										
		Ps	48	18	8	3		28	12	5			44	17	8			39	16				13	3	
		lp	39	24	-	-		27	-	-			31	18	-			23	-				-	-	
300	83	T		1.2	1.0	0.8		1.3	1.1	0.9			2.1	1.3	1.1										
		Ps		28	12	5		40	18	7			64	27	11			56	21	9			18	5	
		lp		33	15	-		34	18	-			39	23	-			27	-	-			-	-	
400	111	T			1.3	1.1	0.9			1.4	1.3	1.0			2.1	1.3	1.0								
		Ps			20	9	4			30	12	5			48	20	8			31	15			29	9
		lp			26	-	-			28	18	-			31	23	-			22	-			-	-
500	139	T			1.6	1.4	1.2			1.7	1.7	1.3			2.6	2.1									
		Ps			32	13	6			48	20	7			30	11			44	24	10			41	44
		lp			32	20	-			37	26	15			29	19			28	18	-			22	-
600	167	T				1.7	1.4				2.1	1.6			3.5	2.6									
		Ps				18	9				28	17			44	18				35	14	5		55	20
		lp				27	16				31	19			35	24				21	-	-		27	23
750	208	T					1.7				2.0				3.3										
		Ps					13				18				28					54	22	11		31	
		lp					24				28				31					28	-	-		28	
1000	278	T					2.3				2.7														
		Ps					24				28										36	14		56	
		lp					35				36									24	-		35		