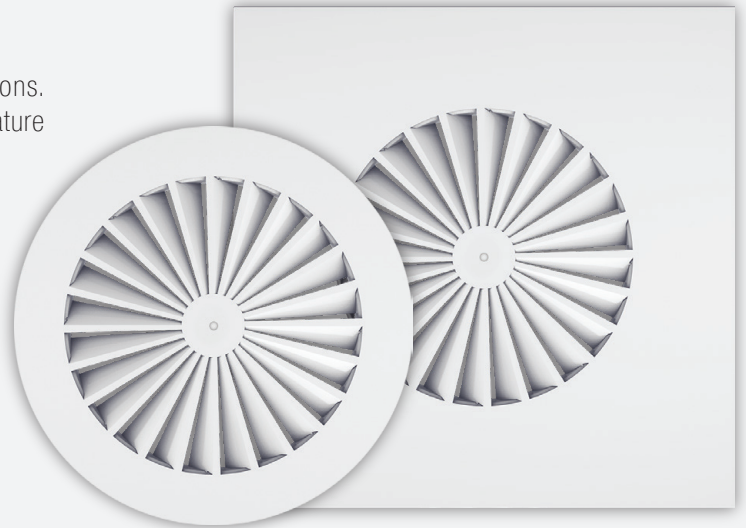


### OVERVIEW

Swirl diffuser for ceiling or freely suspended applications. Blade geometry optimised for VAV, including low temperature supply air ( $\approx 8^{\circ}\text{C}$ ).

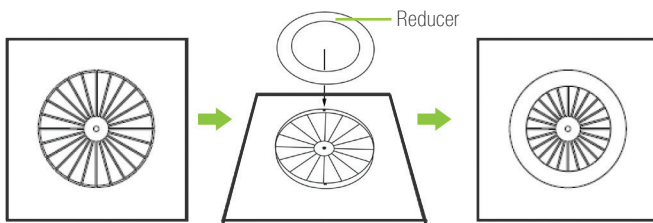
#### Available in:

- 2 shapes - round or square
- 4 neck sizes - DN200, DN250, DN350, DN500
- 4 discharge patterns, via segment covers
- 6 optional reducers
- Optional perforated face



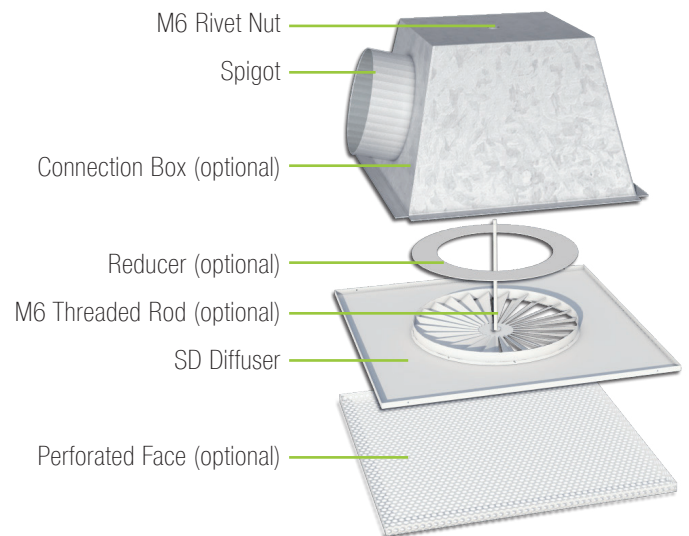
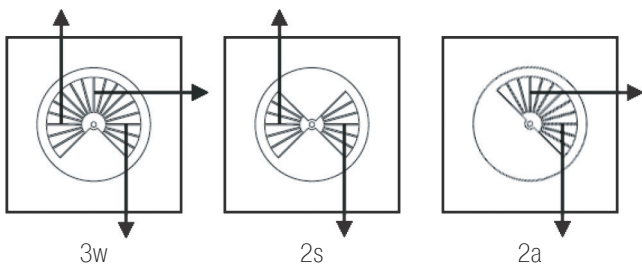
#### Reducers

The diffuser effective neck diameter may be reduced by the insertion of a suitable reducer to ensure stable airflow patterns at low airflow rates, especially in VAV applications.

