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Swirl Diffuser – Constant Volume

Type VDL

Suitable for mounting heights of ≥ 3.80 m



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General Information

Detail

For spaces with varying heat loads, the supply air often has to be either cool, isothermal or warm as required. With the VDL adjustable swirl diffusers, the blade position can be altered (horizontal, angled or vertical air discharge) to give optimum penetration into the occupied zone when cooling or heating, at the same time meeting good comfort criteria.

With high air handling capacity, the swirl diffuser is suitable for use in industrial and comfort conditioning environments.

The diffuser can be used with large floor to ceiling heights (e. g. factories, airport terminals, theatres, banking halls) also in lower ceiling applications _ 3.80 m (e. g. assembly rooms), particularly where the supply air temperature differential varies between -10 K and +15 K.

On delivery, the control blades are set for the air to be discharged in a horizontal direction only.

Air Discharge Options

Horizontal air discharge



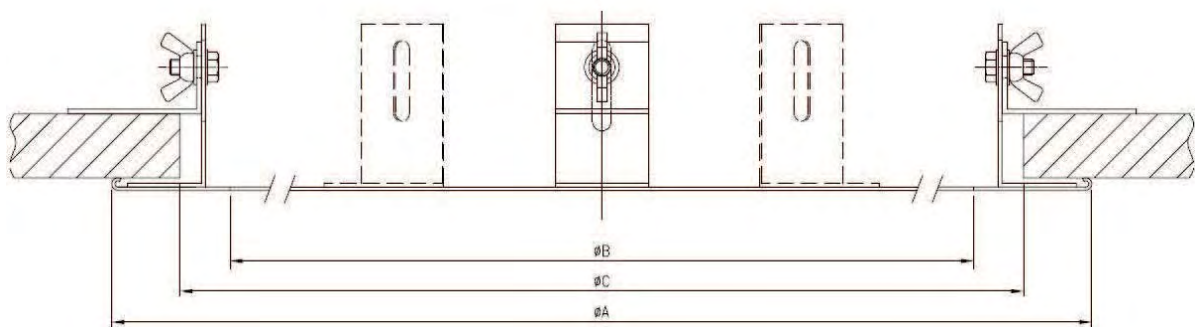
45° discharge



Vertical air discharge



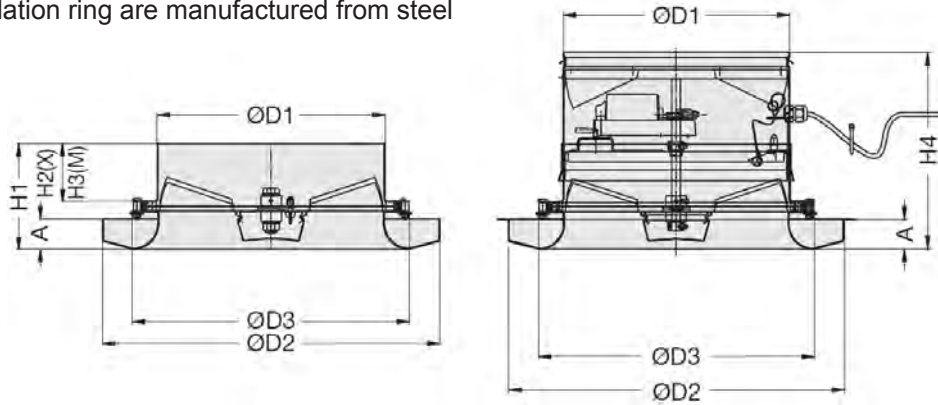
Installation Ring for VDL (315 & 400 only)



VDL / 315	ØA = 554	ØB = 465	ØC = 514
VDL / 400	ØA = 660	ØB = 570	ØC = 620

Construction Dimension

Diffuser and installation ring are manufactured from steel



Size	Dimensions (mm)							
	A	ØD ₁	ØD ₂	ØD ₃	H ₁	H ₂	H ₃	H ₄
315	42	313	464	381	145	92	80	215
400	45	398	567	468	157	101	89	236
630	51	628	871	700	204	117	105	367
800	55	798	1077	871	229	123	111	538

Selection Data

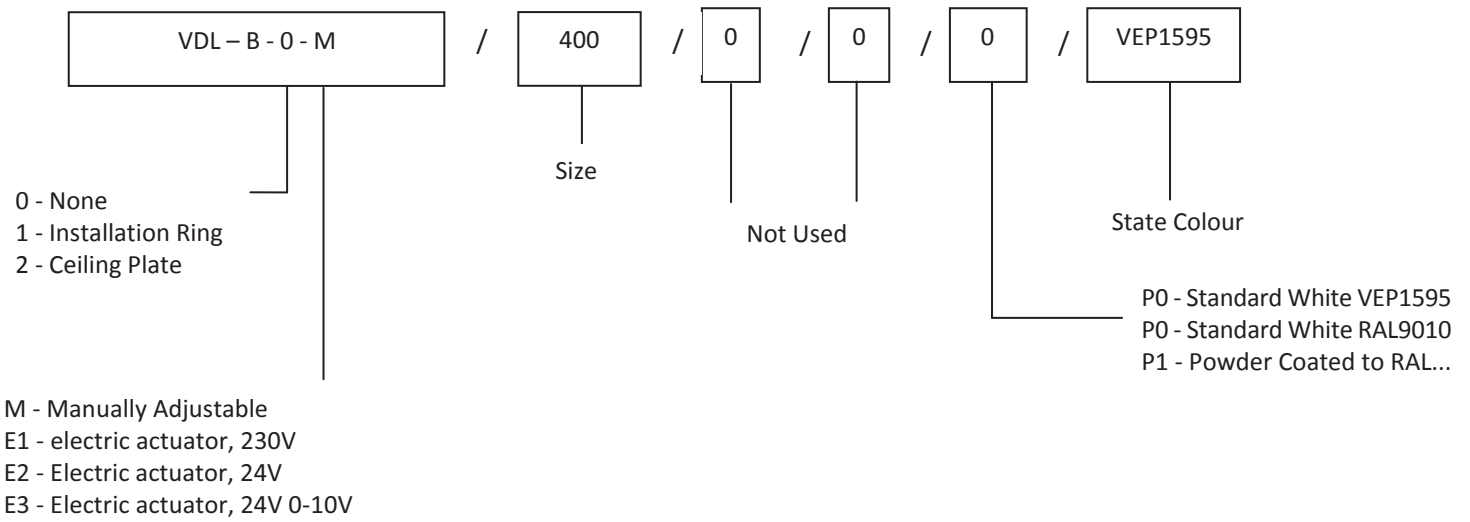
VDL	Reading	Operating Pressures					
		20Pa	30Pa	40Pa	50Pa	60Pa	70Pa
315	Volume (l/s)	120	145	170	190	205	220
	NC	30	35	40	43	45	48
	Throw	2	2.5	2.7	2.9	3.2	3.5
400	Volume (l/s)	185	230	265	300	320	350
	NC	27	33	36	40	42	44
	Throw	2	2.5	2.7	2.9	3.2	3.5
630	Volume (l/s)	425	510	600	675	750	825
	NC	29	34	39	43	45	48
	Throw	3.5	4.1	4.8	5.2	6	6.8
800	Volume (l/s)	540	660	720	860	920	1000
	NC	30	36	39	43	45	50
	Throw	3.8	4.6	5	6	6.4	7

Throw = from diffuser to point where the jet velocity is reduced to < 0.2 m/s.

Selection valid for ceiling height 3.8m to 6.8m

Order Details

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