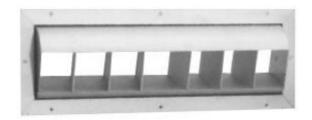






**Drum Diffusers** DD





#### **DESCRIPTION:**

The High Capacity Drum Diffuser (DD) consist of extruded aluminum blades mounted inside a rotatable drum to produce long air throws with a high degree of directional control

#### **MATERIAL:**

- Aluminum
- sheet metal

#### **FUNCTION:**

The DD provides long throws to supply air to spaces that cannot be served by ductwork and conventional outlets due to structural or architectural restrictions. This makes the DD ideal for use in warehouses, factories, stadiums, or any large enclosed space. For demanding environments such as industrial plants, or areas where corrosion resistance is necessary, an all stainless steel option is available.

Cylindrical core installed in frame, which allows to adjust air pattern +-300 horizontally the blade which is located cylindrical core allows to adjust the air pattern vertically

#### **FINISHING:**

Powder coated in RAL9010 colour as standard. Other colours on request

#### **INSTALLATION:**

- Screw
- Mounting Frame

#### **ACCESSORIES:**

- Damper
- Mounting Frame

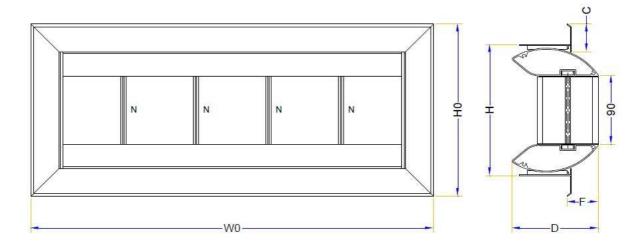


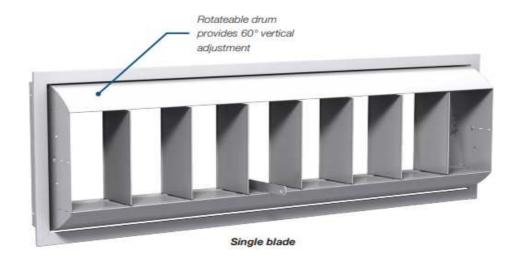
## **STANDARD SIZES (mm):**

TYP	E DD - AVAIL	ABLE SIZES (r	nm)
	NECK	SIZE	
250x165	300x165	475x165	625x165
Х	Х	Х	X

### **DIMENSIONS**

DIMENSIONS	W	W <sub>0</sub>	Н	H <sub>0</sub>	D	F	С	N
250X165	250	332	165	217	107	40	35	2
300X165	300	370	165	217	107	40	35	3
475X165	475	545	165	217	107	40	35	5
625X165	625	695	165	217	107	40	35	7



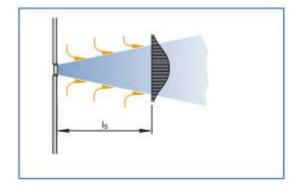




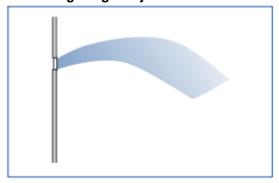
#### Air patterns



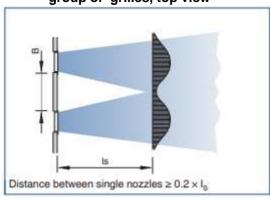
Air pattern, isothermal air



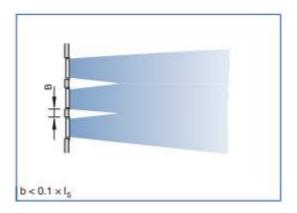
Air pattern in cooling mode, with vertical discharge angle adjustment



Air pattern without ceiling effect, group of grilles, top view



Air pattern, group of grilles, top view



L [mm] : Nominal length of the ventilation grille H [mm] LWA [dB(A)] : Nominal height of the ventilation grille : Sound power level of the air-regenerated noise

V [m³/h] and [l/s] : Volume flow rate Δpt [Pa] IS [m] : Total differential pressure

: Distance from single grille or horizontal run section (throw distance)



### **TECHNICAL DATA**

Nominal length	250mm up to 1000mm
Nominal height	165mm
Minimum volume flow rate	138 - 1000 l/s or 500 - 3600 m <sup>3</sup> /h
Maximum volume flow rate, with Lwa max. 45 dB(A) without attachments	378 - 1683 l/s or 1360 - 6060 m3/h
Supply air to room air temperature difference	-12 to +10 K