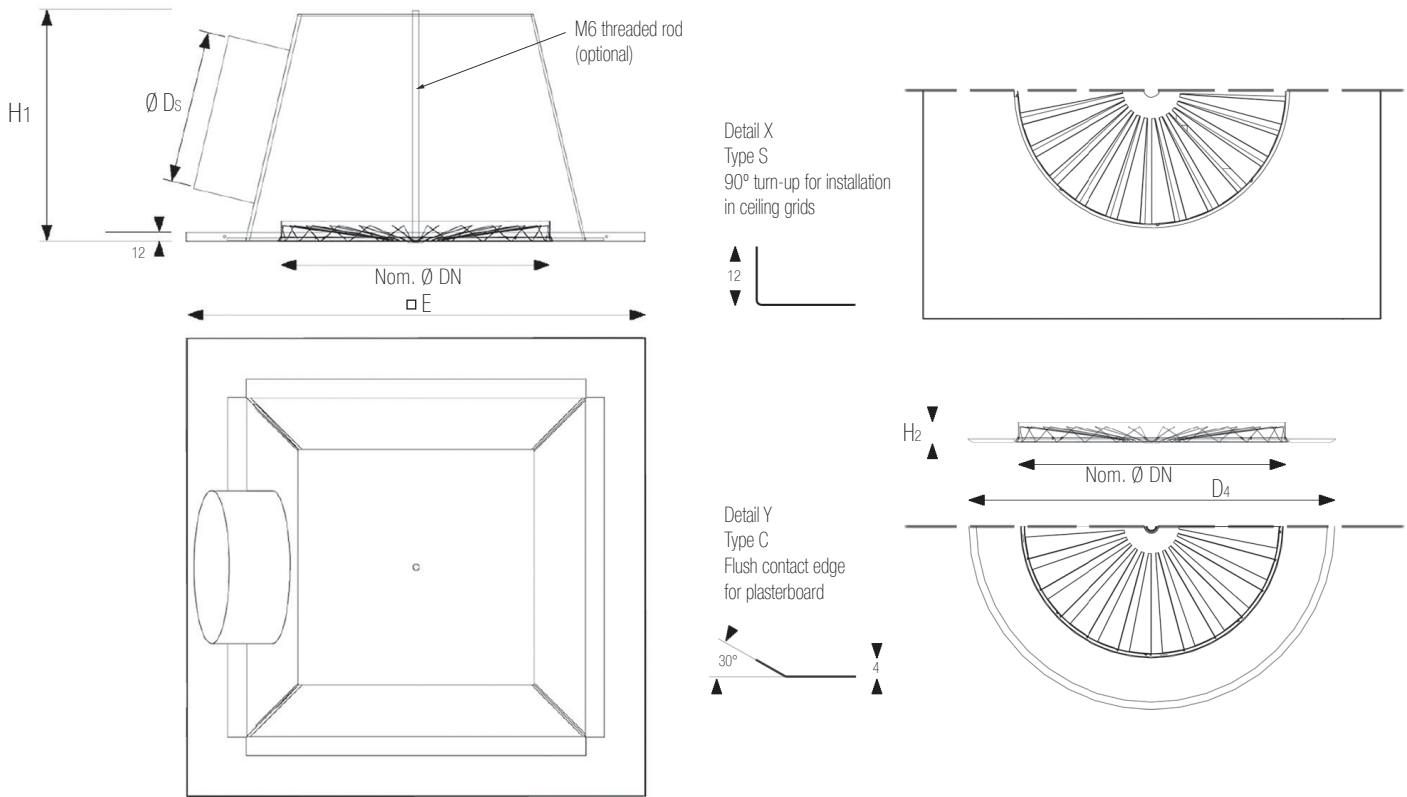


#### Segment Covers

Segment covers may be used to blank off one or more blade quadrants to create 3-way, 2-way symmetrical or 2-way asymmetrical discharge patterns.



# TECHNICAL DATA



Nominal diameter DN	Ceiling grid	Reducer size	Volume flow rate <sup>1)</sup>			Dimensions in mm					Weight in Kg	
			$\dot{V}$ L/s at $\Delta T = -15$ K	$\dot{V}$ L/s at $\Delta T = -12$ K	$V_{min}$ in L/s <sup>2)</sup> with perf. <sup>5)</sup> $\Delta T = -10$ K	□ E	Ø Ds <sup>4)</sup>	H1	H2	D4	Air Outlet	Connection Box
DN200	□ 300 <sup>3)</sup>	0	23 - 60	20 - 60	32 - 50	□ 295 <sup>3)</sup>	≥149	250	20	270	0.7	3.0
DN250	□ 300 <sup>3)</sup>	0	34 - 100	30 - 100	45 - 85	□ 295 <sup>3)</sup>	≥199	250	25	335	1.2	3.5
DN350	□ 400 □ 450 □ 500 □ 600	0	55 - 175	50 - 175	80 - 160	□ 395 <sup>3)</sup> □ 445 <sup>3)</sup> □ 495 <sup>3)</sup> □ 595 <sup>3)</sup>	≥249	340	28	470	2.0 to 3.0	4.8
		1	44 - 140	40 - 140	65 - 125							
		2	38 - 120	35 - 120	55 - 110							
		3	33 - 95	30 - 95	45 - 90							
		4	24 - 75	22 - 75	34 - 70							
		5	18 - 55	16 - 55	25 - 50							
DN500	□ 600	0	130 - 400	120 - 400	180 - 350	□ 595	≥349	460	36	675	2.7 to 3.6	7.4
		1	120 - 320	100 - 320	145 - 300							
		2	100 - 290	90 - 290	130 - 260							
		3	75 - 240	70 - 240	110 - 210							
		4	60 - 180	55 - 180	85 - 170							
		5	50 - 145	45 - 145	65 - 135							

1)  $\Delta p$ , less than 45 Pa,  $L_p$  per diffuser less than NC30 (based on 10 dB (A) room absorption).  $\dot{V}_{min}$  valid for diffuser flush with closed ceiling; add 30% to  $\dot{V}_{min}$  if freely suspended.

2) Perforated face adds 3 dB and increases pressure loss by 10%.

3) Other dimensions available on request.

4) Min. ØDs valid for R0-4w. For other reducer sizes / discharge patterns refer to performance tables.

5) Perforation details on request; diffuser height increases by 10 mm.

Products supplied may differ slightly from those described in this technical brochure due to on-going product development.

# PERFORMANCE TABLES - DN200 & DN250

Quick selection guide. Refer to the online selection tool for detailed selections.

## DN200-4w

$\dot{V}$ L/s	$P_{st}$ Pa	$P_t$ Pa	$L_{W(A)}$ dB(A)	$L_{P(A)}^{(1)}$ NC	$C_{min}^{(2)}$ m	$C_{max}^{(2)}$ m
21 <sup>(3)</sup>	4.4	5.3	<25	<10	1.2 <sup>(6)</sup>	4.6 <sup>(6)</sup>
23 <sup>(4)</sup>	5.2	6.3	<25	<10	1.3 <sup>(7)</sup>	4.8 <sup>(7)</sup>
25	6.1	7.3	<25	<10	1.4 <sup>(7)</sup>	5.1 <sup>(7)</sup>
30	8.6	10.3	27	12	1.5 <sup>(7)</sup>	5.9 <sup>(7)</sup>
40	14.7	17.7	34	19	1.8 <sup>(7)</sup>	7.4 <sup>(7)</sup>
50	22.2	27	40	25	2.0 <sup>(7)</sup>	8.9 <sup>(7)</sup>
61 <sup>(5)</sup>	32.1	39.3	45	30	4.0 <sup>(7)</sup>	16.0 <sup>(7)</sup>

## DN200-3w

$\dot{V}$ L/s	$P_{st}$ Pa	$P_t$ Pa	$L_{W(A)}$ dB(A)	$L_{P(A)}^{(1)}$ NC	$C_{min}^{(2)}$ m	$C_{max}^{(2)}$ m
16 <sup>(3)</sup>	4.4	5.4	<25	<10	1.0 <sup>(6)</sup>	4.0 <sup>(6)</sup>
17 <sup>(4)</sup>	4.9	6.1	<25	<10	1.2 <sup>(7)</sup>	4.1 <sup>(7)</sup>
20	6.7	8.3	<25	<10	1.2 <sup>(7)</sup>	4.6 <sup>(7)</sup>
25	10.1	12.6	28	13	1.4 <sup>(7)</sup>	5.5 <sup>(7)</sup>
30	14.1	17.7	33	18	1.5 <sup>(7)</sup>	6.4 <sup>(7)</sup>
40	24.1	30.5	40	25	1.8 <sup>(7)</sup>	8.1 <sup>(7)</sup>
45 <sup>(5)</sup>	30	38.1	43	28	2.0 <sup>(7)</sup>	9.0 <sup>(7)</sup>

## DN200-2w

$\dot{V}$ L/s	$P_{st}$ Pa	$P_t$ Pa	$L_{W(A)}$ dB(A)	$L_{P(A)}^{(1)}$ NC	$C_{min}^{(2)}$ m	$C_{max}^{(2)}$ m
11 <sup>(3)</sup>	4.6	5.7	<25	<10	0.8 <sup>(6)</sup>	3.4 <sup>(6)</sup>
12 <sup>(4)</sup>	5.4	6.8	<25	<10	0.9 <sup>(7)</sup>	3.6 <sup>(7)</sup>
14	7.1	9.1	<25	<10	0.9 <sup>(7)</sup>	4.0 <sup>(7)</sup>
16	9.2	11.6	26	11	1.0 <sup>(7)</sup>	4.4 <sup>(7)</sup>
20	13.8	17.7	31	16	1.1 <sup>(7)</sup>	5.2 <sup>(7)</sup>
25	20.9	27	37	22	1.3 <sup>(7)</sup>	6.3 <sup>(7)</sup>
30 <sup>(5)</sup>	29.3	38.1	41	26	1.6 <sup>(7)</sup>	7.3 <sup>(7)</sup>

## DN250-4w

$\dot{V}$ L/s	$P_{st}$ Pa	$P_t$ Pa	$L_{W(A)}$ dB(A)	$L_{P(A)}^{(1)}$ NC	$C_{min}^{(2)}$ m	$C_{max}^{(2)}$ m
31 <sup>(3)</sup>	3.8	4.3	<25	<10	1.4 <sup>(6)</sup>	5.6 <sup>(6)</sup>
34 <sup>(4)</sup>	4.5	5.2	<25	<10	1.6 <sup>(7)</sup>	5.8 <sup>(7)</sup>
40	6.1	7.1	<25	<10	1.7 <sup>(7)</sup>	6.5 <sup>(7)</sup>
60	13.1	15.3	31	14	2.1 <sup>(7)</sup>	8.8 <sup>(7)</sup>
80	22.5	26.4	38	21	2.5 <sup>(7)</sup>	11.0 <sup>(7)</sup>
100	34.2	40.3	44	27	2.9 <sup>(7)</sup>	13.3 <sup>(7)</sup>
105 <sup>(5)</sup>	37.5	44.2	45	28	3.0 <sup>(7)</sup>	13.8 <sup>(7)</sup>