### **DD SELECTION TABLE**

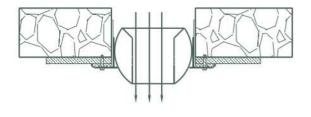
	Arrival Speed		7		The second									
Dimension	Throw Distance m³/h	0. 1	0. 2	0, 3	0. 4	0, 5	0. 6	0. 7	0.8	1.0	1. 2	1.5	2. 0	2. 5
10	500	24. 1	10. 6	6.4	4, 6	3, 6	2, 9							
	600	32. 9	14, 8	9. 0	6, 3	4. 9	4. 0	3. 5	2, 7	ĵ.	Ĵ	Ĵ.	į.	Ĵ.
	700	41.7	18. 9	11,5	8. 2	6. 3	5. 1	4. 4	3. 7	2, 6	į.			
250×165	800	53. 9	25, 2	15. 1	10.6	8. 3	6. 6	5. 9	4. 8	3. 7	3. 0			
20×	900	>55	30. 1	18.5	13. 1	9. 8	8. 2	6. 8	5. 9	4.5	3. 7	2, 5	φ·	8
22	1000	>55	38. 0	23. 3	16.3	12, 7	10.0	8. 6	7. 2	5. 7	4.5	3. 4	2. 2	
	1200	>55	52, 1	32.6	23.5	18. 1	14.6	12.5	10.4	8. 0	6, 44	4, 87	3, 5	2. 6
	1500	>55	>55	47.0	34.0	26. 6	21.7	18.0	15. 1	11.7	9.4	7.0	5.0	3. 9
	600	20.7	9.4	5. 7	4. 1	3. 1	2. 5			ĺ	ĺ			Ĭ.
	700	28. 1	12. 7	7.8	5, 5	4. 3	3, 5	3. 0	2, 5		1			ĺ
10	800	36.7	16. 6	10.1	7, 2	5, 6	4, 5	3. 9	3. 2	2, 4	Ĵ	Ĵ.		
300×165	900	43.7	19. 8	12, 1	8. 6	6. 6	5. 4	4. 6	3. 8	2, 9				
×	1000	52.1	23. 6	14.4	10.2	7.9	6. 4	5, 5	4. 6	3. 5	2, 8	4	Ø.	Ø
30	1200	>55	34. 0	20.8	14.8	11. 4	9. 2	7. 9	6. 6	5. 0	4. 0	3. 0	2. 1	Ø
	1500	>55	50. 5	30.8	21.9	17. 0	13.7	11.8	9. 8	7.4	6.0	4.4	3. 1	2. 3
	2000	>55	>55	51.2	36.4	28. 2	22.8	19.6	16. 2	12.3	9. 9	7.3	5. 2	4, 3
	700	18.5	8. 4	5. 1	3.6	2.8	2.3	)						
	800	20.6	9.3	5. 7	4.0	3. 1	2. 5	Ĵ	j.		)			ĺ
10	900	28.8	13, 0	8. 0	5.7	4, 4	3, 5	3. 0	2, 5	Ĵ.	ĵ.	Ĵ.		Ü.
16	1000	34. 7	15, 7	9. 6	6, 8	5, 3	4, 3	3. 7	3. 0	2, 3			1	
475×165	1200	48. 3	21. 9	13. 3	9. 5	7. 3	5. 9	5. 1	4. 2	3, 2	2, 6	3	į.	
4	1500	>55	33. 0	20.1	14.3	11. 1	9. 0	7.7	6. 4	4. 9	3. 9	2. 9		
	2000	>55	53. 1	32.4	23.0	17. 8	14.4	12.4	10.3	7.8	6. 3	4. 6	3, 3	2, 6
	2500	>55	>55	49.7	35. 3	27. 3	22. 1	19.0	15. 7	12.0	9, 7	7. 1	5, 1	4. 2
	900	18. 9	8. 6	5. 2	3. 7	2.9	Î	Î		Î	Î			Î
	1000	23.4	10. 6	6.5	4. 6	3. 6	2. 9	j	j			Ì	Ì	Ì
50	1200	34.7	15.7	9.6	6.8	5, 3	4. 3	3.7	3. 0	2.3				
625x165	1500	41.6	18. 8	11.5	8, 2	6, 3	5, 1	4. 4	3. 6	2.8			<u> </u>	į.
25x	2000	>55	36. 9	22, 5	16.0	12. 4	10,0	8, 6	7. 1	5.4	4, 4	3. 2	2, 3	
9	2500	>55	54, 2	33, 1	23, 5	18. 2	14.7	12, 6	10. 5	8. 0	6.4	4.7	3. 4	2, 6
	3000	>55	>55	45. 4	32, 3	25. 0	20. 2	17.3	14. 4	11.0	8.8	6.5	4.6	3. 7
	3500	>55	>55	>55	42.9	33. 2	26.9	23. 1	19, 1	14.6	11.7	8. 6	6, 2	4. 9

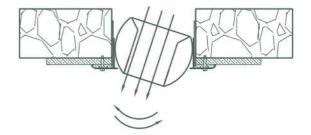


## Flow - Sound Level and Pressure Relationship

Flow Rate (m3/h)	250)	(165	300X165		475X	165	625X165		
	Pressure Drop (Pa)	Sound Level (dB)	Pressure Drop (Pa)	Sound Level (dB)	Pressure Drop (Pa)	Sound Level (dB)	Pressure Drop (Pa)	Sound Level (dB)	
500	68	32							
600	87	34	48	<30					
700	106	37	62	30	<40	<30			
800	142	39	83	33	41	<30			
900	150	41	96	36	50	<30	<40	<30	
1000	196	43	106	37	63	30	<45	<30	
1200	254	47	150	40	94	34	50	<30	
1500	>300	>55	220	44	126	37	92	33	
2000			>300	>50	195	43	108	37	
2500					254	47	171	42	
3000							220	44	
3500							254	47	

### **INSTALLATION:**







#### **ORDER CODES**