## DN250-3w

$\dot{V}$ L/s	$P_{st}$ Pa	$P_t$ Pa	$L_{W(A)}$ dB(A)	$L_{P(A)}^{(1)}$ NC	$C_{min}^{(2)}$ m	$C_{max}^{(2)}$ m
23 <sup>(3)</sup>	3.7	4.3	<25	<10	1.2 <sup>(6)</sup>	4.8 <sup>(6)</sup>
26 <sup>(4)</sup>	4.7	5.4	<25	<10	1.4 <sup>(7)</sup>	5.1 <sup>(7)</sup>
40	10.5	12.2	27	<10	1.7 <sup>(7)</sup>	6.9 <sup>(7)</sup>
50	16	18.6	32	15	2.0 <sup>(7)</sup>	8.2 <sup>(7)</sup>
60	22.6	26.4	37	20	2.2 <sup>(7)</sup>	9.5 <sup>(7)</sup>
70	30	35	41	24	2.4 <sup>(7)</sup>	10.8 <sup>(7)</sup>
78 <sup>(5)</sup>	37.1	43.4	44	27	2.6 <sup>(7)</sup>	11.9 <sup>(7)</sup>

## DN250-2w

$\dot{V}$ L/s	$P_{st}$ Pa	$P_t$ Pa	$L_{W(A)}$ dB(A)	$L_{P(A)}^{(1)}$ NC	$C_{min}^{(2)}$ m	$C_{max}^{(2)}$ m
16 <sup>(3)</sup>	4.1	4.6	<25	<10	1.0 <sup>(6)</sup>	4.0 <sup>(6)</sup>
18 <sup>(4)</sup>	5.1	5.8	<25	<10	1.2 <sup>(7)</sup>	4.3 <sup>(7)</sup>
20	6.3	7.1	<25	<10	1.2 <sup>(7)</sup>	4.6 <sup>(7)</sup>
30	13.5	15.3	28	11	1.5 <sup>(7)</sup>	6.2 <sup>(7)</sup>
40	23.3	26.4	35	18	1.8 <sup>(7)</sup>	7.8 <sup>(7)</sup>
50	35.5	40.3	41	24	2.1 <sup>(7)</sup>	9.4 <sup>(7)</sup>
52 <sup>(5)</sup>	38.2	43.4	42	25	2.1 <sup>(7)</sup>	9.7 <sup>(7)</sup>

### Key:

4w = 4-way blow; 3w = 3-way blow; 2w = 2-way blow

### Notes:

- 1) Based on 10 dB room absorption per diffuser.
- 2) Centre-line distance between diffusers, based on 2.7 to 4 m discharge height & ADPI ≥ 90%.
- 3) Minimum airflow rate @  $\Delta T_{supply-room} = -12$  K.
- 4) Minimum airflow rate @  $\Delta T_{supply-room} = -15$  K.
- 5) Maximum airflow rate for  $P_t \leq 45$  Pa and  $L_p \leq NC30$ .
- 6) Diffuser centre-line spacing @  $\Delta T_{supply-room} = -12$  K for ADPI ≥ 90%.
- 7) Diffuser centre-line spacing @  $\Delta T_{supply-room} = -15$  K for ADPI ≥ 90%.

## PERFORMANCE TABLES - DN350

Quick selection guide. Refer to the online selection tool for detailed selections.

R0-4w Min. ØD<sub>S</sub> = 250 mm

$\dot{V}$ L/s	P <sub>st</sub> Pa	P <sub>t</sub> Pa	L <sub>W(A)</sub> dB(A)	L <sub>P(A)</sub> <sup>1)</sup> NC	C <sub>min</sub> <sup>2)</sup> m	C <sub>max</sub> <sup>2)</sup> m
50 <sup>3)</sup>	3.1	3.7	<25	<10	1.8 <sup>6)</sup>	7.1 <sup>6)</sup>
55 <sup>4)</sup>	3.7	4.4	<25	<10	2.1 <sup>7)</sup>	7.4 <sup>7)</sup>
75	6.3	7.7	<25	<10	2.4 <sup>7)</sup>	9.1 <sup>7)</sup>
100	10.3	12.8	30	16	2.7 <sup>7)</sup>	11.3 <sup>7)</sup>
125	15	18.9	36	21	3.1 <sup>7)</sup>	13.4 <sup>7)</sup>
150	20.5	26.1	40	25	3.5 <sup>7)</sup>	15.5 <sup>7)</sup>
180 <sup>5)</sup>	28	36.1	44	30	4.0 <sup>7)</sup>	16.0 <sup>7)</sup>

R1-4w / R0-3w Min. ØD<sub>S</sub> = 225 mm

$\dot{V}$ L/s	P <sub>st</sub> Pa	P <sub>t</sub> Pa	L <sub>W(A)</sub> dB(A)	L <sub>P(A)</sub> <sup>1)</sup> NC	C <sub>min</sub> <sup>2)</sup> m	C <sub>max</sub> <sup>2)</sup> m
40 <sup>3)</sup>	3.2	3.8	<25	<10	1.6 <sup>6)</sup>	6.3 <sup>6)</sup>
45 <sup>4)</sup>	4	4.8	<25	<10	1.9 <sup>7)</sup>	6.7 <sup>7)</sup>
60	6.7	8.1	26	<10	2.1 <sup>7)</sup>	8.2 <sup>7)</sup>
80	11.3	13.8	33	16	2.5 <sup>7)</sup>	10.1 <sup>7)</sup>
100	17	20.8	39	22	2.8 <sup>7)</sup>	12.1 <sup>7)</sup>
120	23.6	29.1	43	26	3.2 <sup>7)</sup>	14.0 <sup>7)</sup>
139 <sup>5)</sup>	30.9	38.2	47	30	3.5 <sup>7)</sup>	15.9 <sup>7)</sup>

R2-4w / R1-3w / R2-2w Min. ØD<sub>S</sub> = 200 mm

$\dot{V}$ L/s	P <sub>st</sub> Pa	P <sub>t</sub> Pa	L <sub>W(A)</sub> dB(A)	L <sub>P(A)</sub> <sup>1)</sup> NC	C <sub>min</sub> <sup>2)</sup> m	C <sub>max</sub> <sup>2)</sup> m
34 <sup>3)</sup>	3.6	4.3	<25	<10	1.5 <sup>6)</sup>	5.8 <sup>6)</sup>
39 <sup>4)</sup>	4.7	5.6	<25	<10	1.7 <sup>7)</sup>	6.3 <sup>7)</sup>
40	4.8	5.9	<25	<10	1.8 <sup>7)</sup>	6.4 <sup>7)</sup>
60	10.3	12.5	28	13	2.1 <sup>7)</sup>	8.5 <sup>7)</sup>
80	17.6	21.4	35	20	2.5 <sup>7)</sup>	10.6 <sup>7)</sup>
100	26.5	32.5	41	26	2.9 <sup>7)</sup>	12.7 <sup>7)</sup>
118 <sup>5)</sup>	35.8	44.3	45	30	3.2 <sup>7)</sup>	14.6 <sup>7)</sup>

R3-4w / R2-3w / R1-2w Min. ØD<sub>S</sub> = 175 mm

$\dot{V}$ L/s	P <sub>st</sub> Pa	P <sub>t</sub> Pa	L <sub>W(A)</sub> dB(A)	L <sub>P(A)</sub> <sup>1)</sup> NC	C <sub>min</sub> <sup>2)</sup> m	C <sub>max</sub> <sup>2)</sup> m
30 <sup>3)</sup>	3.8	4.7	<25	<10	1.4 <sup>6)</sup>	5.5 <sup>6)</sup>
34 <sup>4)</sup>	4.8	6	<25	<10	1.6 <sup>7)</sup>	5.9 <sup>7)</sup>
40	6.6	8.2	<25	<10	1.8 <sup>7)</sup>	6.6 <sup>7)</sup>
50	10.1	12.7	<25	12	2.0 <sup>7)</sup>	7.8 <sup>7)</sup>
65	16.8	21.2	29	18	2.0 <sup>7)</sup>	9.6 <sup>7)</sup>
80	25.1	31.8	34	23	2.3 <sup>7)</sup>	11.4 <sup>7)</sup>
95 <sup>5)</sup>	35	44.4	38	27	2.6 <sup>7)</sup>	13.1 <sup>7)</sup>

R4-4w / R3-3w / R2-2w Min. ØD<sub>S</sub> = 150 mm

$\dot{V}$ L/s	P <sub>st</sub> Pa	P <sub>t</sub> Pa	L <sub>W(A)</sub> dB(A)	L <sub>P(A)</sub> <sup>1)</sup> NC	C <sub>min</sub> <sup>2)</sup> m	C <sub>max</sub> <sup>2)</sup> m
22 <sup>3)</sup>	3.1	4	<25	<10	1.2 <sup>6)</sup>	4.7 <sup>6)</sup>
25 <sup>4)</sup>	4	5.2	<25	<10	1.4 <sup>7)</sup>	5.0
35	7.6	9.9	<25	<10	1.6 <sup>7)</sup>	6.4
45	12.3	16.2	28	13	1.9 <sup>7)</sup>	7.7
55	18.2	24	33	18	2.1 <sup>7)</sup>	9.0 <sup>7)</sup>
65	25.1	33.2	38	22	2.3 <sup>7)</sup>	10.3
75 <sup>5)</sup>	33.1	43.9	41	26	2.6 <sup>7)</sup>	11.7

R5-4w / R4-3w / R3-2w Min. ØD<sub>S</sub> = 125 mm

$\dot{V}$ L/s	P <sub>st</sub> Pa	P <sub>t</sub> Pa	L <sub>W(A)</sub> dB(A)	L <sub>P(A)</sub> <sup>1)</sup> NC	C <sub>min</sub> <sup>2)</sup> m	C <sub>max</sub> <sup>2)</sup> m
17 <sup>3)</sup>	3.6	4.7	<25	<10	1.0 <sup>6)</sup>	4.2 <sup>6)</sup>
19 <sup>4)</sup>	4.4	5.8	<25	<10	1.2 <sup>7)</sup>	4.4 <sup>7)</sup>
25	7.5	9.9	<25	<10	1.4 <sup>7)</sup>	5.3 <sup>7)</sup>
30	10.6	14.2	<25	<10	1.5 <sup>7)</sup>	6.1 <sup>7)</sup>
40	18.4	24.7	31	16	1.8 <sup>7)</sup>	7.7 <sup>7)</sup>
50	28.2	38.1	37	22	2.1 <sup>7)</sup>	9.3 <sup>7)</sup>
54 <sup>5)</sup>	32.7	44.3	39	24	2.2 <sup>7)</sup>	9.9 <sup>7)</sup>

R6-4w / R5-3w / R4-2w Min. ØD<sub>S</sub> = 125 mm

$\dot{V}$ L/s	P <sub>st</sub> Pa	P <sub>t</sub> Pa	L <sub>W(A)</sub> dB(A)	L <sub>P(A)</sub> <sup>1)</sup> NC	C <sub>min</sub> <sup>2)</sup> m	C <sub>max</sub> <sup>2)</sup> m
13 <sup>3)</sup>	5	5.7	<25	<10	0.9 <sup>6)</sup>	3.5 <sup>6)</sup>
15 <sup>4)</sup>	6.6	7.5	<25	<10	1.1 <sup>7)</sup>	3.9 <sup>7)</sup>
20	11.4	13	<25	<10	1.2 <sup>7)</sup>	5.0 <sup>7)</sup>
25	17.4	19.9	26	11	1.4 <sup>7)</sup>	6.0 <sup>7)</sup>
30	24.6	28.2	30	15	1.6 <sup>7)</sup>	7.0 <sup>7)</sup>
35	33	37.9	34	19	1.7 <sup>7)</sup>	8.0 <sup>7)</sup>
38 <sup>5)</sup>	38.6	44.3	37	21	1.8 <sup>7)</sup>	8.3 <sup>7)</sup>

### Key:

R0 = No reducer

R1 to R6 = reducers 1 to 6

4w = 4-way blow; 3w = 3-way blow; 2w = 2-way blow

### Notes:

1) Based on 10 dB room absorption per diffuser.

2) Centre-line distance between diffusers, based on 2.7 to 4 m discharge height & ADPI ≥ 90%.

3) Minimum airflow rate @ ΔT<sub>supply-room</sub> = -12 K.

4) Minimum airflow rate @ ΔT<sub>supply-room</sub> = -15 K.

5) Maximum airflow rate for P<sub>t</sub> ≤ 45 Pa and L<sub>p</sub> ≤ NC30.

6) Diffuser centre-line spacing @ ΔT<sub>supply-room</sub> = -12 K for ADPI ≥ 90%.

7) Diffuser centre-line spacing @ ΔT<sub>supply-room</sub> = -15 K for ADPI ≥ 90%.

## PERFORMANCE TABLES - DN500

Quick selection guide. Refer to the online selection tool for detailed selections.

R0-4w Min. ØD<sub>S</sub> = 350 mm

$\dot{V}$	P <sub>st</sub>	P <sub>t</sub>	L <sub>W(A)</sub>	L <sub>P(A)</sub> <sup>1)</sup>	C <sub>min</sub> <sup>2)</sup>	C <sub>max</sub> <sup>2)</sup>
L/s	Pa	Pa	dB(A)	NC	m	m
117 <sup>3)</sup>	2.2	3.1	<25	<10	2.7 <sup>6)</sup>	10.8 <sup>6)</sup>
131 <sup>4)</sup>	2.8	3.9	<25	<10	3.2 <sup>7)</sup>	11.4 <sup>7)</sup>
200	6.7	9.3	28	13	3.9 <sup>7)</sup>	15.4 <sup>7)</sup>
250	10.5	14.6	33	18	4.4 <sup>7)</sup>	16.0 <sup>7)</sup>
300	15.3	21.2	38	23	4.9 <sup>7)</sup>	16.0 <sup>7)</sup>
350	21.1	29	41	27	5.4 <sup>7)</sup>	16.0 <sup>7)</sup>
400 <sup>5)</sup>	27.7	38.1	45	30	5.9 <sup>7)</sup>	16.0 <sup>7)</sup>

R1-4w / R0-3w Min. ØD<sub>S</sub> = 325 mm

$\dot{V}$	P <sub>st</sub>	P <sub>t</sub>	L <sub>W(A)</sub>	L <sub>P(A)</sub> <sup>1)</sup>	C <sub>min</sub> <sup>2)</sup>	C <sub>max</sub> <sup>2)</sup>
L/s	Pa	Pa	dB(A)	NC	m	m
108 <sup>3)</sup>	3.1	4.1	<25	<10	2.6 <sup>6)</sup>	10.4 <sup>6)</sup>
121 <sup>4)</sup>	3.9	5.2	<25	<10	3.1 <sup>7)</sup>	11.0 <sup>7)</sup>
150	6.1	8	27	10	3.4 <sup>7)</sup>	12.9 <sup>7)</sup>
200	11	14.5	34	17	4.0 <sup>7)</sup>	16.0 <sup>7)</sup>
250	17.4	22.8	40	23	4.5 <sup>7)</sup>	16.0 <sup>7)</sup>
300	25.3	33.2	44	27	5.1 <sup>7)</sup>	16.0 <sup>7)</sup>
320 <sup>5)</sup>	28.9	37.9	46	29	5.3 <sup>7)</sup>	16.0 <sup>7)</sup>

R2-4w / R1-3w / R2-2w Min. ØD<sub>S</sub> = 300 mm

$\dot{V}$	P <sub>st</sub>	P <sub>t</sub>	L <sub>W(A)</sub>	L <sub>P(A)</sub> <sup>1)</sup>	C <sub>min</sub> <sup>2)</sup>	C <sub>max</sub> <sup>2)</sup>
L/s	Pa	Pa	dB(A)	NC	m	m
90 <sup>3)</sup>	2.4	3.4	<25	<10	2.4 <sup>6)</sup>	9.5 <sup>6)</sup>
101 <sup>4)</sup>	3.1	4.4	<25	<10	2.8 <sup>7)</sup>	10.1 <sup>7)</sup>
125	5	6.8	<25	<10	3.1 <sup>7)</sup>	11.7 <sup>7)</sup>
150	7.3	10	29	13	3.4 <sup>7)</sup>	13.4 <sup>7)</sup>
200	13.6	18.4	36	20	4.0 <sup>7)</sup>	16.0 <sup>7)</sup>
250	21.9	29.4	42	26	4.6 <sup>7)</sup>	16.0 <sup>7)</sup>
290 <sup>5)</sup>	30.2	40.3	45	30	5.0 <sup>7)</sup>	16.0 <sup>7)</sup>

R3-4w / R2-3w / R1-2w Min. ØD<sub>S</sub> = 275 mm

$\dot{V}$	P <sub>st</sub>	P <sub>t</sub>	L <sub>W(A)</sub>	L <sub>P(A)</sub> <sup>1)</sup>	C <sub>min</sub> <sup>2)</sup>	C <sub>max</sub> <sup>2)</sup>
L/s	Pa	Pa	dB(A)	NC	m	m
68 <sup>3)</sup>	2.7	3.7	<25	<10	2.1 <sup>6)</sup>	8.4 <sup>6)</sup>
75 <sup>4)</sup>	3.4	4.3	<25	<10	2.4 <sup>7)</sup>	8.7 <sup>7)</sup>
100	6.2	7.9	<25	<10	2.8 <sup>7)</sup>	10.6 <sup>7)</sup>
125	9.9	12.6	29	13	3.1 <sup>7)</sup>	12.5 <sup>7)</sup>
150	14.6	18.4	33	18	3.4 <sup>7)</sup>	14.4 <sup>7)</sup>
200	26.8	33.6	40	25	4.1 <sup>7)</sup>	16.0 <sup>7)</sup>
229 <sup>5)</sup>	35.7	44.6	44	28	4.5 <sup>7)</sup>	16.0 <sup>7)</sup>

R4-4w / R3-3w / R2-2w Min. ØD<sub>S</sub> = 250 mm

$\dot{V}$	P <sub>st</sub>	P <sub>t</sub>	L <sub>W(A)</sub>	L <sub>P(A)</sub> <sup>1)</sup>	C <sub>min</sub> <sup>2)</sup>	C <sub>max</sub> <sup>2)</sup>
L/s	Pa	Pa	dB(A)	NC	m	m
54 <sup>3)</sup>	2.8	3.5	<25	<10	1.9 <sup>6)</sup>	7.4 <sup>6)</sup>
60	3.5	4.4	<25	<10	2.2 <sup>7)</sup>	7.7 <sup>7)</sup>
80	6.4	8	<25	<10	2.5 <sup>7)</sup>	9.5 <sup>7)</sup>
100	10.4	12.9	28	12	2.8 <sup>7)</sup>	11.2 <sup>7)</sup>
125	16.9	20.8	33	18	3.1 <sup>7)</sup>	13.4 <sup>7)</sup>
150	25	30.6	38	22	3.5 <sup>7)</sup>	15.5 <sup>7)</sup>
179 <sup>5)</sup>	36.5	44.5	42	26	3.9 <sup>7)</sup>	16.0 <sup>7)</sup>

R5-4w / R4-3w / R3-2w Min. ØD<sub>S</sub> = 225 mm

$\dot{V}$	P <sub>st</sub>	P <sub>t</sub>	L <sub>W(A)</sub>	L <sub>P(A)</sub> <sup>1)</sup>	C <sub>min</sub> <sup>2)</sup>	C <sub>max</sub> <sup>2)</sup>
L/s	Pa	Pa	dB(A)	NC	m	m
45 <sup>3)</sup>	4.2	5	<25	<10	1.7 <sup>6)</sup>	6.7 <sup>6)</sup>
50 <sup>4)</sup>	5.1	6.1	<25	<10	2.0 <sup>7)</sup>	7.1 <sup>7)</sup>
60	7.2	8.5	<25	<10	2.1 <sup>7)</sup>	8.0 <sup>7)</sup>
80	12.2	14.6	28	12	2.5 <sup>7)</sup>	10.0 <sup>7)</sup>
100	18.4	22.2	34	18	2.8 <sup>7)</sup>	11.9 <sup>7)</sup>
120	25.7	31.2	38	22	3.1 <sup>7)</sup>	13.8 <sup>7)</sup>
145 <sup>5)</sup>	36.4	44.4	43	27	3.6 <sup>7)</sup>	16.0 <sup>7)</sup>

### Key:

R0 = No reducer

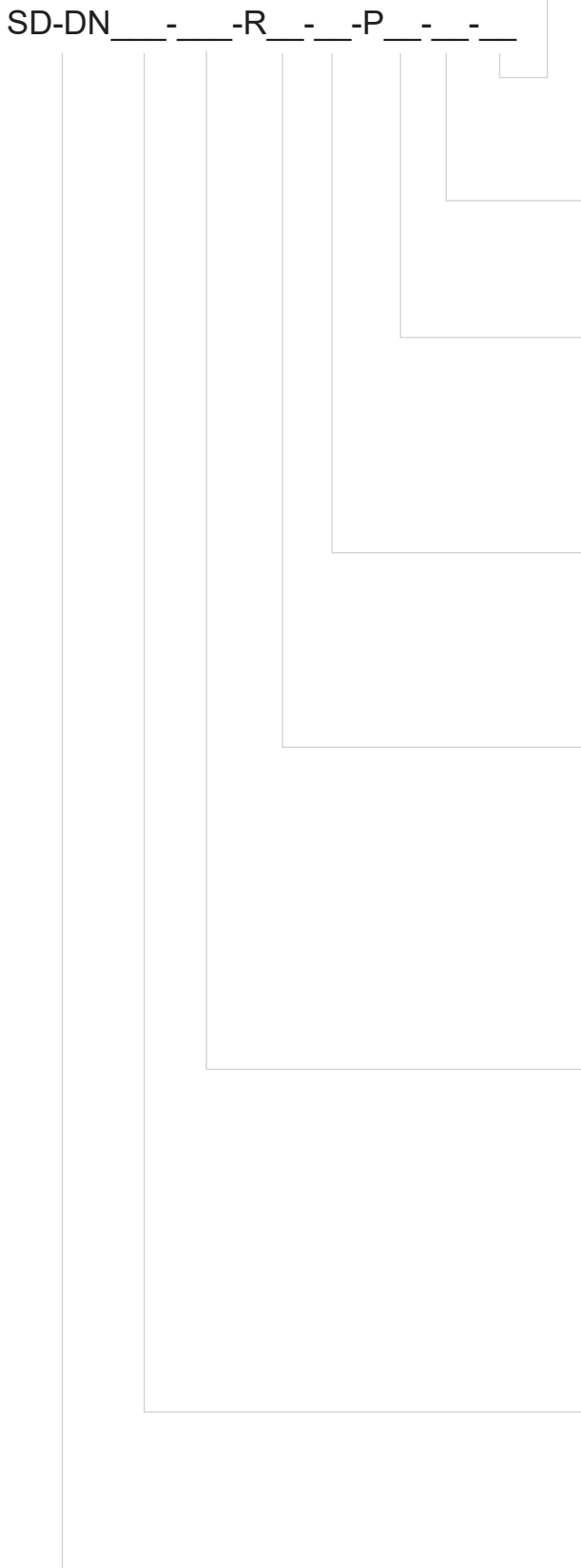
R1 to R6 = reducers 1 to 6

4w = 4-way blow; 3w = 3-way blow; 2w = 2-way blow

### Notes:

- 1) Based on 10 dB room absorption per diffuser.
- 2) Centre-line distance between diffusers, based on 2.7 to 4 m discharge height & ADPI ≥ 90%.
- 3) Minimum airflow rate @ ΔT<sub>supply-room</sub> = -12 K.
- 4) Minimum airflow rate @ ΔT<sub>supply-room</sub> = -15 K.
- 5) Maximum airflow rate for P<sub>t</sub> ≤ 45 Pa and L<sub>p</sub> ≤ NC30.
- 6) Diffuser centre-line spacing @ ΔT<sub>supply-room</sub> = -12 K for ADPI ≥ 90%.
- 7) Diffuser centre-line spacing @ ΔT<sub>supply-room</sub> = -15 K for ADPI ≥ 90%.

## ORDER DETAILS



### CONNECTION TYPE:

- 0\* = No connection box.
- KF = Thermally insulated foam connection box with magnetic fastener & blanking cap.
- KFR = As for KF plus threaded rod fastener and cap.

### SURFACE FINISH:

- 9003\* = Face powder coated to RAL 9003 (Signal White).
- \_\_\_\_ = Face powder coated to RAL \_\_\_\_ .

### FACE FINISH:

- 0\* = No perforated face.
- 1 = Perforated face.

### DISCHARGE PATTERN:

- 4w\* = No blanking segments.
- 3w = 1/4 blanking segment – for diffuser adjacent to wall.
- 2s = 2/4 blanking segments – for diffuser in corridor.
- 2a = 1/2 blanking segment – for diffuser in corner.

### REDUCER:

- 0\* = No reducer
- 1 – 6 = Reducers 1 to 6 for size DN355.
- 1 – 5 = Reducers 1 to 5 for size DN500.

### FACE SHAPE:

- S\* = Square face with 90° turn-up for coffered ceilings:
  - □ 295 mm\* for size DN250;
  - □ 595 mm\* (445 mm to 595 mm available) for size DN350;
  - □ 595 mm\* for size DN500.
- C = Circular face with flush contact edge (4 mm / 30°) for closed false ceilings:
  - Ø 270 mm\* for size DN200;
  - Ø 335 mm\* for size DN250;
  - Ø 470 mm\* for size DN350;
  - Ø 675 mm\* for size DN500.

### NECK DIAMETER:

- DN200 = Nominal neck diameter 200 mm.
- DN250 = Nominal neck diameter 250 mm.
- DN350 = Nominal neck diameter 350 mm.
- DN500 = Nominal neck diameter 500 mm.

### MODEL:

- Harmony Swirl Diffuser

Note: \* Standard, if no type code entered.

Products supplied may differ slightly from those described in this technical brochure due to on-going product development.